
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

**FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

Tempus Labs, Inc.

(Exact name of Registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

7370
(Primary Standard Industrial
Classification Code Number)

47-4903308
(I.R.S. Employer
Identification Number)

600 West Chicago Avenue, Suite 510
Chicago, Illinois 60654
(800) 976-5448
(Address, including zip code, and telephone number, including
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Approximate date of commencement of proposed sale to the public: As soon as practicable after this registration statement is declared effective.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer
Non-accelerated filer

Accelerated filer
Smaller reporting company
Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

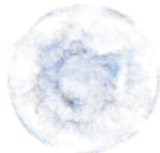
The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant will file a further amendment which specifically states that this Registration Statement will thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the Registration Statement will become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

[Table of Contents](#)

The information in this preliminary prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

PRELIMINARY PROSPECTUS (Subject to Completion)
Issued , 2022

Shares
"T'EMPUS



CLASS A COMMON STOCK

This is an initial public offering of shares of Class A common stock of Tempus Labs, Inc. We are offering shares of our Class A common stock. Prior to this offering, there has been no public market for our Class A common stock. It is currently estimated that the initial public offering price will be between \$ and \$ per share.

The selling stockholders identified in this prospectus have granted the underwriters the option to purchase up to an additional shares of Class A common stock on the same terms as set forth above within 30 days from the date of this prospectus to cover over-allotments, if any. We will not receive any proceeds from any sale of shares by the selling stockholders.

Following this offering, we will have two classes of common stock: Class A common stock and Class B common stock. The rights of the holders of Class A common stock and Class B common stock are identical, except with respect to voting, conversion and transfer rights. Each share of Class A common stock is entitled to one vote. Each share of Class B common stock is entitled to 30 votes and is convertible at any time into one share of Class A common stock. In addition, all shares of Class B common stock will automatically convert into shares of Class A common stock in certain circumstances, including on the date that our Chief Executive Officer, Founder and Chairman (i) ceases to serve as an executive officer or member of our Board of Directors or (ii) ceases to own, together with his controlled entities, at least 10,000,000 shares of our capital stock (as adjusted for stock splits, stock dividends, combinations, subdivisions and recapitalizations). See the section titled "Description of Capital Stock—Class A Common Stock and Class B Common Stock." Our Chief Executive Officer, Founder and Chairman will beneficially own 100% of our outstanding Class B common stock and will beneficially own approximately % of the voting power of our outstanding capital stock immediately following this offering, assuming no exercise of the underwriters' option to purchase additional shares of Class A common stock to cover over-allotments, if any. As a result, we will be a "controlled company" within the meaning of the corporate governance rules of the Nasdaq stock market, however, we have elected not to take advantage of the controlled company exemption.

We have applied to list our Class A common stock on the Nasdaq Global Select Market under the symbol "TIME."

We are an "emerging growth company" as defined under the federal securities laws and, as such, we have elected to comply with certain reduced reporting requirements for this prospectus and may elect to do so in future filings.

Investing in our Class A common stock involves risks. See "[Risk Factors](#)" beginning on page 23.

	<u>Per Share</u>	<u>Total</u>
Initial public offering price	\$	\$
Underwriting discounts and commissions (1)	\$	\$
Proceeds, before expenses, to Tempus Labs, Inc.	\$	\$
Proceeds, before expenses, to the selling stockholders (2)	\$	\$

(1) See "Underwriting" for additional information regarding compensation payable to the underwriters.
(2) Assumes the exercise in full of the underwriters' option to purchase additional shares of Class A common stock from the selling stockholders.

Neither the Securities and Exchange Commission nor any other regulatory body has approved or disapproved these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The underwriters expect to deliver the shares of Class A common stock to purchasers on , 2022.

MORGAN STANLEY
BofA SECURITIES
STIFEL
LOOP CAPITAL MARKETS

J.P. MORGAN

ALLEN & COMPANY LLC
COWEN
WILLIAM BLAIR
NEEDHAM & COMPANY

Prospectus dated , 2022.

TABLE OF CONTENTS

	<u>Page</u>		<u>Page</u>
Prospectus Summary	1	Executive Compensation	198
Risk Factors	23	Certain Relationships and Related Party Transactions	210
Special Note Regarding Forward-Looking Statements	93	Principal and Selling Stockholders	216
Market, Industry and Other Data	95	Description of Capital Stock	219
Use of Proceeds	97	Shares Eligible for Future Sale	227
Dividend Policy	98	Material U.S. Federal Income Tax Consequences of Non-U.S. Holders	
Capitalization	99	of Our Class A Common Stock	230
Dilution	102	Underwriting	234
Management's Discussion and Analysis of Financial Condition and		Legal Matters	243
Results of Operations	106	Experts	243
Business	124	Where You Can Find Additional Information	244
Management	190	Index to Consolidated Financial Statements	F-1

Neither we, the selling stockholders, nor any of the underwriters have authorized anyone to provide any information or to make any representations other than those contained in this prospectus or in any free writing prospectuses we have prepared. Neither we, the selling stockholders, nor any of the underwriters take responsibility for, or can provide any assurance as to the reliability of, any other information that others may give you. We, the selling stockholders and the underwriters are offering to sell, and seeking offers to buy, shares of our Class A common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of our Class A common stock.

For investors outside the United States: neither we, the selling stockholders, nor any of the underwriters have done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside of the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the shares of our Class A common stock and the distribution of this prospectus outside of the United States.

PROSPECTUS SUMMARY

This summary highlights selected information contained elsewhere in this prospectus. This summary does not contain all of the information you should consider before investing in our Class A common stock. You should read this entire prospectus carefully, including the sections titled “Risk Factors,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements and the related notes included elsewhere in this prospectus, before making an investment decision. Unless the context otherwise requires, all references in this prospectus to “Tempus,” the “company,” “we,” “our,” “us” or similar terms refer to Tempus Labs, Inc. and its subsidiaries.

Overview

We endeavor to unlock the true power of precision medicine by creating Intelligent Diagnostics through the practical application of artificial intelligence, or AI, in healthcare. Intelligent Diagnostics use artificial intelligence to make laboratory tests more accurate, tailored, and personal. Unlike traditional laboratory tests, an Intelligent Diagnostic contextualizes the laboratory test result to a specific patient, by incorporating an individual’s longitudinal clinical data into the result.

To accomplish this, we built both a technology platform to free healthcare data from silos and an operating system to make this data useful. We refer to the combination of those as the Tempus Platform. Our proprietary technology has allowed us to amass what we consider to be one of the largest libraries of clinical and molecular oncology data in the world. Our goal is to embed AI throughout every aspect of diagnostic testing to enable physicians and researchers to make personalized, data-driven decisions that improve patient care. We started in oncology in 2016 and have expanded into neuropsychology, infectious diseases, and cardiology, with aspirations to eventually be in all major disease areas.

We make tests intelligent by connecting laboratory results to a patient’s own clinical data, thereby personalizing the results. Our novel insight was realizing that all laboratory test results, genomic or otherwise, could be contextualized for a specific patient based upon that patient’s unique characteristics, and technology could therefore guide therapy selection and treatment decisions to allow each patient to progress on their own unique path. The drugs recommended, the clinical trials explored, the care pathways evaluated, the adverse events considered—all have the potential to be refined and enhanced when test results are connected to a patient’s personal profile, enabling the right patient to be routed to the right therapy at the right time.

The ability to deploy AI in precision medicine at scale has only recently become possible. Advances in cloud computing, imaging technologies, and low-cost molecular profiling, along with the digitization of vast amounts of healthcare data, have created a landscape that we believe is finally ripe for AI. However, despite an increase in the availability of healthcare data, physicians and researchers are largely unable today to leverage this data to improve patient care. The vast majority of healthcare data remains disconnected and lacks harmonization and structure. Traditional diagnostic tests are typically based only on a single data modality, such as a blood-based biomarker or a genomic mutation, and do not connect and integrate other forms of relevant clinical data, such as outcomes, or adverse events, or pathology results, which are essential for many clinical decisions.

In order to bring AI to healthcare at scale, we began by rebuilding the foundation of how data flows in and out of healthcare institutions. We established data pipes, going to and from providers, to allow for the free exchange of data between physicians, who interpret data, and diagnostic and life science companies, who provide data. Without this capability, we believe that data could continue to accumulate without impacting patient care. Tempus has built this integrated Platform, and we are now deploying it at scale in oncology, and other diseases, in the United States. Our Platform connects multiple stakeholders within the larger healthcare ecosystem, often in near real time, to assemble and integrate the data we collect, thereby providing an opportunity for physicians to

make data-driven decisions in the clinic and for researchers to discover and develop therapeutics. We aim to help doctors find the best therapies for their patients, help pharmaceutical and biotechnology companies make the best drugs possible, and enable patients to access emerging therapies and clinical trials when appropriate.

Tempus is a technology company focused on healthcare that straddles two converging worlds. We strive to combine deep healthcare expertise, providing next-generation diagnostics across multiple disease areas, with leading technology capabilities, harnessing the power of data and analytics to help personalize medicine. Unlike traditional diagnostic labs, we can incorporate unique patient information, such as clinical, molecular, and imaging data, with the goal of making our tests more intelligent and our results more insightful. Unlike technology companies, we are deeply rooted in clinical care delivery as one of the largest sequencers of patients in the United States. Straddling both worlds is advantageous as we believe Intelligent Diagnostics represent the future of precision medicine, informing more personalized and data-driven therapy selection and development.

Our Platform includes proprietary software and dedicated data pipelines that create a network of healthcare institutions through more than 250 unique data connections, many of which supply us with complex multimodal data in near real time, across over 1,500 healthcare institutions that order our products and services. Healthcare institutions supply us with this data in our capacity as a covered entity (for example, when we provide Next Generation Sequencing, or NGS, services on behalf of a patient), or as a business associate (for example, when we provide clinical trial matching services or data de-identification and structuring services). In addition to the data we receive in these capacities, we currently have a limited number of paid license agreements through which we acquire de-identified data directly from healthcare associations or institutions. We integrate this data into a unified multimodal database through which we offer numerous analytical and decision support capabilities to our customers. We establish dedicated and integrated data connections with healthcare institutions to enhance the information we provide in our clinical reports, and to increase the effectiveness of our clinical trial matching services. In certain circumstances, we may cover the actual direct costs associated with the technical integrations needed to create a data connection.

We have launched a suite of different products derived from our Platform, which have gained significant traction over the past five years. In 2020 alone, we performed more than one million diagnostic laboratory tests, and our clinical NGS volume in oncology rose from approximately 31,000 samples in 2018 to approximately 145,000 in 2021. Through December 31, 2021, our offerings have been used by more than 5,000 oncologists across hundreds of provider networks, including more than half of all academic medical centers in the United States. Our database has grown to be approximately 19 times the size of The Cancer Genome Atlas, the largest public genomic dataset that we know of in oncology, as we now have approximately 48 petabytes of connected clinical and molecular data. Between our sequencing and data collection efforts, we are connected in some way to approximately 40% of all oncologists practicing in the United States.

We originally set out to build a sustainable business model in oncology as our first proof of concept. To date, we have focused primarily on establishing and growing our oncology business, which represents the majority of both the data we have amassed and our revenues. Even though our cancer business was at an early stage, we next expanded into neuropsychology, as we believed our model was extensible across disease areas. Having gained early traction in depression, we moved into infectious disease, which was largely prioritized due to the COVID-19 pandemic. With the decline of COVID-19 testing revenue, we intend to expand our infectious disease offering to cover broader viral testing. Our next category is in cardiology, through our collaboration with Geisinger. Each time we enter a new disease area we look to expand upon the model we deployed in oncology by developing Intelligent Diagnostics connected to clinical data, and by amassing large amounts of de-identified data to advance patient care and accelerate drug discovery and development. Once we obtain sufficient data, we also expect to deploy our AI and machine learning capabilities to build algorithmic diagnostics at scale across diseases.

To manage our growth, we have assembled a world-class team of approximately 1,500 employees, including hundreds with diverse expertise across genetics, molecular and computational biology, bioinformatics, regulatory affairs, medical, product and engineering, and data science. Roughly one-third of our team is technical, with over 180 PhDs and MDs on staff.

THE CORE ELEMENTS OF OUR PLATFORM

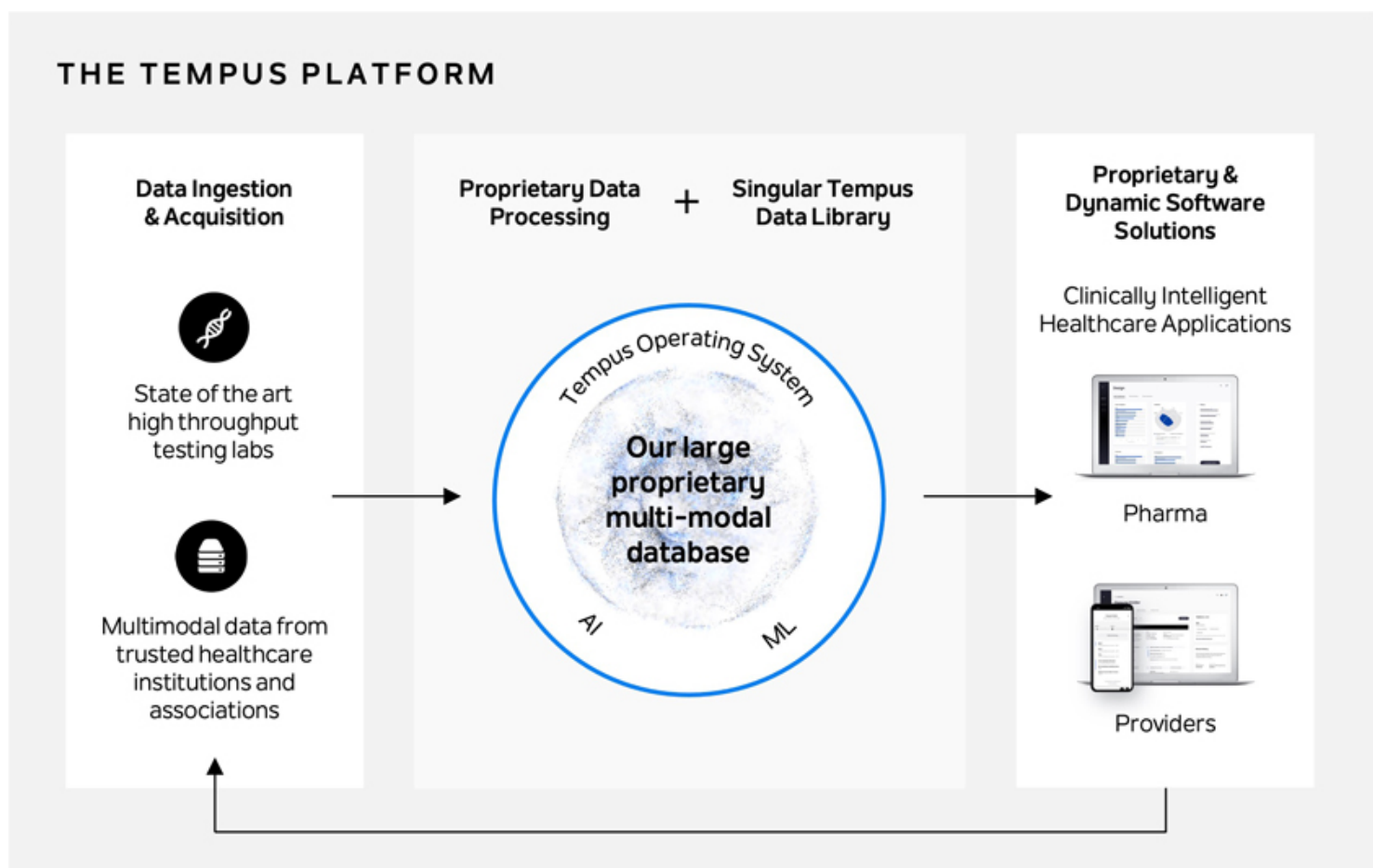
Data ingestion and acquisition	Proprietary data processing	Singular Tempus data library	Proprietary software tools and solutions
<p>>250 Unique data connections</p> <p>~50% Academic medical systems in U.S.</p> <p>>40% of oncologists in the U.S. connected through seq and data collection</p>	<p>Millions of patient cases organized into a common format</p> <p>Hundreds of academic medical systems in U.S.</p>	<p>~48 Petabytes of data</p> <p>~5 million De-identified patient records</p> <p>~19x Size of Cancer Genome Atlas based on petabytes of data</p>	<p>~1,500 Employees</p> <p>~180 PHDs & MDs</p> <p>200 Patents and patent applications filed</p>

We generated total revenue of \$188.0 million and \$257.9 million in the years ended December 31, 2020 and 2021, respectively. Revenue generated from COVID-19 testing was \$89.5 million, or 47.6% of our total revenue, and \$94.7 million, or 36.7% of our total revenue, for the years ended December 31, 2020 and 2021, respectively. We anticipate that demand for, and revenue from, our COVID-19 testing products will decrease materially in future periods due to the lower prevalence of COVID-19 from successful containment efforts and the vaccination of a substantial majority of Americans, reduced testing needs of many of our clients, and the entrance of other testing providers into the market, and that such decreases would have an adverse effect on our results of operations. We incurred net losses of \$209.9 million and \$259.2 million in the years ended December 31, 2020 and 2021, respectively.

The Tempus Platform

The Tempus Platform combines multiple elements into a vertically integrated infrastructure that enables us to ingest data from providers, structure and harmonize the data into a common database, provide laboratory diagnostic testing when requested, and deliver personalized results that provide clinical context by leveraging our data. We offer closed-loop, full-stack, bi-directional integrations between a clinician’s desktop and our laboratory diagnostic capabilities, analytics platform, and vast repository of multimodal data. The key elements of our

Platform, represented in the diagram below, collectively help power a variety of healthcare applications for providers and life sciences researchers. We believe each of these elements is difficult for competitors to replicate, and together represent a significant competitive advantage.



Data Ingestion and Acquisition

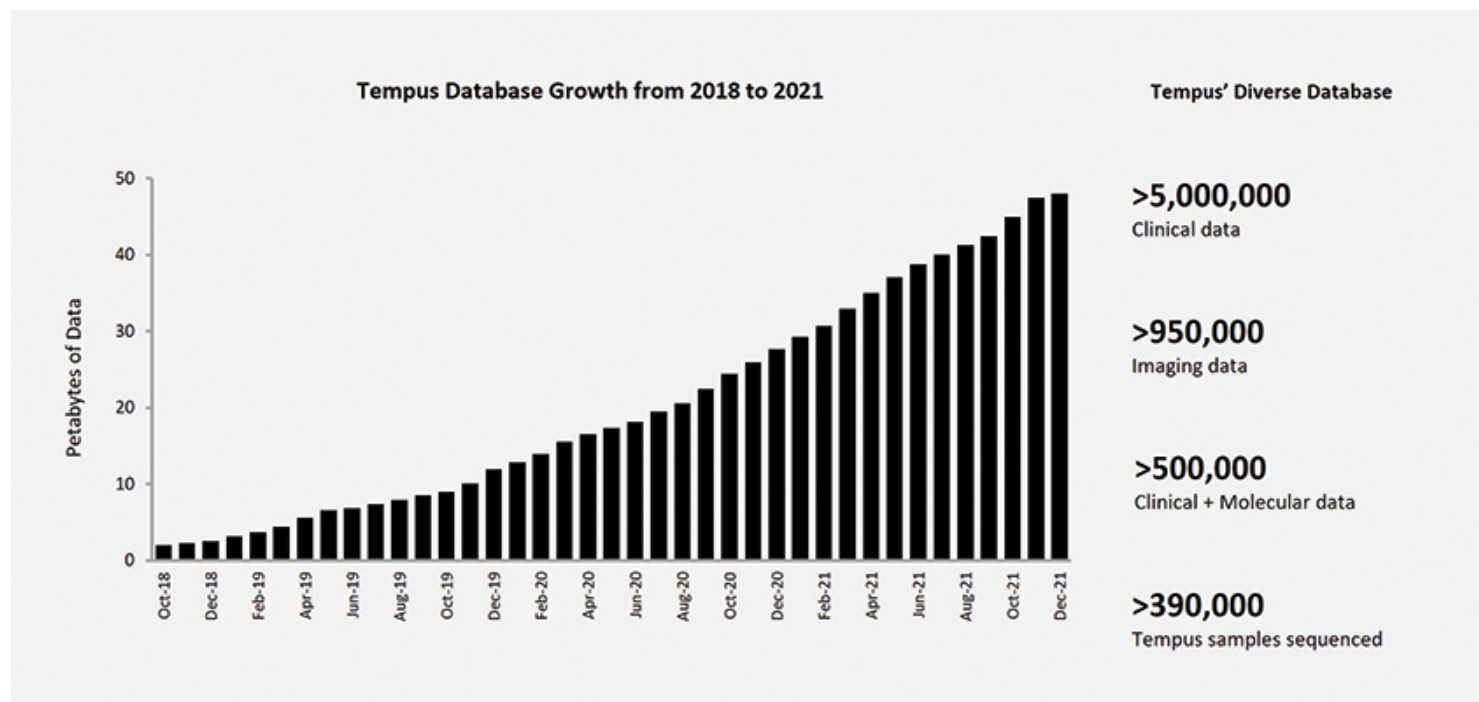
We ingest healthcare data in near real time and at scale, including molecular, clinical and imaging data. We developed the software infrastructure and dedicated data pipelines to aggregate large amounts of multimodal data directly from healthcare institutions. Our software connects to a provider’s electronic health record, or EHR, system, their data warehouse, or their third-party data provider to pull relevant structured and unstructured data that the provider has agreed to contribute to us, including longitudinal follow-up data in certain circumstances. We have established relationships with hundreds of provider networks in the United States, including approximately half of all academic medical centers. In addition, we work with numerous industry associations, including the American Society of Clinical Oncology, or ASCO, to structure and distribute the cancer data that they collect as part of CancerLinq, which is their oncology data effort. We also ingest data via our two high-throughput diagnostic testing labs in Chicago and Atlanta, through which we offer a range of anatomical and molecular NGS tests. We intend to expand these capabilities with a new genomics lab in Raleigh, North Carolina, which we are currently operationalizing and from which we expect to begin offering commercial laboratory tests in 2022.

Proprietary Data Processing

Once we ingest data, we deploy proprietary clinical data abstraction tools, including natural language processing, optical character recognition, and our abstraction software, to structure, harmonize, and de-identify the data we collect. We have developed various software tools to streamline and help secure this process. Once appropriately de-identified, we store the data in our multimodal database.

Our Proprietary Multimodal Database

We believe most healthcare databases lack real-time functionality, depth among data types, and the scale of matched clinical and molecular records needed to meaningfully improve therapeutic research and development. Tempus is attempting to solve this problem by democratizing the use of near real-time molecular, clinical and imaging data by embedding our solution into the clinical care of patients. As our testing volume has grown, and as our dedicated data pipelines have expanded, the size of our database has increased exponentially. Since we launched our Platform in 2016, Tempus has amassed almost 500 million documents and more than 5.0 million de-identified patient records, including over 950,000 with imaging data, more than 500,000 with matched clinical records linked with genomic information, and approximately 80,000 with full transcriptomic profiles. Within oncology specifically, we believe this represents one of the largest and most comprehensive molecular libraries of cancer patients in the world. The breadth of our database, the quality and diversity of our data, as well as its regularly updating nature, allow us to offer a variety of AI-enabled solutions to the market. We also retain the rights to broadly commercialize the de-identified data we collect. As our database continues to grow from its current size of approximately 48 petabytes, we believe new AI applications and opportunities will emerge that are only possible with scale that will drive further innovations in patient treatment. The graph below shows our historical database growth and its composition:



Proprietary Software Tools and Solutions

We have developed numerous software tools that power our Platform, making our services accessible to multiple constituencies within the healthcare ecosystem and creating a back-end infrastructure that supports our various product lines. We employ AI techniques including neural networks, deep learning, and other statistical learning techniques to generate patient-specific insights. Some of these AI models can be not only trained and validated for research use, but also developed into clinical-grade algorithmic tests, or Algos, and deployed clinically as part of routine care. As our data advantage and system architecture continue to improve, we believe our existing Intelligent Diagnostics will gain further adoption thereby accelerating our ability to deploy technologies, including Algos, in the clinical setting.

Our Three Product Lines

We have developed multiple products derived from our Platform that are designed to create an economic model that allows us to invest in structuring and harmonizing data, which is a necessary precursor for deploying AI at scale. Our products are organized under three product lines, each of which is designed to enable and enhance the others, thereby creating network effects in each of the markets in which we operate. Our business model allows both Tempus and our customers to unlock value from the data we make available in different ways across our different product lines. We believe these network effects provide a unique advantage to our business, as the compounding value of each data record in our database serves to enhance our competitive advantage. The more data we collect, the smarter our tests become, the more applications we can launch, the more physicians join our network, further growing our database, making our tests smarter for clinicians and our database more valuable for researchers. We describe below our three product lines—Genomics, Data, and Algos. For the year ended December 31, 2020, Genomics and Data represented 81% and 19% of our total revenue, respectively. For the year ended December 31, 2021, Genomics and Data represented 76% and 24% of our total revenue, respectively. For the years ended December 31, 2020 and 2021, revenue generated from Algos was less than \$1.0 million and was reported within our Data and other product line.

Genomics

Our *Genomics* product line leverages our laboratories to provide NGS diagnostics, polymerase chain reaction, or PCR, profiling, molecular genotyping, and other anatomic and molecular pathology testing to healthcare providers, life sciences companies, researchers, and other third parties. We operate robotic sequencing labs in Chicago and Atlanta with automated bioinformatics and variant classification and reporting that allow us to operate as a high-quality, low-cost NGS provider that broadly serves the market. Our labs are certified by the Clinical Laboratory Improvement Amendments, or CLIA, and accredited by the College of American Pathologists, or CAP. We are also currently operationalizing an additional sequencing lab in Raleigh, North Carolina. However, unlike other laboratory diagnostic testing providers, many of our tests are connected to clinical data in some manner, which allows our suite of tests to be self-learning, becoming more accurate and precise with each new test that we run. Our current primary assays include:

- xT – 648 gene solid tumor cancer assay;
- xE – whole exome cancer assay;
- xF – 105 gene liquid biopsy cancer assay (we are currently performing analytical validation on a larger 523 gene version);
- xG – 52 gene inherited cancer risk germline assay;
- nP – pharmacogenomics profiling in neuropsychology;
- iC – PCR test for COVID-19; and
- xG+ – 88 gene panel covering genes associated with both common and rare hereditary cancers.

We are also currently developing xM, a low pass whole genome + methylation assay for monitoring for cancer recurrence and minimal residual disease.

Our cancer tests have gained wide market adoption and allowed us to amass what we consider to be one of the largest clinical and molecular oncology datasets in the world, which we make available to physicians and life sciences companies. Because our Platform is designed to be extensible across disease areas, we hope, over time, to have similar success in neuropsychology, cardiology, infectious disease, and the other disease categories in which we choose to expand.

Data

Our *Data* product line facilitates drug discovery and development for life sciences companies through two primary products, *Insights* and *Therapies*. Through our *Insights* product, we license libraries of linked clinical, molecular, and imaging de-identified data and provide a suite of analytic and cloud-and-compute tools to pharmaceutical and biotechnology companies. Historically, datasets in healthcare have been siloed, often lacking important contextual information such as outcome and treatment response data. Our *Insights* offering is designed to address this void across multiple diseases, enabling pharmaceutical and biotechnology companies to improve decision-making across the drug lifecycle from discovery, research and development, to commercialization. Customers either pay us on a per file basis or through multi-year data licensing agreements to access our de-identified database of clinical records. At present, we work with 16 of the 20 largest public pharmaceutical companies based on 2020 revenue, and, as of December 31, 2021, we have signed contracts with a remaining total contract value of \$428 million, a majority of which we expect to deliver over the next several years. See “Business” for additional discussion regarding our remaining total contract value.

We retain broad rights to commercialize most of the de-identified data we collect, and we are able to license the same de-identified records to multiple customers. Additionally, because many of our data profiles regularly update with clinical outcome and response data over time, the value of a single de-identified record can increase over time.

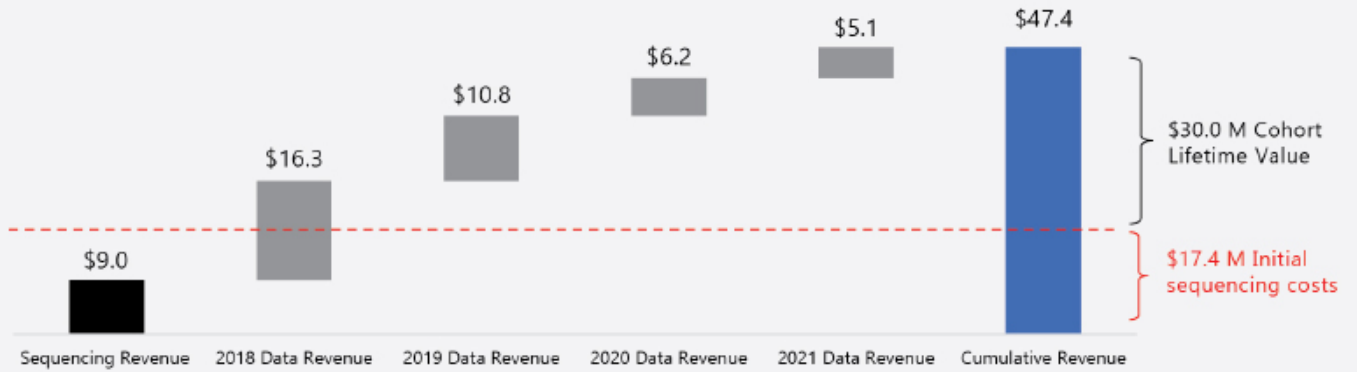
To evaluate the revenue stream in our *Data* product line, we rely on “Cohort Lifetime Value.” We define “Cohort Lifetime Value” as the cumulative revenue attributable to a specific cohort of de-identified records, including revenue derived both from the initial sequencing (Genomics) and licensing (*Data* and other), less the initial sequencing costs incurred to generate the data ultimately licensed. Sequencing revenue is a component of genomics revenue in our Consolidated Statement of Operations and differs from total genomics revenue due to other components, including COVID-19 PCR testing and other lab services unrelated to our data business. *Data* revenue is a component of *data* and other revenue and represents the revenues recognized in each period attributable to each cohort. Initial sequencing costs are a component of cost of revenue, genomics in our Consolidated Statement of Operations and include laboratory personnel compensation and benefits, as well as the cost of laboratory supplies and consumables, depreciation of laboratory equipment, shipping costs, and certain allocated overhead expenses. Total initial sequencing costs differ from total cost of revenues, genomics due to other components, including costs associated with COVID-19 PCR testing and other lab services unrelated to our data business. Notably, “Cohort Lifetime Value” also does not include costs reported as cost of revenues, *data* and other in the Consolidated Statement of Operations. Cost of revenues, *data* and other were \$7.1 million and \$11.9 million for the years ended December 31, 2020 and 2021, respectively. These costs represent 19.6% and 19.0% of *data* and other revenue for the years ended December 31, 2020 and 2021, respectively.

In 2018, the first full year that we operated a laboratory, we sequenced samples from approximately 7,500 patients. From that 2018 cohort of sequenced patients, through December 31, 2021, we generated \$47.4 million of combined revenue from sequencing, *data* licensing of de-identified *data* derived from those records, and clinical trials matching, which is approximately 5.3 times the revenue we received from sequencing at the onset. The total cost to sequence the 2018 cohort was \$17.4 million, of which \$9.0 million was covered by reimbursement for the corresponding sequencing tests. We then generated \$16.3 million of *data* revenue from that cohort in 2018, finishing the year with a “Cohort Lifetime Value” of \$7.9 million. As more customers licensed de-identified records from the 2018 cohort in subsequent years, we generated additional revenue in 2019, 2020 and 2021 from the 2018 cohort, and as of December 31, 2021, the 2018 “Cohort Lifetime Value” for this cohort was \$30.0 million. We maintained similar trends for the 2019, 2020 and 2021 cohorts. As of December 31, 2021, the 2019 “Cohort Lifetime Value” was \$34.2 million, the 2020 “Cohort Lifetime Value” was \$19.2 million and the 2021 “Cohort Lifetime Value” was \$17.1 million.

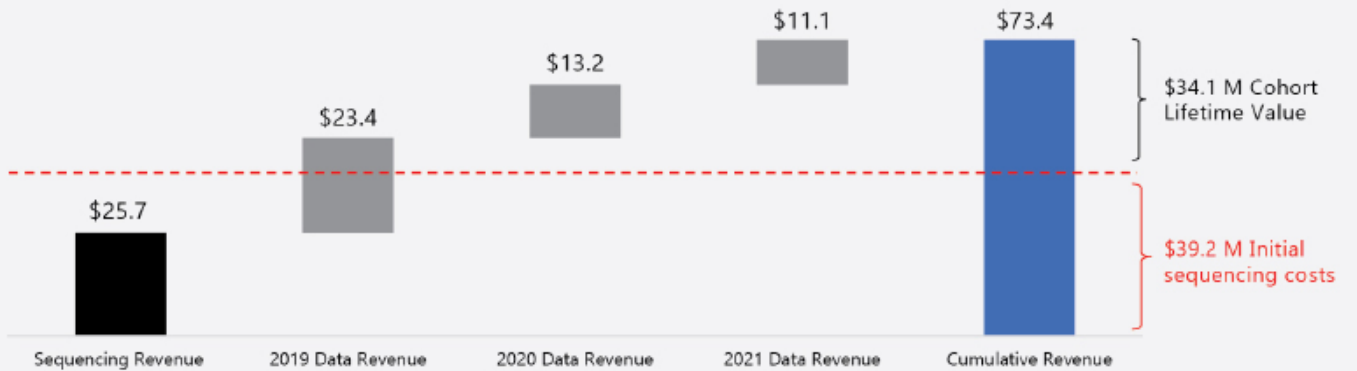
“Cohort Lifetime Value” for the 2018, 2019, 2020 and 2021 data cohorts is illustrated in the graphs below.

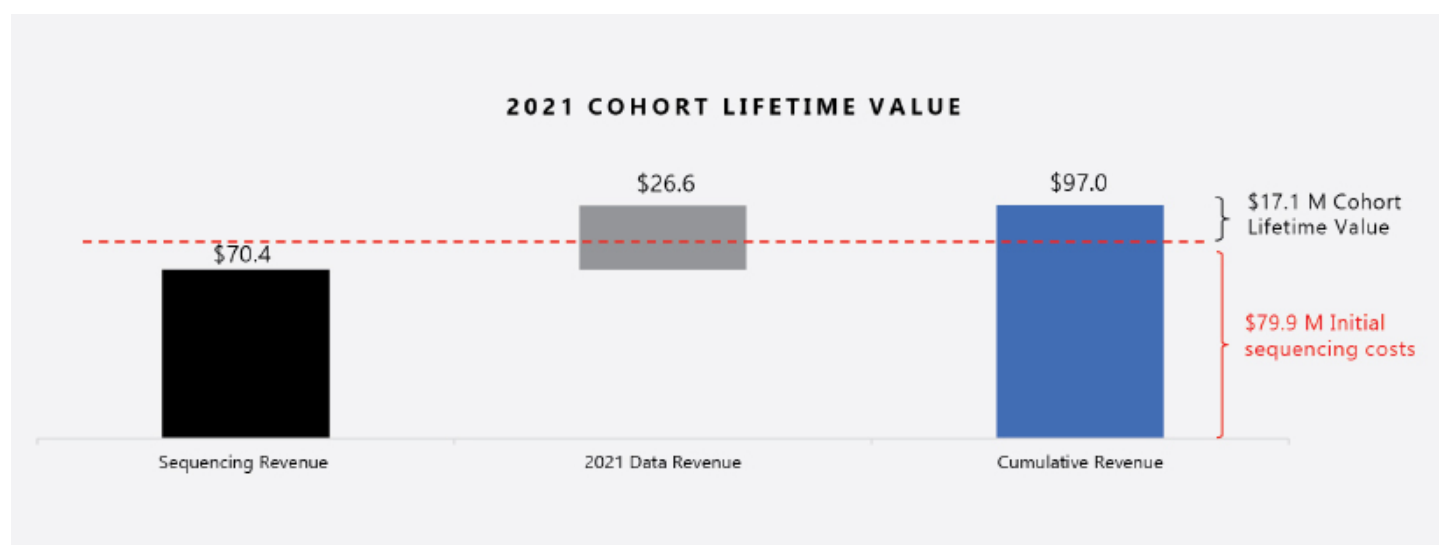
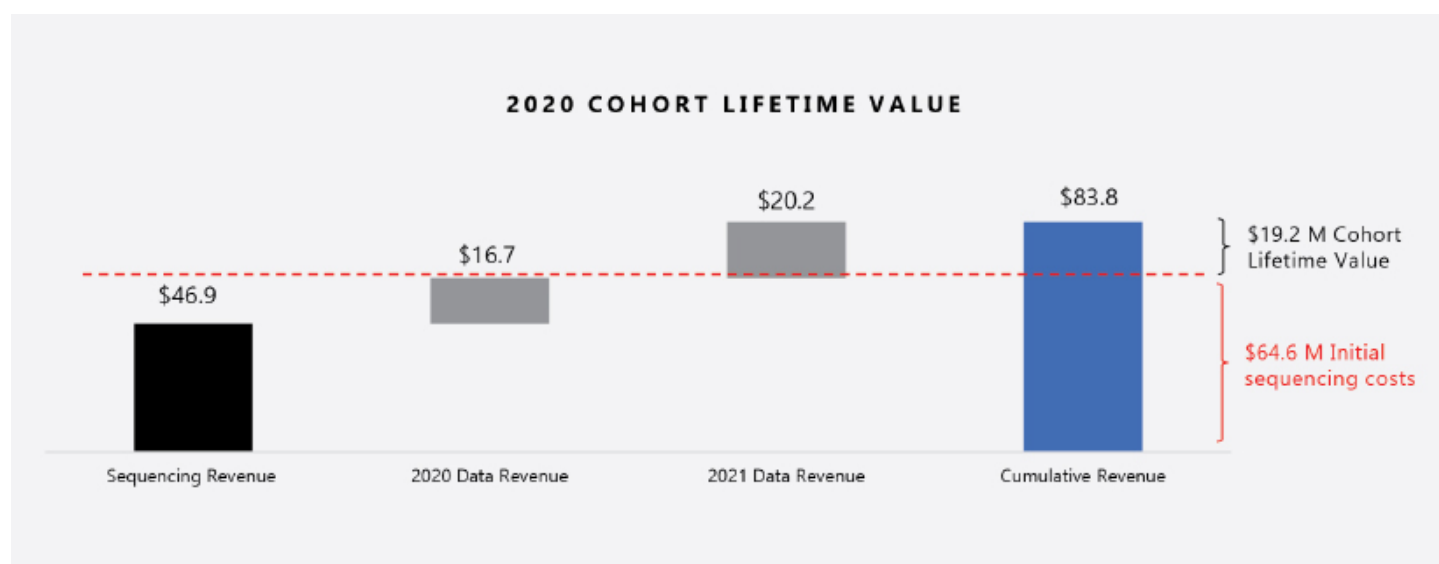
COHORT LIFETIME VALUE (see definition above) from 2018 to 2021 Sequenced Cohorts

2018 COHORT LIFETIME VALUE



2019 COHORT LIFETIME VALUE





Our second product within our Data product line, *Therapies*, is designed to leverage the broad network of physicians we work with in oncology to provide clinical trial matching services for pharmaceutical companies that are looking to reach hard-to-find and underserved patient populations. Our clinical trial matching product is built on top of our near real-time data feeds and harnesses AI to accelerate the connection between patients, clinical trial providers (hospitals), and clinical trial sponsors (life sciences companies). We empower both oncologists to help their patients find clinical trials and pharmaceutical companies to enroll patients into their trials. We generate revenue from both matching the patient to the trial (through notices we send to physicians alerting them of potential trials that are a fit for their patients), and from the patient actually enrolling in the trial. Since its introduction, this program has gained significant traction with more than 1,500 oncologists fully enrolled, more than 75 clinical trials onboarded and active, and more than 5,800 patients were identified for potential enrollment into clinical trials in our network, as of December 31, 2021. We believe the breadth of our network, the data to which we have near real-time access, and our relationships with oncologists enable us to offer a clinical trial matching service that has the potential to materially expand patient access to and accelerate enrollment in clinical trials in the United States.

Algos

Our newest product line, *Algos*, focuses on developing and providing diagnostics that are algorithmic in nature. Algos are tests that can be run without additional chemistry or biology; they are simply 0's and 1's

running on digitized data derived from a laboratory test. Algos leverage AI-driven insights to produce clinically validated and actionable information for physicians.

We currently offer three algorithmic tests in oncology: our tumor origin test, or TO test, our homologous recombination deficiency test, or HRD test, and our Dihydropyrimidine Dehydrogenase Deficiency, or DPYD test. Our TO test is designed to predict the site of origin for cancer patients for whom the primary tumor site is unknown, which represents approximately 3% of cancer patients. Our TO test compares the molecular profile of the tumor with profiles of other cancers in our database. Our HRD test is designed to identify patients who might be sensitive to poly (ADP-ribose) polymerase inhibitors, or PARP inhibitors, which we estimate represent approximately 936,000 addressable patients in breast, ovarian, pancreatic and prostate cancer patients. Identifying which patients are PARP sensitive can help physicians pursue specific courses of treatment, which may meaningfully prolong the patient's life expectancy. Our DPYD test is designed to identify certain alterations in the DPYD gene, which may be associated with a patient's potential toxicity to 5-FU/Capecitabine chemotherapy based on the associated drug labeling and guidelines from the Clinical Pharmacogenomics Implementation Consortium (CPIC).

We are also developing Algos in other disease areas. In cardiology, for example, we entered into a collaboration with Geisinger to build algorithmic models that aid clinicians in identifying patients at increased risk of developing atrial fibrillation, or AFib, along with a variety of other cardiac conditions. These Algos are trained using de-identified data derived from Geisinger's dataset of approximately 3.2 million electrocardiograms, or ECGs, across approximately 600,000 patients, with decades of longitudinal connected clinical data, including outcome and response data. As part of this initiative, the U.S. Food and Drug Administration, or FDA, recently awarded Tempus breakthrough designation status for an algorithm to predict AFib from a normal ECG for certain populations. Approximately 3.5% of all ECG results appear not to have AFib upon initial read, yet a major cardiac trauma or stroke occurs in these patients within a year. We estimate that approximately 300 million ECGs are run annually worldwide, and accordingly, this group of algorithms could affect up to ten and a half million patients.

We are also advancing Algos that are designed to predict aortic stenosis, and we are working on other disease areas within cardiology, such as low ejection fraction and familial hypercholesterolemia. If broadly deployed, we believe these Algos could have widespread clinical applicability, increase life expectancy, and reduce the total cost of care.

Our Algos product line represents an emerging category of diagnostics and has the potential to be highly disruptive across diagnostic tests in a broad set of disease areas. We believe that as our database grows, we will be able to expand our Algos offering, with the goal of launching hundreds or thousands of Algos at some point in the future, representing a significant long-term opportunity that may be substantially larger than our other existing product lines. We believe our ability to launch Algos at scale could be a unique differentiator of our Platform. For Algos, we use data the same way legacy diagnostic companies use chemistry in the battle against disease, improving patient care by learning from the patients who have come before, and tailoring test results based on a patient's unique profile. While we only have four Algos tests at present, we have a goal of launching at least 50 Algos by year end 2025. Some Algos will likely yield little to no reimbursement until their clinical utility is well established, and some may obtain reimbursement at prevailing rates for comparable tests. Through December 31, 2021 our Algos have been ordered more than 13,600 times and have generated approximately \$100 per test on average. Eventually, we would like to launch hundreds, if not thousands, of Algos.

Market Opportunity

We believe our Platform's impact on healthcare could be profound, and that quantifying our potential market opportunity is challenging, especially for opportunities like Algos that are in their infancy. Our Platform is particularly well suited when there exists both heterogeneous conditions that make up a diseased population and a variety of potential therapeutics or therapeutic pathways, often prescribed based on trial and error. When these conditions exist, technology and AI can facilitate precision medicine through data associations that substantially reduce the guesswork associated with which drug to prescribe, in what amount, and in which order. We are currently focused on oncology, neuropsychology, cardiology, and infectious diseases, in which there is over \$4 trillion of economic burden according to publicly available sources.

Within these markets, our Platform addresses both the clinical diagnostic testing market as well as the market for therapeutic research and development. Our Genomics product line targets an addressable market opportunity for diagnostic testing services that we estimate at over \$70 billion across oncology and neuropsychology. Our Data product line operates within a market in which life sciences companies spent an estimated \$219 billion in 2020 on research and development according to Evaluate Pharma, and addresses needs within the \$38 billion clinical trial services market, the \$46 billion market for biomarker discovery, and the \$29 billion market for third party research for “real world evidence”, as estimated according to Mordor Intelligence and our internal estimates. Over time, we believe that the potential market opportunity for our Algos product line could be substantially larger than our other product lines combined.

Long-Term Vision

We are in the early stages of addressing the significant market opportunity that is emerging as AI permeates healthcare. Based on our current customer adoption, Tempus has already built what we consider to be one of the largest multimodal datasets for cancer patients in the world (with other diseases following). We believe our competitive advantages are substantial. Our Genomics product line, which is based on our strong and extensive relationships with providers, feeds our Platform; our Data product line is powered by dedicated, near real-time data pipelines that we believe are increasingly difficult to replicate; and our proprietary technology has allowed us to scale where others have been unable. As we are now connected to approximately 40% of all oncologists practicing in the United States in some way, and a growing number of neuropsychiatric, infectious disease, and cardiology patients, we have reached what we believe is an inflection point for adoption. As we collect more data, our tests become more accurate, we launch more applications, which leads more physicians to join our network, thereby growing our database even further, making our tests more precise for clinicians and our database more valuable for researchers

Our goal is to make vast amounts of healthcare information accessible and useful, allowing data to be organized and analyzed for the benefit of patients, physicians, and researchers. We envision a world where currently siloed, inaccessible datasets are instantly available through a single, purpose-built Platform to bring AI to healthcare. In oncology, this means the ability to generate new insights using molecular and anatomic pathology, bioinformatics, genomic variant analysis, inherited cancer risk, computational biology, drug label data, noted adverse events, clinical trials data, research publications, investigational studies, care pathways, real world evidentiary studies, and phenotypic and morphologic data. We envision a world where all of this data is connected to every diagnostic test run, with the results contextualized and personalized so that physicians can make data-driven decisions in real time in the clinical setting.

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Tempus has built the first version of our desired world—in oncology, in the United States—as our platform connects a patient’s genomic and clinical data to help physicians determine the optimal therapeutic path. Our tests are designed to know who the patient is. When we have the requisite data, the tests do not recommend drugs that have already been prescribed or clinical trials for which patients are not eligible.

Our current product and service offerings represent the first step toward our singular pursuit: a world where physicians tailor their patient’s treatment based on data, so that every complex case is handled in a personalized fashion, making the promise of precision medicine a reality. We endeavor to make all laboratory tests (genomic or otherwise) AI-enabled or “Intelligent” because we believe this is the fastest path to bring the promise of AI to healthcare, improving outcomes for those most in need.

To this singular pursuit we are indelibly focused.

For a glimpse into how these technologies might influence care over time:

Imagine the world as it exists today. A 44 year old female feels a lump in her left breast. She sees her gynecologist, who orders a biopsy. The patient is diagnosed with triple negative breast cancer, which has metastasized to her lung. The patient is prescribed chemotherapy (paclitaxel), but her tumors don’t respond. Despite another course of chemotherapy (capecitabine), the patient’s survival rate is limited to approximately a year.

Now imagine a future world, where artificial intelligence and technology combine at scale to revolutionize treatment options. Not only does the same 44 year old patient receive a biopsy and scans, but her physician has access to a wealth of clinically relevant information including her clinical history, pathology images, germline, and tumor molecular profile to better inform precision care:

- *Once the patient receives a biopsy, her diagnostic pathology slides are automatically connected to Tempus’ cloud platform. Within minutes, dozens of diagnostic algorithms run on her pathology images. Of note, the algorithm suggests the patient has HRD and an overexpression of c-Met protein.*
- *The patient’s physician orders molecular profiling of her tumor using Tempus’ whole genome & whole transcriptome assay. The results confirm the patient is HRD positive and c-Met amplified. Sequencing also reveals the patient has high expression levels of CD40 along with loss of heterozygosity for HLA A*01:01 in her tumor and is eligible for an immunotherapy trial targeting CD40.*
- *Tempus automatically scans the patient’s clinical history, which reveals that the patient had an ECG at her last visit. Tempus runs a body of cardiology-focused algorithms against the ECG and detects a high probability of developing atrial fibrillation, a potentially serious condition the patient and physician were unaware of.*

With access to both multimodal data and artificial intelligence, the physician prescribes a different course of treatment. Her oncologist starts with a PARP inhibitor to address her HRD status, and surgical ablation to address her atrial fibrillation. The patient also enrolls in an immunotherapy clinical trial, which begins after chemotherapy, with an immunotherapy drug targeting CD40. The patient responds well, having a complete radiologic response with no tumors in her breast or lung. Her physician orders quarterly minimal residual disease testing using Tempus’ cell free DNA assay, and the patient is routinely monitored on an annual basis thereafter.

Our Competitive Advantages

- We are both a technology company and a healthcare company, allowing us to harness the advantages of both to advance precision medicine.

- We have built a Platform that is connected to hundreds of provider networks, allowing us to amass a large repository of multimodal data that we believe is essential for bringing AI to healthcare.
- Our Intelligent Diagnostics provide significant value to our customers, which has fostered broad adoption of many of our products.
- Our business model has inherent network effects that help drive adoption and improve our data advantage with each new order placed.
- Our Platform was built to collect, structure, harmonize and analyze large amounts of multimodal data.
- Our Platform is disease agnostic and facilitates rapid expansion into different disease categories.
- The size of our database and the breadth of our multimodal data capabilities position us well to be able to launch algorithmic diagnostics (Algos) at scale.
- Many of our products and services are already widely used throughout the healthcare ecosystem.

Our Growth Strategy

- Grow our database and the number of providers connected to our Platform.
- Drive increased adoption of our Genomics product across healthcare providers.
- Drive increased adoption of our data licensing and clinical trial matching products with pharmaceutical and biotechnology companies.
- Validate and deploy Algos at scale.
- Expand our capabilities and commercial traction outside of oncology, including in neuropsychology, infectious disease, cardiology, and other disease categories.
- Expand internationally.

Recent Developments

On April 18, 2022, we entered into a stock purchase agreement with certain of our existing investors, including Mr. Lefkowsky, pursuant to which we issued and sold 1,483,242 shares of our Series G-3 preferred stock at a price per share of \$57.3069, for an aggregate purchase price of approximately \$85.0 million (the “Series G-3 Financing”). As of the date hereof, we have received \$68.5 million of the committed \$85.0 million, with the remainder committed from one additional investor, which is due by April 29, 2022. As part of the Series G-3 Financing, we may sell up to an additional 2,006,739 shares of Series G-3 preferred stock within sixty days from April 18, 2022. The terms of our Series G-3 preferred stock provide that in the event of an initial public offering of our common stock, each share of Series G-3 preferred stock would be converted into a number of shares of our Class A common stock equal to (i) \$57.3069 per share, plus any accrued and unpaid dividends on such share divided by (ii) the lesser of (a) \$51.5762 and (b) 90% of the public offering price in this offering (or, if this offering is completed after June 30, 2023, 85% of the public offering price in this offering). Based on an assumed initial public offering price of \$ per share, which is the midpoint of the estimated price range set forth on the cover page of this prospectus, all of the shares of Series G-3 preferred stock will convert into an aggregate of shares of our Class A common stock in connection with this offering. Each \$1.00 increase or decrease in the assumed initial public offering price of \$ per share, which is the midpoint of the estimated price range set forth on the cover page of this prospectus, would increase or decrease, as applicable, the number of shares of Class A common stock into which all shares of Series G-3 preferred stock would convert in connection with this offering by approximately shares.

Risk Factors Summary

Investing in our Class A common stock involves substantial risk. The risks described in the section titled “Risk Factors” immediately following this summary may cause us to not realize the full benefits of our strengths or may cause us to be unable to successfully execute all or part of our strategy. Some of the more significant challenges include the following:

- We have incurred significant losses since inception, we may continue to incur losses in the future, and we may not be able to generate sufficient revenue to achieve and maintain profitability.
- As demand for COVID-19 testing decreases or such testing is no longer necessary, we expect our COVID-19 testing revenue to decrease, and if the Emergency Use Authorizations for our COVID-19 diagnostic tests or tests we license are terminated or revoked, we may be unable to secure regulatory approval for our test.
- Our current or future products may not achieve or maintain sufficient commercial market acceptance.
- Our operating results may fluctuate significantly, which makes our future operating results difficult to predict and could cause our operating results to fall below expectations or any guidance we may provide.
- The success of our business depends on our continued access to, and ability to monetize, de-identified patient data.
- Our limited operating history and rapid growth make it difficult to evaluate our future prospects and the risks and challenges we may encounter.
- We will need to raise additional capital to fund our existing operations, develop our Platform, commercialize new products or expand our operations.
- If third-party payers, including commercial payers and government healthcare programs, do not provide coverage of, or adequate reimbursement for, our tests, our business, financial condition and results of operations will be negatively affected.
- Failure of, or defects in, our Platform’s artificial intelligence software, or increased regulation in this space, could impair our ability to process our data, develop products, or provide test results, and harm our business, financial condition and results of operations.
- If we cannot compete successfully with our competitors, we may be unable to increase or sustain our revenue or to achieve and then sustain profitability.
- We rely on a limited number of suppliers or, in some cases, sole suppliers, for some of our laboratory instruments and materials and may not be able to find replacements or promptly transition to alternative suppliers.
- If our existing laboratory and storage facilities become damaged or inoperable or we are required to vacate our existing facilities, our ability to perform our tests and pursue our research and development efforts may be jeopardized.
- We conduct business in a heavily regulated industry, and changes in regulations or violations of regulations may, directly or indirectly, reduce our revenue, adversely affect our business, financial condition and results of operations.
- If we are unable to obtain, maintain and enforce sufficient intellectual property protection for our Platform and products, or if the scope of the intellectual property protection obtained is not sufficiently broad, our competitors or other third parties could develop and commercialize products similar or identical to ours, and our ability to successfully commercialize our products may be impaired.
- We are highly dependent on the services of Eric Lefkofsky and other members of our senior management team and the loss of any member of our senior management team or our inability to

attract and retain highly skilled scientists, clinicians, sales representatives and business development managers could adversely affect our business, financial condition and results of operations.

- We have identified a material weakness in our internal control over financial reporting.
- We depend on information technology systems, including on premises, co-located and third-party data centers and platforms, and any interruptions of service or failures may impair and harm our business, financial condition and results of operations.
- The dual class structure of our common stock will have the effect of concentrating voting control with our Chief Executive Officer, Founder and Chairman, which will limit your ability to influence the outcome of important decisions.
- We have not elected to take advantage of the “controlled company” exemption to the corporate governance rules for publicly listed companies but may do so in the future.

Corporate Information

We were originally formed under the name Bioin LLC in Delaware in August 2015 and we converted to a Delaware corporation in September 2015 under the name Bioin Inc. We changed our name to Tempus Health, Inc. later in 2015 and in 2016, we changed our name to Tempus Labs, Inc. Our principal executive offices are located at 600 West Chicago Avenue, Suite 510 Chicago, Illinois 60654, and our telephone number is (800) 976-5448. Our website address is www.tempus.com. Information contained on, or that can be accessed through, our website is not incorporated by reference into this prospectus, and you should not consider information on our website to be part of this prospectus.

The Tempus logo, “Tempus” and our other registered and common law trade names, trademarks and service marks are the property of Tempus Labs, Inc. or our subsidiaries. Other trade names, trademarks and service marks used in this prospectus are the property of their respective owners.

Implications of Being an Emerging Growth Company

We are an “emerging growth company” as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. We may take advantage of certain exemptions from various public company reporting requirements, including not being required to have our internal control over financial reporting audited by our independent registered public accounting firm under Section 404 of the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a non-binding advisory vote on executive compensation and any golden parachute payments. We may take advantage of these exemptions for up to five years or until we are no longer an emerging growth company, whichever is earlier. We will cease to be an emerging growth company prior to the end of such five-year period if certain earlier events occur, including if we become a “large accelerated filer” as defined in Rule 12b-2 under the Securities Exchange Act of 1934, as amended, or the Exchange Act, our annual gross revenues exceed \$1.07 billion or we issue more than \$1.0 billion of non-convertible debt in any three-year period. In particular, in this prospectus, we have provided only two years of audited financial statements and have not included all of the executive compensation related information that would be required if we were not an emerging growth company. Accordingly, the information contained herein may be different than the information you receive from other public companies in which you hold stock. In addition, the JOBS Act provides that an “emerging growth company” can delay adopting new or revised accounting standards until those standards apply to private companies. We have elected to use the extended transition period under the JOBS Act. Accordingly, our financial statements may not be comparable to the financial statements of public companies that comply with such new or revised accounting standards.

THE OFFERING

Class A common stock offered by us	shares
Option to purchase additional shares of Class A common stock offered by the selling stockholders to cover over-allotments, if any	shares
Class A common stock to be outstanding immediately after this offering	shares
Class B common stock to be outstanding immediately after this offering	shares
Total Class A common stock and Class B common stock to be outstanding immediately after this offering	shares
Use of proceeds	<p>We estimate that our net proceeds from the sale of our Class A common stock that we are offering will be approximately \$ million, assuming an initial public offering price of \$ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, and after deducting estimated underwriting discounts and commissions and estimated offering expenses. We will not receive any proceeds from any sale of shares of our Class A common stock by the selling stockholders.</p> <p>The principal purposes of this offering are to increase our capitalization and financial flexibility, create a public market for our Class A common stock and facilitate our future access to the capital markets. As of the date of this prospectus, we cannot specify with certainty all of the particular uses for the net proceeds to us from this offering. However, we currently intend to use the net proceeds we receive from this offering for general corporate purposes, including working capital, operating expenses and capital expenditures. We may also use a portion of the net proceeds to acquire complementary businesses, products, services or technologies. At this time, we do not have agreements or commitments to enter into any material acquisitions. See the section titled “Use of Proceeds” for additional information.</p>
Voting rights	<p>We will have two classes of common stock following this offering: Class A common stock and Class B common stock. Each share of Class A common stock is entitled to one vote and each share of Class B common stock is entitled to 30 votes and is convertible at any time into one share of Class A common stock. In addition, all shares of Class B common stock will automatically convert into shares of Class A common stock in certain circumstances,</p>

including on the date that Eric Lefkofsky, our Chief Executive Officer, Founder and Chairman (1) ceases to serve as an executive officer or member of our Board of Directors or (2) ceases to own, together with his controlled entities, at least 10,000,000 shares of our capital stock (as adjusted for stock splits, stock dividends, combinations, subdivisions and recapitalizations). See the section titled “Description of Capital Stock—Class A Common Stock and Class B Common Stock.”

Holder of Class A common stock and Class B common stock will generally vote together as a single class, unless otherwise required by law or our amended and restated certificate of incorporation that will be in effect on the closing of this offering. Our Chief Executive Officer, Founder and Chairman, Eric Lefkofsky, will beneficially own 100% of our outstanding Class B common stock and will hold approximately % of the voting power of our outstanding shares immediately following this offering. As a result, Mr. Lefkofsky will have the ability to control the outcome of matters submitted to our stockholders for approval, including the election of our directors and the approval of any change in control transaction. See the sections titled “Principal and Selling Stockholders” and “Description of Capital Stock” for additional information.

Risk factors

You should carefully read the section titled “Risk Factors” beginning on page 23 and the other information included in this prospectus for a discussion of facts that you should consider before deciding to invest in shares of our Class A common stock.

Proposed trading symbol

“TIME”

The number of shares of Class A common stock and Class B common stock that will be outstanding immediately after this offering as noted above is based on shares of Class A common stock and 5,374,899 shares of Class B common stock outstanding as of (after giving effect to the Series G-3 Financing and assuming the conversion of all outstanding shares of redeemable convertible preferred stock, other than our Series B redeemable convertible preferred stock and non-voting common stock into Class A common stock and all outstanding shares of Series B redeemable convertible preferred stock into Class B common stock as described below) and excludes:

- shares of Class A common stock issuable on the vesting and settlement of restricted stock units, or RSUs, outstanding as of December 31, 2021 under our Third Amended and Restated 2015 Stock Plan, as amended, or 2015 Plan, for which the performance-based vesting condition will be satisfied in connection with this offering, but for which the service-based vesting condition will not be satisfied on or before , 2022;
- shares of Class A common stock that may become issuable upon the vesting and settlement of Performance-Vesting Restricted Stock Units, or PSUs, outstanding as of December 31, 2021 under

our 2015 Plan, for which the performance-based vesting condition may be satisfied in connection with this offering, but for which the service-based vesting condition will not be satisfied on or before _____, 2022;

- 10,000,000 shares of Class A common stock reserved for future issuance under our 2022 Equity Incentive Plan, or 2022 Plan, as well as any future increases, including annual automatic evergreen increases, in the number of shares of Class A common stock reserved for issuance under the 2022 Plan;
- 3,000,000 shares of Class A common stock reserved for future issuance under our 2022 Employee Stock Purchase Plan, or the ESPP, as well as any future increases, including annual automatic evergreen increases, in the number of shares of Class A common stock reserved for issuance under the ESPP;
- 210,000 shares of Class A common stock issuable on the exercise of a stock option outstanding as of December 31, 2021 under the 2015 Plan, with an exercise price of \$0.8542 per share;
- shares of Class A common stock issuable upon conversion of an outstanding convertible promissory note, which is convertible beginning in March 2026 into a number of shares determined by dividing (i) the then outstanding principal amount of such note (which was \$238.2 million as of December 31, 2021) plus accrued and unpaid interest by (ii) the average of the last trading price of the Company's Class A common stock on each trading day during the twenty day period ending immediately prior to March 22, 2026, as more fully described in the section of this prospectus titled "Description of Capital Stock—Convertible Promissory Note";
- _____ shares of Class A common stock, assuming an initial public offering price of \$ _____ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, issuable upon the exercise of the warrant issued to AstraZeneca AB with an exercise price equal to the initial public offering price, as more fully described in the section of this prospectus titled "Business—Operations—Our Strategic Collaboration with AstraZeneca";
- up to \$ _____ million in shares of Class A common stock, assuming an initial public offering price of \$ _____ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, issuable to one of our stockholders pursuant to a contingent payment right, which payment may be made in cash or shares of Class A common stock, upon mutual agreement of the Company and such stockholder;
- up to \$4.0 million in shares of Class A common stock which may become issuable as contingent consideration in connection with our acquisition of Highline Consulting, LLC, as more fully described in the section of this prospectus titled "Management's Discussion and Analysis of Financial Condition and Results of Operations—Acquisition of Highline Consulting, LLC"; and
- the expected issuance on or around December 9, 2022 of 145,466 shares of Class A common stock to former stockholders of AKESOgen, Inc. in connection with our purchase of all of the outstanding shares of AKESOgen, Inc. See Note 3 to our consolidated financial statements included elsewhere in this prospectus.

In addition, unless we specifically state otherwise, the information in this prospectus (except for the historical financial statements and the related discussion of such financial information) assumes:

- the filing of our amended and restated certificate of incorporation and the effectiveness of our amended and restated bylaws, each of which will occur upon the closing of this offering;
- the conversion on a one-for one basis of all outstanding shares of our Series B redeemable convertible preferred stock into an aggregate of 5,374,899 shares of Class B common stock, which will occur upon the closing of this offering;
- the conversion of all outstanding shares of redeemable convertible preferred stock, other than our Series B redeemable convertible preferred stock, into an aggregate of _____ shares of Class A common stock, assuming an initial public offering price of \$ _____ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, which will occur upon the closing of this offering;

- the issuance of _____ additional shares of Class A common stock, which we refer to as the Additional Class A Conversion Shares, upon the conversion of all outstanding shares of our redeemable convertible preferred stock upon the closing of this offering, pursuant to provisions of our certificate of incorporation as currently in effect, assuming an initial public offering price of \$ _____ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus;
- the issuance of _____ shares of Class A common stock upon the settlement of RSUs outstanding as of December 31, 2021 under our 2015 Plan for which the performance-based vesting condition will be satisfied in connection with this offering and for which any service-based vesting condition was satisfied on or before _____, 2022, which settlement will be effected upon the expiration of the lock-up period in connection with this offering;
- the conversion of all outstanding shares of our nonvoting common stock into 4,612,450 shares of Class A common stock, which will occur upon the closing of this offering;
- no exercise of the underwriters' option to purchase up to _____ additional shares of Class A common stock from the selling stockholders in this offering to cover over-allotments, if any; and
- no exercise of options or settlement of outstanding RSUs except as described above.

Additional Class A Conversion Shares

Upon any conversion of our redeemable convertible preferred stock into common stock, including in connection with the closing of this offering, we are obligated to pay declared or accrued dividends on shares of our redeemable convertible preferred stock, at our option, in cash or in shares of common stock. As of the date of this prospectus, shares of redeemable convertible preferred stock have accrued approximately \$ _____ million in unpaid dividends, which we expect to pay in shares of our Class A common stock. As a result, at the closing of this offering, we expect to issue the Additional Class A Conversion Shares to holders of shares of our redeemable convertible preferred stock. The number of Additional Class A Conversion Shares to be issued depends on the initial public offering price of our Class A common stock. Based on an assumed initial public offering price of \$ _____ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, we will issue _____ Additional Class A Conversion Shares immediately prior to the closing of this offering. For illustrative purposes only, the table below shows the number of Additional Class A Conversion Shares that would be issuable at various initial public offering prices, as well as the total number shares of our Class A common stock that would be outstanding after this offering as a result:

<u>Assumed Initial Public Offering Price (\$)</u>	<u>Additional Class A Conversion Shares</u>	<u>Estimated Total Shares of Class A Common Stock Outstanding After this Offering</u>
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SUMMARY CONSOLIDATED FINANCIAL DATA

The summary consolidated statement of operations data for the years ended December 31, 2020 and 2021 have been derived from our audited consolidated financial statements included elsewhere in this prospectus. You should read the consolidated financial data set forth below in conjunction with our consolidated financial statements and the accompanying notes and the information in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” contained elsewhere in this prospectus. Our historical results are not necessarily indicative of the results to be expected for the full year or any other period in the future.

	<u>Year Ended December 31,</u>	
	<u>2020</u>	<u>2021</u>
	<u>(in thousands, except share and per share data)</u>	
Consolidated Statements of Operations Data:		
Revenue:		
Genomics	\$ 151,911	\$ 195,012
Data and Other	36,093	62,841
Total revenue	<u>\$ 188,004</u>	<u>\$ 257,853</u>
Cost and operating expenses:		
Cost of revenues, genomics	152,198	162,276
Cost of revenues, data and other	7,092	11,933
Technology research and development	45,861	67,190
Research and development	45,415	61,161
Selling, general and administrative	130,892	199,004
Total cost and operating expenses	<u>381,458</u>	<u>501,564</u>
Loss from operations	<u>\$ (193,454)</u>	<u>\$ (243,711)</u>
Interest income	1,495	623
Interest expense	(18,929)	(15,184)
Other expenses, net	(466)	(316)
Loss before provision for income taxes	<u>\$ (211,354)</u>	<u>\$ (258,588)</u>
Provision for (benefit from) income taxes	—	—
Earnings (losses) from equity method investments	1,500	(604)
Net loss	<u>\$ (209,854)</u>	<u>\$ (259,192)</u>
Accretion of convertible preferred stock to redemption value	(7,381)	(106)
Dividends on Series A, B, B-1, B-2, C, D, E, F and G preferred shares	(34,420)	(35,758)
Cumulative Undeclared Dividends on Series C preferred shares	(2,250)	(2,680)
Net loss available to common shareholders, basic and diluted	<u>(253,905)</u>	<u>(297,736)</u>
Net loss per share attributable to common shareholders, basic and diluted	<u>\$ (4.05)</u>	<u>\$ (4.73)</u>
Weighted-average shares used to compute net loss per share attributable to common stockholders, basic and diluted ⁽¹⁾	<u>62,706</u>	<u>62,975</u>
Pro forma net loss per share attributable to common stockholders, basic and diluted ⁽²⁾		<u>\$</u>
Weighted-average shares used to compute pro forma net loss per share attributable to common stockholders, basic and diluted ⁽²⁾		<u></u>

(1) See Notes 2 and 11 to our consolidated financial statements included elsewhere in this prospectus for an explanation of the calculations of our basic and diluted net loss per share attributable to common stockholders.

- (2) Pro forma net loss per share gives effect to (a) the Series G-3 Financing, (b) the automatic conversion of all of our outstanding shares of Series B redeemable convertible preferred stock into 5,374,899 shares of Class B common stock, which will occur upon the closing of this offering, (c) the automatic conversion of all of our outstanding shares of redeemable convertible preferred stock, other than our Series B preferred stock, into shares of Class A common stock, which will occur upon the closing of this offering, assuming an initial public offering price of \$ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, (d) the issuance of Additional Class A Conversion Shares, assuming an initial public offering price of \$ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, which will occur upon the conversion of all outstanding shares of our redeemable convertible preferred stock and upon the closing of this offering, (e) the automatic conversion of all of our nonvoting common stock into 4,612,450 shares of Class A common stock, which will occur upon the closing of this offering, (f) the issuance of shares of Class A common stock upon settlement of RSUs for which the service-based vesting condition was satisfied on or before , 2022 and for which the performance-based vesting condition will be satisfied in connection with this offering, which settlement will occur upon the expiration of the lock-up period in connection with this offering, (g) stock-based compensation expense of approximately \$ million related to the vesting of RSUs and PSUs for which the service-based vesting condition was satisfied on or before , 2022 and for which the performance-based vesting condition will be satisfied in connection with this offering, as further described in Note 9 to our consolidated financial statements included elsewhere in this prospectus, and (h) the filing and effectiveness of our amended and restated certificate of incorporation, which will occur upon the closing of this offering. See “Prospectus Summary—The Offering” for a description of the Additional Class A Conversion Shares, as the number of Additional Class A Conversion Shares that will be issued depends on the initial public offering price of our Class A common stock.

	December 31, 2021		
	Actual	Pro Forma(1)	Pro Forma As Adjusted(2)
	(in thousands)		
Consolidated Balance Sheet Data:			
Cash, cash equivalents and restricted cash	\$ 278,466	\$	\$
Total assets	531,354		
Working capital(4)	289,182		
Redeemable convertible preferred stock	898,291		
Total stockholders’ (deficit) equity	(807,491)		

- (1) The pro forma consolidated balance sheet data gives effect to (a) the Series G-3 Financing, (b) the automatic conversion of all of our outstanding shares of Series B redeemable convertible preferred stock into 5,374,899 shares of Class B common stock, which will occur upon the closing of this offering, (c) the automatic conversion of all of our outstanding shares of redeemable convertible preferred stock, other than our Series B preferred stock, into shares of Class A common stock, assuming an initial public offering price of \$ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, which will occur upon the closing of this offering, (d) the issuance of the Additional Class A Conversion Shares, which will occur upon the conversion of all outstanding shares of our redeemable convertible preferred stock and upon the closing of this offering, assuming an initial public offering price of \$ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, (e) the automatic conversion of all of our nonvoting common stock into 4,612,450 shares of Class A common stock, which will occur upon the closing of this offering, (f) the filing and effectiveness of our amended and restated certificate of incorporation, which will occur upon the closing of this offering, (g) the issuance of shares of Class A common stock upon settlement of RSUs for which the service-based vesting condition was satisfied on or before , 2022 and for which the performance-based vesting condition will be satisfied in connection with this offering, which settlement will occur upon the expiration of the lock-up period in connection with this offering, and (h) stock-based compensation expense of approximately \$ million related to the vesting of RSUs and PSUs for which the service-based vesting condition was satisfied on or before , 2022 and for which the performance-based vesting condition will be satisfied in connection with this offering, as further described in Note 9 to our consolidated financial statements

included elsewhere in this prospectus. See “Prospectus Summary—The Offering” for a description of the Additional Class A Conversion Shares, as the number of Additional Class A Conversion Shares that will be issued depends on the initial public offering price of our Class A common stock.

- (2) The pro forma as adjusted consolidated balance sheet data reflects (a) the pro forma adjustments set forth in footnote (1) above and (b) our receipt of \$ million in net proceeds from the sale of shares of Class A common stock that we are offering at an assumed initial public offering price of \$ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.
- (3) Each \$1.00 increase (decrease) in the assumed initial public offering price of \$ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, would increase (decrease) each of our pro forma as adjusted cash, cash equivalents and restricted cash, total assets, working capital and total stockholders’ (deficit) equity by approximately \$ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting the estimated underwriting discounts and commissions. Similarly, each increase (decrease) of 1,000,000 shares in the number of shares of Class A common stock offered by us would increase (decrease) each of our pro forma as adjusted cash, cash equivalents and restricted cash, total assets, working capital and total stockholders’ (deficit) equity by \$ million, assuming the assumed initial public offering price of \$ per share of Class A common stock remains the same, and after deducting the estimated underwriting discounts and commissions.
- (4) Working capital is defined as current assets less current liabilities.

RISK FACTORS

Investing in our Class A common stock involves a high degree of risk. You should consider and carefully read all of the risks and uncertainties described below, as well as other information included in this prospectus, including our consolidated financial statements and related notes appearing elsewhere in this prospectus, before making an investment decision. The risks described below are not the only ones we face. The occurrence of any of the following risks or additional risks and uncertainties not presently known to us or that we currently believe to be immaterial could materially and adversely affect our business, financial condition, or results of operations. In such case, the trading price of our Class A common stock could decline, and you may lose some or all of your original investment.

Risks Related to Our Business and Strategy

We have incurred significant losses since inception, we may continue to incur losses in the future, and we may not be able to generate sufficient revenue to achieve and maintain profitability.

We have incurred significant losses since our inception. For the years ended December 31, 2020 and 2021, we incurred net losses of \$209.9 million and \$259.2 million, respectively. As of December 31, 2021, we had an accumulated deficit of \$807.5 million. To date, we have financed our operations principally from the sale of stock and convertible securities, and revenue from precision oncology and COVID-19 testing in our Genomics business, and from our Insights product in our Data business. We have devoted substantially all of our resources to the development and commercialization of our Platform and current products and to research and development activities related to Platform development and future products, including regulatory initiatives to obtain marketing approval for our diagnostic tests, and sales and marketing activities for our Genomics and Data businesses. We will need to generate substantial revenue to achieve and then sustain profitability, and even if we achieve profitability, we cannot be sure that we will remain profitable for any period of time.

As demand for COVID-19 testing decreases or such testing is no longer necessary, we expect our COVID-19 testing revenue to decrease, and if the Emergency Use Authorizations for our COVID-19 diagnostic tests or tests we license are terminated or revoked, we may be unable to secure regulatory approval for our test.

We currently offer reverse transcription polymerase chain reaction, or PCR, diagnostic tests for the qualitative detection of nucleic acid from the SARS-CoV-2 virus in nasopharyngeal swab specimens from individuals suspected of having COVID-19. We anticipate that demand for our COVID-19 testing products will decrease in future periods due to successful containment efforts, the successful vaccination of a majority of Americans and other factors, and such decreases would have an adverse effect on our results of operations. Revenue from COVID-19 testing accounted for \$89.5 million, or 47.6%, of our revenue in the year ended December 31, 2020 and \$94.7 million, or 36.7%, of our revenue in the year ended December 31, 2021, of which \$32.3 million and \$11.3 million, and \$45.2 million and \$71.0 million, was derived from contracts with the Illinois Department of Public Health, or IDPH, and CVS Pharmacy, Inc., or CVS, respectively. We expect revenue from our contracts with the IDPH and CVS, and from other customers seeking COVID-19 testing products, to decrease substantially over time as the prevalence of COVID-19 subsides and as other COVID-19 testing providers enter the market. Pursuant to our agreement with the IDPH, we have agreed to provide COVID-19 testing services for up to 6,000 specimens per day, subject to our ability to reduce our volume commitment if IDPH does not deliver 60,000 tests to us over any 14-day period. The term of the agreement runs through June 30, 2022, prior to which IDPH may terminate the agreement for convenience upon ten days' prior written notice. Our agreement with CVS, which accounted for 24.0% of our revenue for the year ended December 31, 2020, expired in July 2021. Effective October 2021, we entered into a substantially similar agreement with CVS, under which CVS has agreed to purchase certain COVID-19 testing products and services from us without a minimum purchase commitment. Sales of COVID-19 testing products and services to CVS accounted for 27.5% of our revenue for the year ended December 31, 2021. The term of our agreement with CVS runs through October 1, 2022, prior to which either party may terminate the agreement for convenience upon 90 days' prior written notice or for the other party's uncured material breach. CVS may also terminate the agreement if we fail

[Table of Contents](#)

to return test results within a certain period of time, and the agreement will terminate automatically upon the expiration or termination, as and if applicable, of CVS's arrangements with the U.S. Department of Health and Human Services.

In addition, we currently provide our COVID-19 testing products under emergency use authorizations, or EUAs, issued by the Food & Drug Administration, or FDA, to us or our licensor, permitting us to offer these tests without having completed the normally applicable FDA review and clearance or approval process for marketing authorization (with the related standards that would apply to demonstrate safety and effectiveness) or in some cases, as an LDT. Although the FDA has waived certain regulatory requirements for the duration of the EUAs, we remain subject to specific conditions of the authorizations, including ensuring appropriate labeling as approved by the FDA specifically for purposes of the EUAs, maintaining records of distribution to authorized laboratories, collecting data on occurrences of any false positives or false negatives, and tracking any adverse events. As with other FDA-regulated products, compliance or product performance issues could emerge during the course of the marketing and use of our products under an EUA, that could impact our ability to continue the sale and distribution of these products.

Our EUAs or those of our licensors could be terminated or revoked at any time, including if the FDA determines the criteria for issuance are no longer met or other circumstances make such revocation appropriate to protect public health or safety, which could harm our future business prospects. Once an EUA is revoked or terminated, we will be required to stop marketing the applicable COVID-19 test immediately unless we can obtain FDA clearance for that COVID-19 test under a traditional regulatory pathway, which is lengthy and expensive, and which we may never receive. We also would be subject to the full and usual regulatory obligations for device manufacturers, including the FDA's quality system regulations.

Our current or future products may not achieve or maintain sufficient commercial market acceptance.

We believe our commercial success is dependent upon our ability to continue to successfully market and sell our current Genomic diagnostics products, including diagnostic tests in oncology and infectious diseases, to continue to grow our Data business by expanding our current relationships and developing new relationships with clinicians and pharmaceutical and biotechnology customers, and to develop and commercialize new products based on our Platform, including by expanding our Genomics product line to new disease areas and by advancing our existing and future Algos tests. Our ability to achieve and maintain sufficient commercial market acceptance of our existing and future products will depend on a number of factors, including:

- our ability to increase awareness of our Genomics and Algos diagnostic tests, including new product offerings as they become available;
- the rate of adoption and/or endorsement of our Genomics and Algos diagnostic tests by clinicians, pharmaceutical and biotechnology companies, KOLs, and advocacy groups;
- the timing and scope of obtaining any necessary approvals by regulatory agencies, including the FDA, for our diagnostic tests, any software offerings, Algos, or any features of our Platform, in each case, that may be subject to regulatory oversight;
- our ability to obtain positive coverage decisions for our tests from additional commercial payers and to broaden the scope of indications included in such coverage decisions;
- our ability to obtain reimbursement and expanded coverage from government payers, including Medicare;
- our ability to increase demand for our Data business, including by expanding our database of patient information and increasing the utility of our product offerings;
- our ability to successfully expand beyond oncology into infectious disease, neuropsychology and other indications;
- our ability to build and maintain robust data sets with respect to patient populations in geographic regions that we may seek to enter in the future;

[Table of Contents](#)

- the impact of our investments in Platform development, product innovation and commercial growth;
- public perception of our products, those of our competitors and the industry in which we operate, including our ability to avoid adverse publicity from defects or errors; and
- our ability to further validate our Platform through clinical research and accompanying publications.

We cannot assure that we will be successful in addressing each of these criteria or other criteria that might affect the market acceptance of our products. If we are unsuccessful in achieving and maintaining sufficient market acceptance of our products, our business, financial condition and results of operations will suffer.

Our operating results may fluctuate significantly, which makes our future operating results difficult to predict and could cause our operating results to fall below expectations or any guidance we may provide.

Our quarterly and annual operating results may fluctuate significantly, which makes it difficult for us to predict our future operating results. Because we plan to operate our business with a long-term focus, these fluctuations may be more pronounced than those experienced by other companies that operate with a shorter-term focus. These fluctuations may occur due to a variety of factors, many of which are outside of our control, including, but not limited to:

- the level of demand for any of our products, which may vary significantly, including reduced demand for our COVID-19 tests, which may result in, among other things, write-downs of inventory;
- the timing and cost of, and level of investment in, research, development, regulatory approval and commercialization activities relating to our Platform and products, which may change from time to time;
- the volume and customer mix of our Genomics and Algos diagnostic testing and other products;
- the start and completion of projects in which our Data products are utilized;
- the introduction of new products or product enhancements by us or others in our industry;
- coverage and reimbursement policies with respect to our products and products that compete with our products;
- expenditures that we may incur to acquire, develop or commercialize additional products and technologies;
- changes in governmental regulations, including with respect to privacy and data security and medical device regulation, and our compliance therewith, or in the status of our regulatory approvals or applications;
- future accounting pronouncements or changes in our accounting policies;
- developments or disruptions in the business and operations of our clinical, commercial and other partners;
- the impact of natural disasters, political and economic instability, including wars (such as the armed conflict between Russia and Ukraine), terrorism, and political unrest, epidemics or pandemics, boycotts, curtailment of trade and other business restrictions; and
- general market conditions, including high and rising inflation rates, and other factors, including factors unrelated to our operating performance or the operating performance of our competitors.

Additionally, it is difficult to predict the amounts, if any, we will be able to collect for our diagnostic tests from commercial payers. We are a participating network provider in an extremely small number of commercial payers from whom we receive reimbursement for our diagnostic tests. Payers determine the amount they are willing to reimburse us for tests. We have provided testing to patients with many disease types and indications, most of the time as a non-participating provider. Even when payers have paid a claim, they may elect at any time to review previously paid claims for overpayment against these claims. While we have not experienced significant retroactive adjustments to date, in the event of an overpayment determination, the payer may offset

[Table of Contents](#)

the amount they determine they overpaid against amounts they owe us on current claims. We have limited leverage to dispute these retroactive adjustments and we cannot predict when, or how often, a payer might engage in these reviews. A significant amount of these offsets by one or more payers in any given quarter could have a material effect on our results of operations and cause them to fall below expectations or guidance we may provide. Due to the inherent variability and unpredictability of the reimbursement landscape, including related to the amount that payers reimburse us for any of our tests, previously recorded revenue adjustments are not indicative of future revenue adjustments from actual cash collections, which may fluctuate significantly.

In addition, the demand for our Genomics and Data products will depend in part upon the research and development and clinical budgets of pharmaceutical and biotechnology customers, which are impacted by factors beyond our control, such as:

- changes in government programs (such as the National Institutes of Health) that provide funding to research institutions and companies;
- macroeconomic conditions (including any impact of unforeseen events such as the armed conflict between Russia and Ukraine), the political climate and the ongoing impact of the COVID-19 pandemic;
- changes in the regulatory environment;
- differences in budgetary cycles;
- competitor products or pricing;
- market-driven pressures to consolidate operations and reduce costs; and
- market acceptance of relatively new products.

Our operating results may fluctuate significantly due to reductions and delays in research and development or clinical expenditures by these customers, including delays caused by these customers' reducing activities in response to the COVID-19 pandemic. Further, many of our data licensing agreements allow us to deliver data to our customers over a period of time, which can span a year or longer. Revenue pursuant to our data licensing agreements is recognized upon delivery of the data to the customer. The actual timing of data deliveries can be based on a variety of factors, including, but not limited to, the customer's requirements and/or our technological, operational, and human capital capacity.

The cumulative effects of the factors discussed above could result in large fluctuations and unpredictability in our quarterly and annual operating results. As a result, comparing our operating results on a period-to-period basis may not be meaningful. Investors should not rely on our past results as an indication of our future performance.

This variability and unpredictability could also result in our failing to meet the expectations of industry or financial analysts or investors for any period. If our revenue or operating results fall below the expectations of analysts or investors or below any guidance we may provide, or if the guidance we provide is below the expectations of analysts or investors, the price of our common stock could decline substantially. Such a stock price decline could occur even when we have met any previously publicly stated guidance we may provide.

The success of our business depends on our continued access to, and ability to monetize, de-identified patient data.

Our business relies on our ability to obtain, process, monetize and distribute highly regulated data in the healthcare industry, in a manner that complies with applicable laws, regulations and contractual and technological restrictions. The data that we collect through the provision of Genomics tests is critical to our ability to offer our Data and Algos products and services. We have historically generated more revenue from the sale of products and services that leverage our de-identified data than we have from the provision of the underlying Genomics test related to such data, and we expect this trend to continue. Our Platform also includes proprietary software and dedicated data pipelines that create a network of healthcare institutions that supply us with complex multimodal data. Further, we rely on certain collaborations and licensing agreements to access

important data. The success of our business depends on our continued access to, and ability to monetize, this internal and external de-identified patient data. As we seek to expand our business into additional disease areas and geographies, we will also need to be successful in building and maintaining sufficiently large relevant data sets and obtaining the permissions necessary to de-identify and use that data for commercial purposes.

Our ability to maintain, expand and monetize our datasets are subject to a number of factors, many of which are outside of our control. With respect to data included in our Data and Algos products, we rely on a combination of the statutory rights available to us as a HIPAA covered entity and as a HIPAA business associate. As a HIPAA covered entity, we utilize data generated through our provision of Genomic tests. As a HIPAA business associate, we rely on providers to obtain the requisite consents from their patients, with whom we may have no direct contact, to use the de-identified data that we generate in the provision of our other offerings to the providers, or that we generate from the protected health information, or PHI, we obtain from providers. More broadly, the failure by us or our data suppliers and processors to obtain patient data in a compliant manner could have a harmful effect on our ability to use and disclose data which in turn could impair our functions and operations, including our ability to share data with third parties or incorporate it into our products. In addition, the use, processing and distribution of patient data may require us or our data suppliers and processors to obtain consent from third parties or follow additional laws, regulations or contractual and technological restrictions that apply to the healthcare industry. These requirements could interfere with our ability to deploy our products, prevent creation of new products, or otherwise limit data-driven activities that benefit us. Moreover, due to lack of valid notice, sufficient consents or waiver, we may be subject to claims or liability for use or disclosure of data or other information.

We are also dependent on the healthcare institutions within our network continuing to provide us with broad access to data to multimodal data to support the robustness of our Genomics tests and other offerings, as well as on maintaining our collaborations with ASCO, QCCA, NCCA, Geisinger and similar organizations, and entering into similar collaborations with other organizations in the future, particularly as we attempt to expand into other disease areas. These third parties may have interests that diverge from our interests, including a desire to monetize their data in different ways, and there can be no assurance that we will be successful in maintaining and growing our datasets. Further, our arrangements with some of these third parties are not exclusive, which could allow such parties to provide data to our competitors, thereby adversely impacting our ability to offer differentiated products and services. Our practice of making available to providers the raw data from our Genomics testing along with corresponding clinical data we may have structured as part of providing testing also may allow those providers to use data in ways that may be harmful to our business interests.

The use, processing and distribution of patient data is also the subject of complex, interconnected and frequently changing laws and regulations in the United States and globally. We have policies and procedures in place to address the proper handling and use of data, but could face claims that our practices occur in a manner not permitted under applicable laws or our agreements with or obligations to data providers, patients or other third parties. These claims or liabilities and other failures to comply with applicable requirements could subject us to unexpected costs and adversely affect our business, financial condition and results of operations. Further, any actual or perceived failure to comply with applicable privacy and data security laws could have an adverse impact on the willingness of the third parties on whom we rely for access to data to continue to provide us with such data.

The continued adoption of our products and services is dependent on a number of factors, many of which are interrelated.

Our ability to execute our growth strategy and become profitable is highly dependent on a number of factors, many of which are interrelated.

Continued adoption and use of our Genomics product line will depend on several factors, including the prices we charge for our tests, the scope of coverage and amount of reimbursement available from third-party payers for our tests, the availability of clinical data that support the value of our tests and the inclusion of our tests in industry treatment guidelines. In addition, many clinicians, hospital systems and pharmaceutical

[Table of Contents](#)

companies have existing relationships with companies that develop molecular diagnostic tests, including our competitors, and may continue to use their tests instead of ours. Despite our business development efforts, it could be difficult, expensive and/or time-consuming for healthcare providers to switch diagnostic tests for their patients, and our tests may not be widely accepted by physicians, if at all, which could in turn hinder the growth of sales of our tests. If we are unable to achieve commercial success for our tests, our business, financial condition and results of operations would be materially and adversely affected. We are also particularly dependent on our oncology tests, which accounted for 27% and 32% of our revenue in the years ended December 31, 2020 and 2021, respectively. We cannot assure that our oncology tests will continue to maintain or gain market acceptance, and any failure to do so would materially harm our business, financial condition and results of operations.

Continued adoption of and use of our Data products will depend, in part, on our ability to maintain relationships and to enter into new relationships with pharmaceutical and biotechnology customers and provide relevant data to such customers for outcomes research, companion diagnostic development, novel target discovery and validation, among other uses. This can be difficult due to many factors, including the type of data required and our ability to deliver it to our pharmaceutical and biotechnology customers' satisfaction. Our pharmaceutical and biotechnology customers may decide to decrease or discontinue their use of our Insights product due to changes in their research and product development plans, failures in their clinical trials, financial constraints, or other circumstances outside of our control. Furthermore, pharmaceutical and biotechnology companies may decline to do business with us or decrease or discontinue their use of our data due to a strategic collaboration with any of our competitors. We invest resources in seeking to develop relationships with pharmaceutical and biotechnology companies regarding potential commercial opportunities on an ongoing basis. There can be no assurance that any of this investment will result in a commercial agreement, that the resulting relationship will be successful, or that the data we provide as part of the engagement will produce successful outcomes. If we cannot maintain our current relationships, or enter into new relationships, with pharmaceutical and biotechnology companies, our product development could be delayed and revenue and results of operations could be adversely affected.

The scope and robustness of the Data products and Algos that we can offer our customers also depend significantly on the continued success of our Genomics product line, as the data that we collect through genomic testing is an essential component of our Data products and Algos. Further, we believe that growth in the use of our Data products will help drive awareness and adoption of our Genomics product line, which in turn will drive further growth within our Data and Algos product lines. However, there can be no assurance that we will realize these synergies.

Our limited operating history and rapid growth make it difficult to evaluate our future prospects and the risks and challenges we may encounter.

We were founded in 2015 and have experienced rapid growth in revenue, adoption of our products and services, testing volume, size of our datasets, clinical trial matches and other metrics that we believe are important to assessing our business. In addition, we operate in highly competitive markets characterized by rapid technological advances and our business has, and we expect it to continue, to evolve over time to remain competitive. Our limited operating history, evolving business, rapid growth and ambitious goals make it difficult to evaluate our future prospects and the risks and challenges we may encounter, and may increase the risk that we will not continue to grow at or near historical rates. Further, these factors may make it difficult for us to achieve our stated milestones and goals, and to accurately project the future performance of our business. For example, we may never realize the potential benefits of our technology as contemplated elsewhere in this prospectus, including the section titled "Prospectus Summary—Long-Term Vision."

If we fail to address the risks and difficulties that we face, including those described elsewhere in this "Risk factors" section, our business, financial condition and results of operations could be adversely affected. We have encountered in the past, and will encounter in the future, risks and uncertainties frequently experienced by growing companies with limited operating histories in rapidly changing industries. If our assumptions regarding

these risks and uncertainties, which we use to plan and operate our business, are incorrect or change, or if we do not address these risks successfully, our results of operations could differ materially from our expectations and our business, financial condition and results of operations could be adversely affected.

We will need to raise additional capital to fund our existing operations, develop our Platform, commercialize new products or expand our operations.

We will need to raise additional capital in the future to expand our business, meet existing obligations, pursue acquisitions or strategic investments, or take advantage of financing opportunities or for other reasons, including to:

- increase our sales and marketing efforts to drive market adoption of our current products and services, and address competitive developments;
- fund development and marketing efforts of our products under development or any other future products we may develop;
- acquire, license or invest in technologies;
- acquire or invest in complementary businesses or assets; and
- finance capital expenditures and general and administrative expenses.

Our present and future funding requirements will depend on many factors, including:

- our ability to achieve revenue growth and favorable gross profits;
- our rate of progress in establishing payer coverage and reimbursement arrangements with domestic and international commercial payers and government payers;
- the cost of expanding our laboratory operations and product offerings, including our sales and marketing efforts;
- our rate of progress in, and costs of our sales and marketing activities associated with, establishing adoption of and reimbursement for our current products, including our diagnostic tests and our data analytics products;
- the rate at which we choose to advance, rate of progress in, and costs of our research and development activities associated with, products in development;
- the effect of competing technological and market developments;
- costs related to our international expansion; and
- the potential costs of and delays in product development as a result of any existing or new regulatory oversight applicable to our products.

We have no committed sources of capital. We may seek to sell equity or convertible securities, enter into a credit facility or another form of third-party funding, or seek other debt financing. The various ways we could raise additional capital carry potential risks. If we raise funds by issuing equity or convertible securities, dilution to our stockholders could result. Any preferred equity securities issued also could provide for rights, preferences or privileges senior to those of holders of our common stock. If we raise funds by issuing debt securities, those debt securities would have rights, preferences and privileges senior to those of holders of our common stock. The terms of debt securities issued or borrowings pursuant to a credit agreement could impose significant restrictions on our operations. If we raise funds through collaborations and licensing arrangements, we might be required to relinquish significant rights to our Platform or products or grant licenses on terms that are not favorable to us. These alternatives of raising additional capital may not be available to us on acceptable or commercially reasonable terms, if at all, or in amounts sufficient to meet our needs. The failure to obtain any required future financing may require us to reduce or eliminate certain existing operations and could contribute to negative market perceptions about us or our securities.

Our Algos product line is nascent.

As of December 31, 2021, we had only three commercialized Algos. While we have a number of additional Algos in development, we may not be successful in developing and commercializing these or future Algos, or in attaining our Algo development targets. Further, the scope and robustness of the Algos that we can offer our customers depend significantly on the continued success of our Genomics product line and access to third-party data, of which there can be no assurance. We also cannot accurately estimate how our future Algos will be priced, whether reimbursement can be obtained or whether we will generate any revenue from such Algos. Further, the use of diagnostics that are entirely algorithmic in nature is novel and today represent only a small proportion of the diagnostics market. While we believe Algos represent a significant long-term opportunity for us, there can be no assurances that a robust and sustained market for such diagnostics will develop or that we will successfully compete in any such market.

New product development and commercialization involve a lengthy and complex process and we may be unable to develop or commercialize new products on a timely basis, or at all.

Products that are under development have taken time and considerable resources to develop, and we may not be able to complete the development and commercialization of such products on a timely basis, or at all.

Before we can commercialize any new Genomics or Algos diagnostic products, we will need to expend significant funds in order to:

- conduct substantial research and development, including validation studies and, in some cases, clinical trials;
- further develop and scale our laboratory or algorithmic processes to accommodate diagnostic tests in additional disease areas; and
- further develop and scale our infrastructure to be able to analyze increasingly large amounts of data.

Our diagnostic product development process involves a high degree of risk, and product development efforts may fail for many reasons, including:

- failure of the diagnostic product to perform as expected, including defects and errors;
- lack of validation data; or
- failure to demonstrate the clinical utility of the diagnostic test.

Expanding the offerings of our Data business is also a speculative and risky endeavor and may require us to:

- acquire additional access to patient healthcare information that is relevant to the products we offer;
- correctly identify customer needs and preferences and predict future needs and preferences;
- allocate our research and development funding to areas with higher growth prospects; and
- anticipate and respond to our competitors' development of new products and technological innovations.

Our Platform development plan involves using data and analytical insights generated from our current products to foster research and development in our future products. However, if we are unable to generate additional or compatible data and insights, then we may not be able to advance our products under development as quickly, or at all, or without significant additional investment.

As we develop our products, we have made and will have to make significant investments in Platform development, marketing and selling resources, which could adversely affect our future cash flows. We may also rely on third parties to develop new products that we may license and include in our overall offering, particularly with respect to our Algos business, and we may exert limited or no control over such development efforts.

[Table of Contents](#)

In addition, in our development and commercialization plans for our business lines, we may forego other opportunities that may provide greater revenue or be more profitable. For example, while we expect to provide diagnostic and data technologies to pharmaceutical and biotechnology companies (including companies in which our Chief Executive Officer, Founder, and Chairman, Eric Lefkofsky, or our other executive officers, directors or significant stockholders may have significant or controlling voting and economic interests) developing therapeutics for various diseases, including cancers, we do not currently expect to conduct development of therapeutics ourselves. As a result, even if our development efforts result in commercially viable products, our business and results of operations could underperform in comparison to our customers and competitors.

We may not be successful in updating or otherwise enhancing our Platform and products.

As of December 31, 2021, we had developed eight genomics diagnostics tests across oncology, infectious diseases, and neuropsychology, and four algorithmic diagnostic tests across oncology and cardiology. A major part of our strategy is bringing new high-value enhancements to our customers through updates to our Platform and existing products, which may include expanding our existing products with additional features, applications and data modalities. We expect to make significant investments to advance these efforts.

Enhancing our Platform and products is a speculative and risky endeavor. Features, applications and data modalities that initially show promise may fail to achieve the desired results or may not achieve acceptable levels of analytical accuracy or utility. We may need to alter our products in development and repeat studies before we identify a potentially successful update. Product development is expensive, may take years to complete and can have uncertain outcomes. Failure can occur at any stage of the development. Even if we confirm that our products can be successfully updated for additional features, applications and data modalities, those features, applications and data modalities may be limited in scope to only some diseases, disease segments, patient markets or geographies. If, after development, an updated product appears successful, we may, depending on the nature of the update, need to obtain FDA's, EMA's and other regulatory clearances, authorizations or approvals before we can market the updated product. The FDA's and EMA's clearance, authorization or approval pathways are likely to require significant time and expenditures. The FDA, EMA or other applicable regulatory authority may not clear, authorize or approve any product update we develop and may even change the applicable regulations or the application of those regulations in ways that would impact our existing products or services, including our Platform. Even if we develop a product update that receives regulatory clearance, authorization or approval, we or our collaborators would need to commit substantial resources to commercialize, sell and market the updated product, which may never achieve significant market acceptance among various stakeholders and be commercially successful.

In addition, we generally sell our products in industries that are characterized by rapid technological changes, frequent new product introductions and changing industry standards. If we do not develop Platform and product enhancements based on technological innovation on a timely basis, our Platform and products may become obsolete over time and our financial and competitive position will suffer. Our success will depend on several factors, including our ability to:

- correctly identify customer needs and preferences and predict future needs and preferences;
- allocate our research and development funding to areas with higher growth prospects;
- anticipate and respond to our competitors' development of new products and technological innovations;
- innovate and develop new technologies and applications, and acquire or obtain rights to third-party technologies that may have valuable applications in the markets we serve;
- successfully develop and commercialize new technologies and applications in a timely manner; and
- convince customers to adopt new technologies and applications.

The expenses or losses associated with unsuccessful expansion of our Platform could adversely affect our business, financial condition and results of operations.

If we are not successful in leveraging our Platform to identify, develop and commercialize additional genomic and algorithmic tests, our ability to expand our business and achieve our strategic objectives would be impaired.

A key element of our strategy is to leverage our Platform to identify, develop and potentially commercialize genomic and algorithmic tests beyond our current portfolio to diagnose various types of diseases. Identifying new genomic and algorithmic tests requires substantial technical, financial and human resources, whether or not any genomic or algorithmic tests are ultimately developed and commercialized. We may pursue what we believe is a promising opportunity to leverage our Platform only to discover that certain of our risk or resource allocation decisions were incorrect or insufficient, or that individual genomic or algorithmic tests have limitations that were previously unknown or underappreciated.

Our strategy of pursuing the value of our Platform to develop genomic and algorithmic tests over a long time horizon and across a broad array of human diseases may not be effective. In the event that material decisions in any of these areas turn out to be incorrect or sub-optimal, we may experience a material adverse impact on our business and ability to fund our operations, and we may never realize what we believe is the potential of our Platform for developing and commercializing genomic and algorithmic tests.

If our existing and new products fail to achieve and sustain sufficient scientific acceptance, we will not generate expected revenue and our prospects may be harmed.

The life sciences scientific community is comprised of a small number of early adopters and key opinion leaders who significantly influence the rest of the community. The success of life sciences products is due, in large part, to acceptance by the scientific community and their adoption of certain products as best practice in the applicable field of research. The current system of academic and scientific research views publishing in a peer-reviewed journal as a measure of success. In such journal publications, the researchers will describe not only their discoveries but also the methods and typically the products used to fuel such discoveries. Mentions in peer-reviewed journal publications is a good barometer for the general acceptance of our products as best practices. Ensuring that early adopters and key opinion leaders publish research involving the use of our products is critical to ensuring our products gain widespread acceptance and market growth. Continuing to maintain good relationships with such key opinion leaders is vital to growing our market. The number of times our products were mentioned in peer-reviewed publications has increased significantly in recent years. As of December 31, 2021, our products have been mentioned in 59 peer-reviewed articles published in major journals, including 40 that were Tempus-authored. We cannot assure investors, however, that our products will continue to be mentioned in peer-reviewed articles with any frequency or that any new products that we introduce in the future will be mentioned in peer-reviewed articles. In addition, self-authored journal publications that mention our products may present an actual, potential or perceived conflict of interest and, therefore, the number of publications in which our products are mentioned may not be indicative of the level of acceptance of our products. If too few researchers describe the use of our products, too many researchers shift to a competing product and publish research outlining their use of that product or too many researchers negatively describe the use or usability of our products in publications, it may drive existing and potential customers away from our products, which could harm our operating results. Any decrease in the frequency at which our products are mentioned in peer reviewed journals may negatively impact our prospects.

Our diagnostic products, or our competitors' diagnostic products, could have defects or errors or otherwise fail to meet the expectations of patients, physicians and third-party payers; in such cases our operating results, reputation and business could suffer.

The success of our Genomics and Algos products depends in part on patients', physicians' and third-party payers' confidence that our Platform can provide reliable, high-quality intelligent diagnostics that will improve

[Table of Contents](#)

clinical outcomes and lower healthcare costs, as well as our ability to comply with applicable privacy and data security requirements. We believe that patients, physicians and third-party payers are likely to be particularly sensitive to product defects and errors in the use of our products, including if our products fail to detect genomic alterations or other clinical relevant information with high accuracy from samples, if we fail to list or inaccurately include certain treatment options and available clinical trials in our test reports, or if we fail to comply with applicable privacy and data security laws, and there can be no guarantee that we will be successful in this regard. Furthermore, if our competitors' diagnostic products do not perform to expectations or if they fail to comply with applicable laws and regulations, it may result in lower confidence in us as well. As a result, the failure of our diagnostic products or our competitors' diagnostic products to perform as expected, or failure by us or our competitors to comply with applicable laws and regulations, could significantly impair our operating results and our reputation. In addition, we may be subject to legal claims arising from any such failures, including claims that defects or errors in our diagnostic products led to injury or death. Confidence in us, as well as the strength of our brand and reputation, could also be eroded by perceived failures by us or our competitors, even absent any evidence of failure or wrongdoing.

If we are unable to support demand for our current and future Genomics product line, including ensuring that we have adequate capacity to meet increased demand, or we are unable to successfully manage our anticipated growth, our business could suffer.

As the volume of our Genomics product line sales grows, we will need to continue to increase our workflow capacity for sample intake, customer service, billing and general process improvements, expand our internal quality assurance program and extend our Platform to support comprehensive genomic analysis at a larger scale within expected turnaround times. We will need additional certified laboratory scientists and other scientific and technical personnel to process higher volumes of our Genomics tests. Portions of our process are not automated and will require additional personnel to scale. We will also need to purchase additional equipment, some of which can take several months or more to procure, set up and validate, and increase our software and computing capacity to meet increased demand. There can be no assurance that any of these increases in scale, expansion of personnel, equipment, software and computing capacities or process enhancements will be successfully implemented, if at all, or that we will have adequate space in our laboratory facility or be able to secure additional facility space to accommodate such required expansion.

As we commercialize additional Genomics products, we will need to incorporate new equipment, implement new technology systems and laboratory processes, and hire new personnel with different qualifications. Failure to manage this growth or transition could result in turnaround time delays, higher product costs, declining product quality, deteriorating customer service and slower responses to competitive challenges. A failure in any one of these areas could make it difficult for us to meet market expectations for our products and could damage our reputation and the prospects for our business.

In addition, our ability to manage our growth properly will require us to continue to improve our operational, financial and management controls, as well as our reporting systems and procedures. The time and resources required to implement these new systems and procedures is uncertain and could be demanding, and failure to complete this in a timely and efficient manner could adversely affect our business, financial condition and results of operations.

If third-party payers, including commercial payers and government healthcare programs, do not provide coverage of, or adequate reimbursement for, our tests, our business, financial condition and results of operations will be negatively affected.

We received payment on approximately 45% of our clinical oncology NGS tests performed from January 1, 2020 through June 30, 2021. For the years ended December 31, 2020 and 2021, our average reimbursement for NGS tests billed to insurance in oncology was approximately \$1,100. In addition, we receive a substantial portion of our diagnostic revenue from a limited number of third-party commercial payers, most of which have not contracted with us to be a participating provider. We also receive reimbursement from Medicare for claims

[Table of Contents](#)

submitted with respect to our various diagnostic tests. Approximately 29% and 29% of our clinical tests were for Medicare beneficiaries in the years 2020 and 2021, respectively. Our revenue and commercial success depend on achieving coverage and reimbursement for our tests from payers, including both commercial and government payers. If payers do not provide coverage of, or do not provide adequate reimbursement for our tests, we may need to seek payment from the patient, which may adversely affect demand for our tests.

In addition, because our Genomics and Algos diagnostic tests represent new approaches to the diagnosis of diseases, we cannot accurately estimate how they would be priced, whether reimbursement could be obtained or any potential revenue generated. Coverage determinations by a payer may depend on a number of factors, including but not limited to a payer's determination that a test is appropriate, medically necessary or cost-effective. If we are unable to provide payers with sufficient evidence of the clinical utility and validity of our test, they may not provide coverage, may provide limited coverage or may terminate coverage, which will adversely affect our business, financial condition and results of operations. To the extent that more competitors enter our markets, the availability of coverage and the reimbursement rate for our tests may decrease as we encounter pricing pressure from our competitors.

Each payer makes its own decision as to whether to provide coverage for our tests, whether to enter into a contract with us and the reimbursement rate for a test. Negotiating with payers is time-consuming, and payers often insist on their standard form contracts, which may allow payers to terminate coverage on short notice, impose significant obligations on us and create additional regulatory and compliance hurdles for us. There can be no guarantee that a payer will provide adequate coverage or reimbursement for our tests or that we can reach an agreement with the payer on reasonable terms without being subject to additional regulatory and compliance risks. In cases where there is no coverage, or we do not have a contracted rate for reimbursement with the payer, the patient is typically responsible for a greater share of the cost of the test, which may result in delay of revenue, increase collection costs or decrease the likelihood of collection. We maintain a financial assistance program under which we assess patient financial need and offer discounted or no-cost tests to certain patients who meet the financial and other eligibility criteria of the program. This may result in scrutiny by payers of our financial assistance program and could result in recoupment actions or termination of coverage of our tests.

Our claims for reimbursement have in the past been denied and may again in the future be denied, and we have needed, and again may need, to appeal such denials in order to get paid. Such appeals may not result in payment. Payers may perform audits of historically paid claims and attempt to recoup funds years after the funds were initially distributed if the payers believe the funds were paid in error or determine that our tests were medically unnecessary. If a payer's audit of our claims results in a negative finding, and we are unable to reverse the finding through appeal, any subsequent recoupment could result in a material adverse effect on our revenue. Additionally, in some cases commercial payers for whom we are not a participating provider may elect at any time to review claims previously paid and determine the amount they paid was excessive. In these situations, the payer typically notifies us of its decision and then offsets the amount it determines to be overpaid against amounts it owes us on current claims. We do not have a mechanism to dispute these retroactive adjustments, and we cannot predict when, or how often, a payer might engage in these reviews, as historic success and payments are not indicative of future success of and payments from such appeals.

Our efforts to become a participating provider of a number of commercial payers may not be successful. When we contract with a payer as a participating provider, reimbursements by the payer are generally made pursuant to a negotiated fee schedule and are limited to only covered indications or where prior approval has been obtained.

Although we are a participating provider with an extremely small number of commercial payers, other large, national commercial payers, including Anthem, Aetna and Humana, have issued non-coverage policies that consider tissue and liquid comprehensive genomic profile testing, including certain of our Genomics tests, as experimental or investigational. If we are not successful in obtaining coverage from such payers, or if other payers issue similar non-coverage policies, our business, financial condition and results of operations could be materially and adversely affected.

[Table of Contents](#)

Coverage and reimbursement are ever changing, and we are not in control of how our competitors' coverage and pricing strategies are established. Some of our competitors have widespread brand recognition and substantially greater financial and technical resources and development, production and marketing capabilities than we do. Others may develop lower-priced, less complex tests that payers and healthcare professionals could view as functionally equivalent to our products, which could force us to lower the list price of our tests and impact our operating margins and our ability to achieve and maintain profitability. Payers may compare our products to our competitors and utilize them as precedents, which may impact our coverage and reimbursement. In addition, technological innovations that result in the creation of enhanced diagnostic tools that are more effective than ours may enable other clinical laboratories, hospitals, medical personnel or medical providers to provide specialized diagnostic tests similar to ours in a more patient-friendly, efficient or cost-effective manner than is currently possible.

In the United States, many significant decisions about reimbursement for new diagnostics are made by the Centers for Medicare & Medicaid Services, or CMS, which makes a national coverage determination, or NCD, as to whether and to what extent a new diagnostic will be covered and reimbursed under Medicare, although it frequently delegates this authority to local Medicare Administrative Contractors, or MACs, which may make a local coverage determination, or LCD, with respect to coverage and reimbursement. Private payers tend to follow Medicare to a substantial degree. It is difficult to predict what CMS or the applicable MACs will decide with respect to reimbursement for novel diagnostic products such as ours.

Medicare's NCD for next generation sequencing, or NGS, first established in 2018 and subsequently updated in 2020, states that NGS oncology tests (such as our Tempus|xT and Tempus|xF tests), would be covered by Medicare nationally if and when: (1) performed in a Clinical Laboratory Improvement Amendments, or CLIA, certified laboratory, (2) ordered by a treating physician, (3) the patient meets certain clinical and treatment criteria, including having recurrent, relapsed, refractory, metastatic, or advanced stages III or IV cancer, (4) the test is approved or cleared by the FDA as a companion in vitro diagnostic for an FDA approved or cleared indication for use in that patient's cancer, and (5) results are provided to the treating physician for management of the patient using a report template to specify treatment options. The NGS NCD also states that each MAC may provide local coverage of other next-generation sequencing tests for cancer patients only when the test is performed by a CLIA-certified laboratory, ordered by a treating physician and the patient meets the same clinical and treatment criteria required of nationally covered next-generation sequencing tests under the NGS NCD. An NGS test is typically not covered by Medicare when cancer patients do not have the above-noted indications for cancer under either an NCD or LCD.

National Government Services, Inc., or the Local MAC, is the MAC that makes local coverage determinations, or LCDs, for tests conducted at our Chicago laboratory. The Local MAC has issued two LCDs related to genetic testing in cancer, each of which currently requires claims to be submitted under a single current procedural terminology, or CPT, code that describes the test. Because no CPT code comprehensively describes our NGS oncology tests, we have historically submitted claims using individual codes based on the cancer subtype profiled. On March 25, 2021, the Local MAC instructed us to submit our claims using a different designated CPT code and indicated that such claims would be individually reviewed. In addition to claims submitted after the March 25, 2021 guidance, on July 23, 2021, the Local MAC issued revised instructions for CPT coding, which may be applicable to our NGS oncology tests performed after the date of the revised guidance, and further updated those instructions on July 29, 2021. We have sought additional clarification on this guidance from the Local MAC in order to understand its impact on our coding procedures. We are also attempting to assess the impact of this updated guidance on the payments we may receive for Medicare claims submitted to the Local MAC. Claims submitted under the March 2021 and July 2021 guidance were summarily denied and we are in the process of appealing these denials, but the process is typically slow and costly, and multiple levels of appeal may be required for adjudication of outstanding claims.

On February 10, 2022, the Local MAC jurisdiction issued a revised LCD (L37810), and a corresponding Billing and Coding update (A56867). The increased scope of coverage provided for in the revised LCD will

[Table of Contents](#)

result in the CPT code they instructed us to begin billing in July 2021 being reimbursed at the prevailing Medicare rate for those tests which meet the revised coverage criteria. The modified LCD is effective April 1, 2022 and applies to genomic sequence analysis panel tests in the treatment of solid tumors, which primarily impacts our solid tumor assay, xT, given the modified scope of coverage in the revised LCD. We are in the process of assessing the impact of the LCD on any claims submitted after April 1, 2022, as well as monitoring any impact the LCD has on the claims currently in the appeal process.

During the fourth quarter of 2021, we began receiving favorable results on outstanding level 2 claims that were adjudicated and have received payment on a subset of these claims as a result of the appeal process. As a result, beginning in the second quarter of 2021, we estimated the reimbursement rate for tests performed within our contractual allowances with a significantly reduced percent expected reimbursement for these tests, which is guided by the updated Local MAC guidance and appeal outcomes through year-end. As of December 31, 2021, Medicare claims represent 29% of our clinical testing volume.

In addition, pursuant to the regulations of CMS, we cannot bill Medicare directly for tests provided for Medicare beneficiaries in some situations. CMS adopted an exception to its laboratory date of service regulation, and if certain conditions are met, molecular testing laboratories such as us can rely on that exception to bill Medicare directly, instead of seeking payment from the hospital. If this exception is repealed or curtailed by CMS, or its laboratory date of service regulation is otherwise changed to adversely impact our ability to bill Medicare directly, our revenue could be materially reduced.

Some payers have implemented, or are in the process of implementing, laboratory benefit management programs, often using third-party benefit managers to manage these programs. The stated goals of these programs are to help improve the quality of outpatient laboratory services, support evidence-based guidelines for patient care and lower costs. The impact on laboratories, such as us, of active laboratory benefit management by third parties is unclear, and we expect that it would have a negative impact on our revenue in the short term. Payers may resist reimbursement for our tests in favor of less expensive tests, require pre-authorization for our tests, or impose additional pricing pressure on and substantial administrative burden for reimbursement for our tests. We expect to continue to focus substantial resources on increasing adoption of, and coverage and reimbursement for, our current tests and any future tests we may develop. We believe it may take several years to achieve broad coverage and adequate contracted reimbursement with a majority of payers for our tests. However, we cannot predict whether, under what circumstances, or at what price levels payers will cover and reimburse our tests. If we fail to establish and maintain broad adoption of, and coverage and reimbursement for, our tests, our ability to generate revenue could be harmed and our business, financial condition and results of operations could suffer.

If we are unable to obtain or maintain adequate reimbursement for our Genomics product line outside of the United States, our ability to expand internationally will be compromised.

A substantial portion of our Genomics product line revenues come from third-party payer reimbursement. In many countries outside of the United States, various coverage, pricing and reimbursement approvals are required for our tests to be available to patients in significant volume. We expect that it will take several years to establish broad coverage and reimbursement for our tests with payers in countries outside of the United States, and our efforts may not be successful.

Even if public or private reimbursement is obtained, it may cover competing tests, or the reimbursement may be limited to a subset of the eligible patient population or conditioned upon local performance of the tests or other requirements we may have difficulty satisfying.

Reimbursement levels outside of the United States may vary considerably from the domestic reimbursement amounts we receive. We may also be negatively affected by the financial instability of, and austerity measures implemented by, several countries in the European Union, or EU, and elsewhere.

Failure of, or defects in, our Platform's artificial intelligence software, or increased regulation in this space, could impair our ability to process our data, develop products, or provide test results, and harm our business, financial condition and results of operations.

Artificial intelligence is enabled by or integrated into our Platform and, as a result, our diagnostic and data products and is a significant element of our current business and our future strategy. As with many developing technologies, artificial intelligence presents risks and challenges that could affect its further development, adoption, and use, and therefore our business. Algorithms may be flawed or biased, and datasets may be insufficient, of poor quality or contain biased information. Overcoming technical obstacles and correcting defects or errors could prove to be impossible or impracticable, and the costs incurred may be substantial and adversely affect our results of operations. If the diagnoses, recommendations, forecasts or analyses that our Platform's artificial intelligence applications assist in producing are deficient or inaccurate, we could be subjected to competitive harm, potential legal liability and brand or reputational harm.

In addition, inappropriate or controversial data practices by data scientists, engineers and end-users of our or our competitors' products could impair the acceptance of artificial intelligence products. Though our business practices are designed to mitigate many of these risks, if we enable or offer artificial intelligence products that are controversial because of their purported or real impact on human rights, privacy, employment, or other social issues, we may experience brand or reputational harm. Additionally, regulation in the artificial intelligence space is constantly changing and increasing, and may make it difficult for us to continue using our artificial intelligence approach to diagnostics and data analysis.

If our Platform does not function reliably, fails to meet expectations in terms of performance, or cannot be fully utilized due to increasing regulation or reputational concerns, we may be unable to provide or our customers may stop using our products.

We may experience challenges with the acquisition, development, enhancement or deployment of technology necessary for our businesses.

Our Platform requires sophisticated computer systems and software in order to accurately and efficiently capture, service and process increasing volumes of health data, in particular a growing number of genomic profiles generated by our customers through various NGS test kits, sequencers and sample materials from different manufacturers. Some of the technologies are changing rapidly and we must continue to adapt to these changes in a timely and effective manner at an acceptable cost. There can be no assurance that we will be able to develop, acquire, enhance, deploy or integrate new technologies, including technologies needed to integrate genomics data into our Platform, that these new technologies will be effective and efficient, will meet our needs or achieve our expected goals or that we will be able to do so as quickly or cost effectively as our competitors.

If we cannot compete successfully with our competitors, we may be unable to increase or sustain our revenue or to achieve and then sustain profitability.

Growing understanding of the importance of biomarkers linked with therapy selection and response is leading to more companies offering products in genomic testing, including NGS diagnostics and PCR profiling. In addition, there are a number of healthcare technology companies providing data analysis products, including artificial intelligence-driven data platforms and diagnostic products.

Our competitors with respect to our Genomics products include certain diagnostic companies, such as Foundation Medicine, Inc., which was acquired by Roche Holdings, Inc., Caris Life Sciences, Guardant Health, Inc., Neogenomics, and ResolutionBio, which was acquired by Agilent, among others, with respect to our currently marketed precision oncology tests, and legacy diagnostic laboratories, such as Quest and LabCorp. In addition, our competitors for our pharmacogenetic test in neuropsychology include Myriad Genetics, Inc. and Genomind, Inc.

[Table of Contents](#)

Our competitors with respect to our Data products include Flatiron Health, Inc., IQVIA Holdings Inc., and ConcertAI, among others. Furthermore, our Data products also face competition from CROs, such as Covance, ICON, Syneos, PPD, and others, who provide data and clinical trial matching services to pharmaceutical and biotechnology companies.

Our competitors with respect to our Algos products include Roche Holdings, Inc., Caris Life Sciences, Guardant Health, Inc., Illumina, Inc., and others, with respect to our TO test, and Myriad Genetics, Inc., Caris Life Sciences, and others, with respect to our HRD test. We may also compete with companies developing or commercializing algorithm-based diagnostics using a variety of different data modalities, including digital pathology companies such as PathAI, Inc. and PaigeAI. In cardiology, we believe our competitors may include HeartFlow Inc. and Eko Devices, Inc. In addition, we are aware that academic medical centers may be developing their own Algos and may decide to enter this market.

Some of our competitors and potential competitors may have longer operating histories; larger customer bases; greater brand recognition and market penetration; substantially greater financial, technological and research and development resources and selling and marketing capabilities; and more experience dealing with third-party payers. As a result, they may be able to respond more quickly to changes in customer requirements, devote greater resources to the development, promotion and sale of their products than we do or sell their products at prices designed to win significant levels of market share. We may not be able to compete effectively against these organizations. Increased competition and cost-saving initiatives on the part of governmental entities and other third-party payers are likely to result in pricing pressures, which could harm our sales or ability to gain market share. In addition, competitors may be acquired by, receive investments from or enter into other commercial relationships with larger, well-established and well-financed companies. Certain of our competitors may be able to secure key inputs from vendors on more favorable terms, devote greater resources to marketing and promotional campaigns, adopt more aggressive pricing policies and devote substantially more resources to product development than we can. In addition, companies or governments that control access to genetic testing through umbrella contracts or regional preferences could promote our competitors or prevent us from selling certain products. If we are unable to compete successfully against current and future competitors, we may be unable to increase market acceptance and sales of our tests, which could prevent us from increasing our revenue or achieving profitability and could cause our stock price to decline.

The sizes of the markets for our current and future products have not been established with precision, and may be smaller than we estimate.

Our estimates of the annual total addressable markets for our current products and products under development are based on a number of internal and third-party estimates, including, without limitation, the number of patients profiled with genomic diagnostics in the diseases we test, the assumed prices for genomic and algorithmic testing products, the number of genomic and algorithmic tests that we are able to successfully develop and commercialize, and the existing market for multimodal patient data and clinical trial matching services. While we believe our assumptions and the data underlying our estimates are reasonable, these assumptions and estimates may not be correct and the conditions supporting our assumptions or estimates may change at any time, thereby reducing the predictive accuracy of these underlying factors. As a result, our estimates of the annual total addressable market for our current or future products may prove to be incorrect. If the actual number of patients who would benefit from our products, the price at which we can sell our products, the number of genomic or algorithmic tests we are able to successfully develop and commercialize, or the annual total addressable market for our products is smaller than we have estimated, it may impair our sales growth and have an adverse impact on our business, financial condition and results of operations.

The industries in which we operate are subject to rapid change, which could make our Platform, our current products and any future products we may develop obsolete.

The healthcare diagnostic and data industries are characterized by rapid changes, including technological and scientific breakthroughs, frequent new product introductions and enhancements and evolving industry

standards, any of which could make our current and future products obsolete. Our future success will depend on our ability to keep pace with the evolving needs of our customers on a timely and cost-effective basis and to pursue new market opportunities that develop as a result of scientific and technological advances. In recent years, there have been numerous advances in technologies relating to genomic diagnostic testing, as well as advances in the application of artificial intelligence to healthcare diagnostics and decision-making. We must continuously enhance our Platform and our existing diagnostic, data and analytics products and develop new products to keep pace with evolving standards of care. If we do not update our product offerings to reflect new scientific knowledge about disease biology, information about new therapies or relevant clinical trials, or insights regarding the current treatment landscape for applicable indications and advances in computational biology, software development, and artificial intelligence, our Platform and products could become obsolete and sales of our current products and any new products we may develop could decline or fail to grow as expected. Further, to the extent that pharmaceutical or biotechnology companies are able to develop therapies or technologies that eradicate or substantially limit the incidence of diseases for which we sell diagnostics, the market for our applicable products could disappear entirely.

Our research and development strategy emphasizes rapid innovation and advancement of successful hires who may not have prior industry expertise, and we frequently prioritize patient care and customer satisfaction over short-term financial results. If we cannot maintain or properly manage our culture as we grow, our business may be harmed.

We have a research and development strategy that encourages employees to quickly develop and launch technologies intended to solve our customers' most important problems and prioritizes the advancement of Platform and product development, technology and engineering employees to positions of significant responsibility based on merit despite, in some cases, limited prior work or industry experience. Successful entry-level hires are often quickly advanced and rewarded with significant responsibilities, including in important customer-facing roles as project managers, development leads, and product managers. As our business grows and becomes more complex, our cultural emphasis on moving quickly and staffing research and development personnel, including certain customer-facing employees, without significant industry experience may result in unintended outcomes or in decisions that are poorly received by customers or other stakeholders. For example, in many cases we launch, at our expense, pilot deployments with customers without a long-term contract in place, and some of those deployments have not resulted in the customer's adoption or expansion of its use of our products, or the generation of significant, or any, revenue or payments. In addition, as we continue to grow, including geographically, and as we develop a public company infrastructure, we may find it difficult to maintain our culture.

Our culture also prioritizes patient care and customer satisfaction over short-term financial results, and we frequently make product decisions that may reduce our short-term revenue or cash flow if we believe that the decisions are consistent with our mission and thereby have the potential to improve our financial performance over the long term. These decisions may not produce the long-term benefits and results that we expect or may be poorly received in the short term by the public markets, in which case our customer growth and our business, financial condition and results of operations may be harmed.

We may not be able to successfully market, sell or distribute our products, and if we are unable to expand our sales organization to adequately address our customers' needs, our business, financial condition and results of operations may be adversely affected.

We may not be able to market, sell or distribute our data products and diagnostic tests, and other products we may develop effectively enough to support our planned growth. We currently sell our Genomics and Algos tests to clinicians and hospital systems in the United States through our own sales organization, and we sell our Data products to pharmaceutical and biotechnology companies through our business development team.

Each of our target markets is large, distinctive and diverse. As a result, we believe it is necessary for many of our sales representatives and business development managers to have established diagnostic- or healthcare

[Table of Contents](#)

data-focused expertise. Competition for such employees within the precision diagnostics and healthcare data analytics industries is intense. We may not be able to attract and retain personnel or be able to build an efficient and effective sales organization or business development team, which could negatively impact sales and market acceptance of our products and limit our revenue growth and potential profitability.

Our expected future growth will impose significant added responsibilities on members of management, including the need to identify, recruit, maintain and integrate additional employees. Our future financial performance and our ability to commercialize our products, to increase our sales and to compete effectively will depend, in part, on our ability to manage this potential future growth effectively, without compromising quality.

If we are not successful in executing our strategy to increase sales of our Data products to large pharmaceutical and biotechnology customers, our results of operations may suffer.

An important part of our growth strategy is to increase sales of Data products, and in particular our Insights product, to large pharmaceutical and biotechnology companies. Sales to large companies involve risks that may not be present (or that are present to a lesser extent) with sales to small-to-mid-sized entities. These risks include:

- increased leverage held by large customers in negotiating contractual arrangements with us;
- changes in key decisionmakers within these organizations that may negatively impact our ability to negotiate in the future;
- customer employees may perceive that our products pose a threat to their internal control and advocate for internally developed solutions over our product;
- resources may be spent on a potential customer that ultimately elects not to purchase our products;
- more stringent requirements in our service contracts, including stricter service response times, and increased penalties for any failure to meet service requirements;
- increased competition from larger competitors that traditionally target large enterprises and government entities; and
- less predictability in completing some of our sales than we do with smaller customers.

Sales to large pharmaceutical and biotechnology companies is often a lengthy process, generally taking several months and sometimes longer. Following the establishment of the relationship, the negotiation of purchase terms can be time-consuming, and a potential customer may require an extended evaluation and testing period. Due to the length, size, scope, and requirements of these evaluations, we frequently provide short-term pilot deployments of our Data products at no or low cost. We sometimes spend substantial time, effort and money in our sales efforts without producing any sales. The success of the investments that we make to acquire customers depends on factors such as our ability to identify potential customers for which our data products have an opportunity to add significant value to the customer's business, our ability to identify and agree with the potential customer on an appropriate pilot deployment to demonstrate the value of our products, and whether we successfully execute on such pilot deployment. Even if the pilot deployment is successful, we or the customer could choose not to enter into a larger contract for a variety of reasons. For example, product purchases by large companies are frequently subject to budget constraints, leadership changes, multiple approvals, and unplanned administrative, processing, and other delays, any of which could significantly delay or entirely prevent our realization of sales. As a result, in the event a sale is not completed or is canceled or delayed, we may have incurred substantial expenses, making it more difficult for us to become profitable or otherwise negatively impacting our financial results.

Finally, large companies typically (i) have longer implementation cycles, (ii) require greater product functionality and scalability and a broader range of services, including design services, (iii) demand that vendors take on a larger share of risks, (iv) sometimes require acceptance provisions that can lead to a delay in revenue recognition and (v) expect greater payment flexibility from vendors.

[Table of Contents](#)

All of these factors can add further risk to business conducted with these customers. If sales expected from a large customer for a particular quarter are not realized in that quarter or at all, our business, financial condition and results of operations could be materially and adversely affected.

If our existing customers do not renew their licenses, do not buy additional products from us, or renew at lower prices, our business and operating results will suffer.

For the year ended December 31, 2021, we derived \$35.4 million, or approximately 56%, of our Data product line revenue from three customers. After removing the impact of COVID-19 testing revenue, we derived \$34.1 million, or approximately 21%, of total revenue from the same three customers for the year ended December 31, 2021. We expect to continue to derive a significant portion of our Data product line revenues from renewal of existing agreements. As a result, maintaining the renewal rate of our existing customers and selling additional products to them is critical to our future operating results. Factors that may affect the renewal rate for our customers and our ability to sell additional products to them include:

- the price, performance, and functionality of our products;
- the availability, price, performance, and functionality of competing products;
- the effectiveness of our support services;
- our ability to develop complementary products;
- the success of competitive products or technologies;
- the stability, performance, and security of our technological infrastructure; and
- the business environment of our customers.

We deliver our Insights product through license agreements that allow our customers to use de-identified datasets for a specified term or for specified uses. Our customers have no obligation to renew their licenses for our Data products after the license ends, and many of our contracts may be terminated or reduced in scope either immediately or upon notice. In addition, our customers may negotiate terms less advantageous to us upon renewal, which may reduce our revenues from these customers. Factors that are not within our control may contribute to a reduction in our Data product line revenues. For instance, our customers may change the indications in which they are conducting research and development, which could result in a reduced demand for our products and thus a lower aggregate renewal fee. The loss, reduction in scope, or delay of a large contract, or the loss or delay of multiple contracts, could materially adversely affect our business, financial condition and results of operations.

Our future operating results also depend, in part, on our ability to sell expanded products to our existing customers. For example, the willingness of existing customers to expand their use of our Insights product will depend on our ability to deliver meaningful information and insights relevant to our customers' research and development endeavors, which we may not do successfully. If our customers fail to renew their agreements, renew their agreements upon less favorable terms or at lower fee levels, or fail to purchase expanded licenses from us, our revenues may decline and our future revenues may be constrained.

A significant portion of our Data product line revenues are generated by sales to life sciences industry customers, and factors that adversely affect this industry could also adversely affect our Data business sales.

A significant portion of our current Data products sales are to customers in the life sciences industry, in particular the pharmaceutical and biotechnology industry. Demand for our Data products could be affected by factors that adversely affect the life sciences industry. The life sciences industry is highly regulated and competitive and has experienced periods of considerable consolidation. Consolidation among our customers could cause us to lose customers, decrease the available market for our products, and adversely affect our

[Table of Contents](#)

business, financial condition and results of operations. In addition, changes in regulations that make investment in the life sciences industry less attractive or drug development more expensive could adversely impact the demand for our data analytics products. For these reasons and others, selling data analytics products to life sciences companies can be competitive, expensive, and time consuming, often requiring significant upfront time and expense without any assurance that we will successfully complete a sale. Accordingly, our operating results and our ability to efficiently provide our products to life sciences companies and to grow or maintain our customer base could be adversely affected as a result of factors that affect the life sciences industry generally.

We have invested and expect to continue to invest in research and development efforts that further enhance our data analytics. Such investments may affect our operating results, and, if the return on these investments is lower or develops more slowly than we expect, our revenue and operating results may suffer.

We have invested and expect to continue to invest in research and development efforts that further enhance our data analytics, often in response to our customers' requirements. These investments may involve significant time, risks, and uncertainties, including the risk that the expenses associated with these investments may affect our margins and operating results and that such investments may not generate sufficient revenues to offset liabilities assumed and expenses associated with these new investments. The healthcare data analytics industry changes rapidly as a result of technological and product developments, which may render our Platform and products less desirable. We believe that we must continue to invest a significant amount of time and resources in our Platform and products to maintain and improve our competitive position. If we do not achieve the benefits anticipated from these investments, if the achievement of these benefits is delayed, or if a slowdown in general computing power impacts the rate at which we expect our physics-based simulations to increase in power and domain applicability, our revenue and operating results may be adversely affected.

If we are unable to collect receivables from our customers, our operating results may be adversely affected.

While the majority of our current customers are well-established large companies and hospital systems, we also provide our Data products to smaller institutions and companies and our Genomics product line to individuals. Our financial success depends upon the creditworthiness and ultimate collection of amounts due from our customers, including our smaller customers with fewer financial resources. If we are not able to collect amounts due from our customers, we may be required to write-off significant accounts receivable and recognize bad debt expenses, which could materially and adversely affect our operating results.

We rely on a limited number of suppliers or, in some cases, sole suppliers, for some of our laboratory instruments and materials and may not be able to find replacements or promptly transition to alternative suppliers.

We rely on a limited number of suppliers or, in some cases, sole suppliers, including Illumina Inc., or Illumina, for certain sequencers, reagents, blood tubes and other equipment, instruments and materials that we use in our laboratory operations. Purchases from this supplier accounted for approximately 23% and 25% of total vendor payments for the year ended December 31, 2020 and 2021, respectively. Amounts due to this supplier approximated \$5.3 million and \$0.9 million at December 31, 2020 and 2021, respectively. An interruption in our laboratory operations could occur if we encounter delays or difficulties in securing these laboratory equipment, instruments or materials, and if we cannot then obtain an acceptable substitute. Any such interruption could significantly and adversely affect our business, financial condition and results of operations. We rely on Illumina as the sole supplier of the sequencers and as the sole provider of maintenance and repair services for these sequencers. Any disruption in operations of Illumina or other sole or limited suppliers or termination or suspension of our relationships with them could materially and adversely impact our supply chain and laboratory operations of our diagnostic testing business and thus our ability to conduct our business and generate revenue. These limited or sole suppliers could engage in diverse types of businesses, including selling products in competition with us, and there can be no assurance that we can continue to receive required equipment, instruments or materials from them.

[Table of Contents](#)

We believe that there are only a limited number of manufacturers that are capable of supplying and servicing the equipment and materials necessary for our laboratory operations, including sequencers and various associated reagents, and potentially replacing our current suppliers. The use of equipment or materials furnished by replacement suppliers would require us to alter our laboratory operations. Transitioning to a new supplier would be time-consuming and expensive, may result in interruptions in our laboratory operations, could affect the performance specifications of our laboratory operations or could require that we revalidate our tests. There can be no assurance that we will be able to secure alternative equipment, reagents and other materials, bring such equipment, reagents and materials online, and revalidate our tests without experiencing interruptions in our workflow. In the case of an alternative supplier for Illumina, for example, there can be no assurance that replacement sequencers and various associated reagents will be available or will meet our quality control and performance requirements for our laboratory operations. If we should encounter delays or difficulties in securing, reconfiguring or integrating the equipment and reagents we require for our products or in revalidating our products, our business, financial condition and results of operations could be materially and adversely affected.

Certain disruptions in supply of, and changes in the competitive environment for, raw materials and components integral to the manufacturing of our products may adversely affect our ability to achieve and maintain profitability.

We use a broad range of materials and supplies, including chemicals and other electronic components, in our Genomics product line. A significant disruption in the supply of these materials, including disruptions stemming from the COVID-19 pandemic, could decrease production and shipping levels, materially increase our operating costs and materially adversely affect our profit margins. Shortages of materials or interruptions in transportation systems, labor strikes, work stoppages, infectious disease, epidemics or pandemics including COVID-19, outbreaks, conflict (including the armed conflict between Russia and Ukraine), civil unrest, acts of terrorism or other interruptions to or difficulties in the employment of labor or transportation in the markets in which we purchase materials, components and supplies for the production of our diagnostic tests, in each case may adversely affect our ability to maintain our testing capacity. Unforeseen end-of-life or unavailability for certain components, such as enzymes, could cause backorders as we modify our product specifications to accommodate replacement components. If we were to experience a significant disruption in the supply of, or prolonged shortage of, critical components from any of our suppliers and could not procure the components from other sources, we would be unable to sustain our testing capacity, which would adversely affect our sales, margins and customer relations.

If our existing laboratory and storage facilities become damaged or inoperable or we are required to vacate our existing facilities, our ability to perform our tests and pursue our research and development efforts may be jeopardized.

We currently derive nearly all of our diagnostic revenue from tests performed at laboratory facilities located in Chicago, Illinois and Atlanta, Georgia, and these facilities generally do not have redundant capabilities. Further, while we are currently in the process of validating our new laboratory facility in Raleigh, North Carolina, there is no assurance that we will successfully complete such validation in a timely manner or at all, and we will not be able to operationalize this facility until such validation is complete. Our facilities and equipment could be harmed or rendered inoperable by natural or man-made disasters, including war, fire, earthquake, power loss, communications failure or terrorism, which may render it difficult or impossible for us to operate our Genomics product line for some period of time and which may also cause us to lose valuable stored tissue samples, including organoids. The inability to perform our tests or to reduce the backlog that could develop if a facility is inoperable for even a short period of time, may result in the loss of customers or harm to our reputation, and we may be unable to regain those customers or repair our reputation. Furthermore, our facilities and the equipment we use to perform our research and development work could be unavailable or costly and time-consuming to repair or replace. It would be difficult, time-consuming and expensive to rebuild a facility, to locate and qualify a new facility or enable a third party to practice our proprietary technology, particularly in light of licensure and accreditation requirements. Even if we are able to find a third party with such qualifications to perform our tests, the parties may be unable to agree on commercially reasonable terms.

[Table of Contents](#)

We carry insurance for damage to our property and disruption of our business, but this insurance may not cover all of the risks associated with damage or disruption to our facilities and business, may not provide coverage in amounts sufficient to cover our potential losses and may not continue to be available to us on acceptable terms, if at all.

We rely on commercial courier delivery services to transport samples to our laboratory facility in a timely and cost-efficient manner and if these delivery services are disrupted, our business will be harmed.

Our business depends on our ability to deliver test results quickly and reliably to our customers. Blood and tissue samples sent from the United States by patients, physicians or hospital pathology departments are typically received within days for analysis at our Chicago or Atlanta facilities. Disruptions in delivery services to transport samples to that facility, whether due to labor disruptions, bad weather, natural disaster, terrorist acts or threats or for other reasons could adversely affect specimen integrity and our ability to process samples in a timely manner, delay our provision of test results to our customers, and ultimately our reputation and our business. In addition, if we are unable to continue to obtain expedited delivery services to transport samples to us on commercially reasonable terms, our business, financial condition and results of operations may be adversely affected.

If we cannot provide quality technical support and services for our Data products, we could lose customers and our business and prospects will suffer.

Our ability to provide relevant information to customers of our Data business, and in particular of our Insights product, depends substantially on our ability to provide quality technical support and services during the term of their license. Accordingly, we need highly trained technical support and services personnel. Hiring support and services personnel is very competitive in our industry due to the limited number of people available with the necessary scientific and technical backgrounds and ability to understand our products and the needs of our customers. To effectively support new customers and the expanding needs of current customers, we will need to substantially expand our support and services staff and develop our support infrastructure and processes. If we are unable to attract, train or retain the number of highly qualified technical services personnel that our business needs, our business and prospects will suffer.

Seasonality may cause fluctuations in our revenue and results of operations.

We believe that there are significant seasonal factors which may cause sales of our products, such as our Insights product and our infectious disease tests, to vary on a quarterly or yearly basis and increase the magnitude of quarterly or annual fluctuations in our operating results. We believe that this seasonality results from a number of factors, including the procurement and budgeting cycles of many of our customers, especially pharmaceutical and biotechnology customers. These customers typically have calendar year fiscal years, which result in a disproportionate amount of their purchasing activity occurring during our fourth quarter. These factors have contributed, and may contribute in the future, to substantial fluctuations in our quarterly operating results. Because of these fluctuations, it is possible that in some quarters our operating results will fall below the expectations of securities analysts or investors. If that happens, the market price of our common stock would likely decrease. These fluctuations, among other factors, also mean that our operating results in any particular period may not be relied upon as an indication of future performance. Seasonal or cyclical variations in our sales have in the past, and may in the future, become more or less pronounced over time, and have in the past materially affected, and may in the future materially affect, our business, financial condition and results of operations. Additionally, impacts of the COVID-19 pandemic could cause unpredictable temporary or permanent fluctuations in seasonal or cyclical variations, including seasonal demand for COVID-19 tests.

Risks Related to Our Highly Regulated Industry

Our collection, processing, use and disclosure of personally identifiable information, including patient and employee information, is subject to privacy and security regulations, and our failure to comply with those regulations or to adequately secure the information in our possession could result in significant liability or reputational harm.

The privacy and security of personally identifiable information stored, maintained, received or transmitted, including electronically, is a major issue in the United States and abroad. We collect, process, maintain, retain, evaluate, utilize and distribute large amounts of personal health and financial information and other confidential and sensitive data about our customers, employees and others in the ordinary course of our business. Concerns about and claims challenging our practices with regard to the collection, use, retention, disclosure or security of personally identifiable information or other privacy-related matters, even if unfounded and even if we are in compliance with applicable laws, could damage our reputation and harm our business, financial condition and results of operations.

Numerous federal, state and foreign laws and regulations govern collection, dissemination, use and confidentiality of personally identifiable information and protected health information, including HIPAA; state privacy and confidentiality laws (including state laws requiring disclosure of breaches); federal and state consumer protection and employment laws; and European and other foreign data protection laws. A range of enforcement agencies exist at both the state and federal levels that can enforce these laws and regulations. New privacy legislation may create additional rights for consumers and impose additional requirements on businesses. As these laws and regulations increase in complexity and number, they may change frequently, sometimes conflict and increase our compliance efforts, costs and risks.

HIPAA, as amended by HITECH, establishes a set of national privacy and security standards for the protection of PHI by health plans, healthcare clearinghouses, and certain healthcare providers that submit certain covered transactions electronically, or “covered entities,” and their “business associates,” which are persons or entities that perform certain services for, or on behalf of, a covered entity that involve creating, receiving, maintaining or transmitting PHI, and their covered subcontractors. We are a covered entity under HIPAA, and also routinely receive large amounts of PHI as a business associate under HIPAA, and therefore must comply with its requirements to protect the privacy and security of health information and must provide individuals with certain rights with respect to their health information. If we engage a business associate to help us carry out healthcare activities and functions, we must have a written business associate contract or other arrangement with the business associate that establishes specifically what the business associate has been engaged to do and requires the business associate to comply with the same requirements.

Penalties for violations of these laws vary. For instance, a single breach incident can result in findings of violations of multiple HIPAA provisions. Penalties for failure to comply with a requirement of HIPAA and HITECH vary significantly, and include civil monetary penalties for each provision of HIPAA that is violated and, in certain circumstances, criminal penalties, including imprisonment and/or additional fines. A person who knowingly obtains or discloses individually identifiable health information in violation of HIPAA may face additional fines and up to one-year imprisonment. The criminal penalties increase if the wrongful conduct involves false pretenses or the intent to sell, transfer, or use identifiable health information for commercial advantage, personal gain, or malicious harm. In addition, any allegation that we have violated HIPAA, regardless of its merit, could harm our reputation and consume significant internal resources. Responding to government investigations regarding alleged violations of these and other laws and regulations, even if ultimately concluded with no findings of violations or no penalties imposed, can consume company resources and impact our business and, if public, harm our reputation.

Data privacy remains an evolving landscape at both the domestic and international level, with new regulations coming into effect. For example, various states, such as California and Massachusetts, have implemented similar privacy laws and regulations, such as the California Confidentiality of Medical Information

[Table of Contents](#)

Act, that impose restrictive requirements regulating the use and disclosure of health information and other personally identifiable information, and the California Consumer Privacy Act, which came into effect on January 1, 2020, and creates new data privacy rights for users. For example, the CCPA requires covered businesses that process personal information of California residents to disclose their data collection, use and sharing practices. Further, the CCPA provides California residents with new data privacy rights (including the ability to opt out of certain disclosures of personal data), imposes new operational requirements for covered businesses, provides for civil penalties for violations as well as a private right of action for data breaches and statutory damages (that is expected to increase data breach class action litigation and result in significant exposure to costly legal judgements and settlements). Aspects of the CCPA and its interpretation and enforcement remain uncertain. In addition, it is anticipated that the CCPA will be expanded on January 1, 2023, when the California Privacy Rights Act of 2020, or CPRA, becomes operative. The CPRA will, among other things, give California residents the ability to limit use of certain sensitive personal information, further restrict the use of cross-contextual advertising, establish restrictions on the retention of personal information, expand the types of data breaches subject to the CCPA's private right of action, provide for increased penalties for CPRA violations concerning California residents under the age of 16, and establish a new California Privacy Protection Agency to implement and enforce the CPRA. Although there are limited exemptions for clinical trial data under the CCPA, the CCPA and other similar laws could impact our business activities depending on how they are interpreted. New legislation proposed or enacted in various other states will continue to shape the data privacy environment nationally. For example, Virginia recently passed its Consumer Data Protection Act, and Colorado recently passed the Colorado Privacy Act, both of which differ from the CPRA and become effective in 2023. Certain state laws may be more stringent or broader in scope, or offer greater individual rights, with respect to confidential, sensitive and personal information than federal, international or other state laws, and such laws may differ from each other, which may complicate compliance efforts.

In addition, all 50 U.S. states and the District of Columbia have enacted breach notification laws that may require us to notify patients, customers, employees or regulators in the event of unauthorized access to or disclosure of personal or confidential information experienced by us or our service providers. These laws are not consistent, and compliance in the event of a widespread data breach is difficult and may be costly. Moreover, states have been frequently amending existing laws, requiring attention to changing regulatory requirements. We also may be contractually required to notify patients or other counterparties of a security breach. Although we may have contractual protections with our service providers, any actual or perceived security breach could harm our reputation and brand, expose us to potential liability or require us to expend significant resources on data security and in responding to any such actual or perceived breach. Any contractual protections we may have from our service providers may not be sufficient to adequately protect us from any such liabilities and losses, and we may be unable to enforce any such contractual protections. In addition to government regulation, privacy advocates and industry groups have and may in the future propose self-regulatory standards from time to time. These and other industry standards may legally or contractually apply to us, or we may elect to comply with such standards.

These laws and regulations are not necessarily preempted by HIPAA, particularly if a state affords greater protection to individuals than HIPAA. Where state laws are more protective, we may have to comply with the stricter provisions. In addition to fines and penalties imposed upon violators, some of these state laws also afford private rights of action to individuals who believe their personal information has been misused. The interplay of federal and state laws may be subject to varying interpretations by courts and government agencies, creating complex compliance issues for us and our clients, and potentially exposing us to additional expense, adverse publicity and liability. Further, as regulatory focus on privacy issues continues to increase and laws and regulations concerning the protection of personal information expand and become more complex, these potential risks to our business could intensify. Changes in laws or regulations associated with the enhanced protection of certain types of sensitive data, such as PHI or other types of sensitive personally identifiable information, or PII, or increased demands for enhanced data security infrastructure applied to personally identifiable information, could greatly increase our costs of providing our products, decrease demand for our products, reduce our revenue and/or subject us to additional risks.

[Table of Contents](#)

In addition, the interpretation and application of consumer, health-related, and data protection laws, especially with respect to genetic samples and data, in the United States, the EU (including all countries in the EEA), and elsewhere are often uncertain, contradictory, and in flux. We may operate in a number of countries outside of the United States whose laws may in some cases be more stringent than the requirements in the United States. For example, EU member countries have specific requirements relating to cross-border transfers of personal data to certain jurisdictions, including to the United States where our laboratory resides. In addition, some countries have stricter consumer notice and/or consent requirements relating to personal data collection, use or sharing, more stringent requirements relating to organizations' privacy programs and provide stronger individual rights. Moreover, international privacy and data security regulations continue to become more complex and have greater consequences. For instance, the General Data Protection Regulation, or GDPR, went into effect in May 2018 and imposes stringent data protection requirements for controllers and processors of personal data of persons within the EU. The GDPR applies to any company established in the EU as well as to those outside the EU if they collect and use personal data in connection with the offering of goods or services to individuals in the EU or the monitoring of their behavior. The GDPR enhances data protection obligations for processors and controllers of personal data, including, for example, higher standards for obtaining consent from individuals to process their personal data, more robust disclosures to individuals and a strengthened individual data rights regime, timelines for data breach notifications as short as 72 hours for notification to supervisory authorities, limitations on retention of information, increased requirements pertaining to health data, other special categories of personal sequencing and pseudonymised (i.e., key-coded) data and additional obligations when we contract third-party processors in connection with the processing of the personal data. The GDPR provides that EU member states may make their own further laws and regulations limiting the processing of personal data, including genetic, biometric or health data, which could limit our ability to use and share personal data or could cause our costs to increase, and harm our business, financial condition and results of operations. Failure to comply with the requirements of GDPR may result in significant fines of up to €20,000,000 or up to 4% of the total worldwide annual turnover of the preceding financial year, whichever is higher, and other administrative penalties. The GDPR also confers a private right of action on data subjects and consumer associations to lodge complaints with supervisory authorities, seek judicial remedies, and obtain compensation for damages resulting from violations of the GDPR. Failure to comply with the GDPR and other applicable privacy or data security-related laws, rules or regulations could result in material penalties imposed by regulators, affect our compliance with client contracts and have an adverse effect on our business, financial condition and results of operations.

European data protection law, including the GDPR, also imposes strict rules on the transfer of personal data from Europe to the United States and other countries unless the parties to the transfer have implemented specific safeguards to protect the transferred personal data. These obligations may be interpreted and applied in a manner that is inconsistent from one jurisdiction to another and may conflict with other requirements or our practices. In addition, these rules are constantly under scrutiny. For example, the EU-US Privacy Shield and the Swiss-US Privacy Shield were both invalidated by the Court of Justice of the EU, in a case known colloquially as "Schrems II," and the Swiss Commissioner, respectively. Further, the EU Standard Contractual Clauses are the subject of legal challenges in European courts and the Standard Contractual Clauses as well as any successor version(s) of those clauses may face additional challenges in the future and be found similarly invalidated, and the absence of successor safeguards for continued data transfer could require us to create duplicative, and potentially expensive, information technology infrastructure and business operations in Europe or limit our ability to collect and use personal information collected in Europe. Notwithstanding the foregoing challenges, the use of the EU Standard Contractual Clauses has also been called into question by the European courts. Use of the standard contractual clauses must now be assessed on a case-by-case basis taking into account the legal regime applicable in the destination country, in particular regarding applicable surveillance laws and relevant rights of individuals with respect to the transferred data. In the context of any given transfer, where the legal regime applicable in the destination country may or does conflict with the intended operation of the standard contractual clauses, the decision in Schrems II and subsequent draft guidance from the European Data Protection Board, or EDPB, may require the parties to that transfer to implement certain supplementary technical, organizational and/or contractual measures to rely on the standard contractual clauses as a GDPR-compliant 'transfer mechanism.' However, the aforementioned draft guidance from the EDPB on such supplementary technical, organizational

and/or contractual measures appears to conclude that no combination of such measures could be sufficient to allow effective reliance on the standard contractual clauses in the context of transfers of personal data ‘in the clear’ to recipients in countries where the power granted to public authorities to access the transferred data goes beyond that which is ‘necessary and proportionate in a democratic society’—which may, following the CJEU’s conclusions in Schrems II on relevant powers of U.S. public authorities and commentary in that draft EDPB guidance, include the United States in certain circumstances (e.g., where Section 702 of the US Foreign Intelligence Surveillance Act applies). If we are unable to implement a valid compliance mechanism for cross-border personal data transfers, we may face increased exposure to regulatory actions, substantial fines and injunctions against processing or transferring personal data from Europe.

Furthermore, in June 2021, the European Commission adopted new standard contractual clauses under the GDPR for transfers of personal data outside the EEA to countries that the European Commission has not deemed to provide an adequate level of protection for such personal data. If we elect to rely on the new standard contractual clauses for personal data transfers out of Europe, we may be required to expend significant resources to update our contractual arrangements and to meet the obligations the new standard contractual clauses impose; for example, we may be required to conduct transfer impact assessments for such cross-border personal data transfers and implement additional security measures. In addition, the EU Commission has proposed a new ePrivacy Regulation that would address various matters, including provisions specifically aimed at the use of cookies to identify an individual’s online behavior, and any such ePrivacy Regulation may provide for new compliance obligations and significant penalties. Any of these changes to EU data protection law or its interpretation could disrupt and harm our business. We rely on a mixture of safeguards to transfer personal data from the EU to the United States, and could be impacted by changes in law as a result of a future review of these transfer mechanisms by European regulators or current challenges to these mechanisms in the European courts.

In addition, the United Kingdom leaving the EU could also lead to further legislative and regulatory changes. It remains unclear how the United Kingdom data protection laws or regulations will develop in the medium to longer term and how data transfer to the United Kingdom from the EU will be regulated, especially following the United Kingdom’s departure from the EU on January 31, 2020 without a deal. However, the United Kingdom has transposed the GDPR into domestic law with the Data Protection Act 2018, which remains in force following the United Kingdom’s departure from the EU. As of January 1, 2021, and the expiry of transitional arrangements agreed to between the United Kingdom and EU, data processing in the United Kingdom is governed by a United Kingdom version of the GDPR (combining the GDPR and the Data Protection Act 2018), exposing us to two parallel regimes, each of which potentially authorizes similar fines and other potentially divergent enforcement actions for certain violations. On June 28, 2021, the European Commission issued an adequacy decision under the GDPR which allows personal data transfers (other than those carried out for the purposes of United Kingdom immigration control) from the EEA to the United Kingdom to continue without restriction for four years (ending June 27, 2025). After that period, the adequacy decision may be renewed, only if the United Kingdom continues to ensure an adequate level of data protection. During these four years, the European Commission will continue to monitor the situation in the United Kingdom and could intervene at any point if the United Kingdom deviates from the level of data protection in place at the time of the issuance of the adequacy decision. If the adequacy decision is withdrawn or not renewed, transfers of personal data from the EEA to the United Kingdom will require a valid ‘transfer mechanism’ and we may be required to implement new processes and put new agreements in place, such as standard contractual clauses, to enable transfers of personal data from the EEA to the United Kingdom to continue.

Because of the breadth of these laws and the narrowness of their exceptions and safe harbors, it is possible that our current practices could be challenged under one or more of such laws, or that we will have to modify our business practices substantially to begin operating in these areas. The scope and enforcement of each of these laws is uncertain and subject to rapid change in the current environment of healthcare reform. Federal, state and foreign enforcement bodies have increased their scrutiny of interactions between healthcare companies and healthcare providers, which has led to a number of investigations, prosecutions, convictions and settlements in the healthcare industry.

[Table of Contents](#)

With the GDPR, CCPA, CPRA, and other laws, regulations and other obligations relating to privacy and data protection imposing new and relatively burdensome obligations, and with substantial uncertainty over the interpretation and application of these and other obligations, we may face challenges in addressing their requirements and making necessary changes to our policies and practices, and may incur significant costs and expenses in an effort to do so. Additionally, if third parties we work with, such as vendors or service providers, violate applicable laws or regulations or our policies, such violations may also put our or our customers' data at risk and could in turn have an adverse effect on our business, financial condition and results of operations. Any failure or perceived failure by us or our service providers to comply with our applicable policies or notices relating to privacy or data protection, our contractual or other obligations to third parties, or any of our other legal obligations relating to privacy or data protection, may result in governmental investigations or enforcement actions, litigation, claims and other proceedings, harm our reputation, and could result in significant liability.

We conduct business in a heavily regulated industry, and changes in regulations or violations of regulations may, directly or indirectly, reduce our revenue, adversely affect our business, financial condition and results of operations.

The diagnostic testing industry is highly regulated, and there can be no assurance that the regulatory environment in which we operate will not change significantly and adversely to us in the future. Areas of the regulatory environment that may affect our ability to conduct business include, without limitation:

- federal and state laws applicable to test ordering, documentation of tests ordered, billing practices and claims payment and/or regulatory agencies enforcing those laws and regulations;
- federal and state health care fraud and abuse laws;
- federal and state laboratory anti-mark-up laws;
- coverage and reimbursement levels by Medicare, Medicaid, other governmental payers and private insurers;
- restrictions on coverage of and reimbursement for tests;
- federal and state laws governing laboratory testing, including CLIA, and state licensing laws;
- federal and state laws and enforcement policies governing the development, use and distribution of diagnostic medical devices, including laboratory developed tests, or LDTs;
- federal and state laws and enforcement policies governing the use of artificial intelligence in analyzing data, including data in healthcare related areas;
- federal, state and local laws governing the handling and disposal of medical and hazardous waste;
- federal and state Occupational Safety and Health Administration rules and regulations;
- the Health Insurance Portability and Accountability Act of 1996, or HIPAA, and similar state data privacy and security laws; and
- consumer protection laws.

In particular, the laws and regulations governing the marketing of diagnostic tests are complex, and there are often no sufficient regulatory or judicial interpretations of these laws and regulations. For example, some of our diagnostic tests are actively regulated by the FDA pursuant to the medical device provisions of the Federal Food, Drug and Cosmetic Act, or FDCA. The FDA defines a medical device to include any instrument, apparatus, implement, machine, contrivance, implant, in vitro reagent or other similar or related article, including a component, part or accessory, intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment or prevention of disease, in man or other animals. Many of our genomic and algorithmic diagnostic tests are likely to be considered by the FDA to be medical devices. Among other things, pursuant to the FDCA and its implementing regulations, the FDA regulates the research, design, testing, manufacturing,

[Table of Contents](#)

safety, labeling, storage, recordkeeping, premarket clearance or approval, marketing and promotion and sales and distribution of medical devices in the United States to ensure that medical devices distributed domestically are safe and effective for their intended uses. In addition, the FDA regulates the import and export of medical devices. If we do not comply with these requirements or fail to adequately comply, our business, financial condition and results of operations may be harmed.

Changes in the current regulatory framework for algorithmic diagnostic products and services can impose additional regulatory burdens on us. On September 27, 2019, the FDA's Center for Devices and Radiological Health released a draft guidance on clinical decision support software to describe their planned regulatory approach for certain healthcare software functions. The FDA is also currently considering the development of novel regulatory pathways for artificial intelligence technologies and other software. As the regulatory framework evolves, we may incur substantial costs to ensure compliance with new or amended laws and regulations. Failure to comply with any of these laws and regulations could result in enforcement actions against us, damage to our reputation and loss of goodwill, any of which could have a material adverse effect on our business, financial condition and results of operations.

Certain of our tests are currently marketed as LDTs, and future changes in FDA enforcement discretion for LDTs could subject our operations to much more significant regulatory requirements.

The FDA has a policy of enforcement discretion with respect to LDTs whereby the FDA does not actively enforce its regulatory requirements for such tests. However, the FDA has stated its intention to modify its enforcement discretion policy with respect to LDTs. If there are changes in FDA policy, or if the FDA disagrees that we are marketing our tests as LDTs within the scope of its policy of enforcement discretion, we may become subject to extensive regulatory requirements and may be required to stop selling our existing tests or launching any other tests we may develop and to conduct additional clinical trials or take other actions prior to continuing to market our tests. This could significantly increase the costs and expenses of conducting, or otherwise harm, our business, financial condition and results of operations. Additionally, because our Platform and other software applications we make available include functionality related to the reporting of results from the LDTs we run, the FDA could attempt to regulate the software applications, including portions of our Platform, that we utilize to provides results of the LDTs to our customers and this may require costly modifications, additional development or the reduction in functionality in our offerings which could, in turn, make them less attractive to our customers.

We market some of our tests as LDTs. While we believe that we are in material compliance with applicable laws and regulations, we cannot assure that the FDA will agree with us.

On July 31, 2014, the FDA notified Congress of its intent to modify its policy of enforcement discretion with respect to LDTs. On October 3, 2014, FDA issued two draft guidances, entitled "Framework for Regulatory Oversight of Laboratory Developed Tests (LDTs)," or the Framework Guidance, and "FDA Notification and Medical Device Reporting for Laboratory Developed Tests (LDTs)." The Framework Guidance stated that the FDA intended to modify its policy of enforcement discretion with respect to LDTs in a risk-based manner consistent with the existing classification of medical devices. Thus, pursuant to the Framework Guidance, the FDA planned to begin to enforce its medical device requirements, including premarket submission requirements, on LDTs that have historically been marketed without FDA premarket review and oversight. The FDA could ultimately modify its current approach to LDTs (including the various software components we use to prepare and deliver the results of the LDTs) in a way that would subject our products marketed as LDTs to the enforcement of regulatory requirements. If such changes to the regulatory framework occur, we could be subject to enforcement of regulatory requirements as a device manufacturer such as registration and listing requirements, medical device reporting requirements and the requirements of the FDA's Quality System Regulation. Additionally, if the FDA begins to enforce its premarket submission regulations with respect to LDTs, we may be required to obtain premarket clearance or approval for our products we plan to commercialize as LDTs.

There is no guarantee that the FDA will grant 510(k) clearance or a premarket approval of our products and failure to obtain necessary clearances or approvals for our products would adversely affect our ability to grow our business.

Before we begin to label and market certain of our products for use as clinical diagnostics in the United States, including as companion diagnostics, we may be required to obtain either 510(k) clearance or a premarket approval, or supplemental premarket approval, or respectively, PMA or sPMA, from the FDA, unless an exemption applies or FDA exercises its enforcement discretion and refrains from enforcing its medical device requirements. For example, the FDA has a policy of refraining from enforcing such requirements with respect to LDTs, which the FDA considers to be a type of *in vitro* diagnostic test that is designed, manufactured and used within a single laboratory. The FDA has also largely refrained from regulating pharmacogenomic tests like those we perform in our neuropsychology business.

The process of obtaining a PMA is a rigorous, costly, lengthy and uncertain process. In the PMA process, the FDA must determine that a proposed device is safe and effective for its intended use based, in part, on extensive data, including, but not limited to, technical, pre-clinical, clinical trial, manufacturing and labeling data. In the 510(k) clearance process, the FDA must determine that a proposed device is “substantially equivalent” to a device legally on the market, known as a “predicate” device, in order to clear the proposed device for marketing. To be “substantially equivalent,” the proposed device must have the same intended use as the predicate device, and either have the same technological characteristics as the predicate device or have different technological characteristics and not raise different questions of safety or effectiveness than the predicate device. Clinical data is sometimes required to support a substantial equivalence determination.

The FDA can delay, limit or deny clearance or approval of a device for many reasons, including:

- our inability to demonstrate to the satisfaction of the FDA that our products are safe or effective for their intended uses;
- the disagreement of the FDA with the design, conduct or implementation of our clinical trials or the analysis or interpretation of data from our pre-clinical studies or clinical trials;
- serious and unexpected adverse effects experienced by participants in our clinical trials;
- the data from our pre-clinical studies and clinical trials may be insufficient to support clearance or approval, where required;
- our inability to demonstrate that the clinical and other benefits of any of our tests outweigh the risks;
- an advisory committee, if convened by the FDA, may recommend against approval of our PMA or other application for any of our tests or may recommend that the FDA require, as a condition of approval, additional pre-clinical studies or clinical trials, limitations on approved labeling or distribution and use restrictions, or even if an advisory committee, if convened, makes a favorable recommendation, the FDA may still not approve the test;
- the FDA may identify deficiencies in our marketing application, and in our manufacturing processes, facilities or analytical methods or those of our third-party contract manufacturers;
- the potential for approval policies or regulations of the FDA to change significantly in a manner rendering our clinical data or regulatory filings insufficient for the clearance or approval; and
- the FDA may audit our clinical trial data and conclude that the data is not sufficiently reliable to support a PMA application.

In foreign jurisdictions, we may be required to procure similar regulatory approvals or clearances prior to marketing our diagnostic products. For example, in the Europe Union, we would need to comply with the new Medical Device Regulation 2017/745 and In Vitro Diagnostic Regulation 2017/746, which became effective May 26, 2017, with application dates of May 26, 2021 (postponed from 2020) and May 26, 2022, respectively. Obtaining the requisite regulatory approvals or clearances in foreign jurisdictions can be expensive and may involve considerable delay.

Any delay or failure to obtain necessary regulatory approvals or clearances would have a material adverse effect on our business, financial condition and results of operations.

Modifications to our FDA-cleared or approved products may require new 510(k) clearances or premarket approvals, or may require us to cease marketing or recall the modified products until clearances are obtained.

For any product approved pursuant to a PMA, we are required to seek supplemental approval for many types of changes to the approved product, for which we will need to determine whether a PMA supplement or other regulatory filing is needed or whether the change may be reported via the PMA Annual Report. Similarly, any modification to a 510(k)-cleared device that could significantly affect its safety or effectiveness, or that would constitute a major change in its intended use, design, or manufacture, requires new 510(k) clearance or, possibly, approval of a new PMA. If the FDA requires us to seek approvals or clearances for modifications to our previously approved or cleared products, for which we concluded that new approvals or clearances are unnecessary, we may be required to cease marketing or distribution of our products or to recall the modified product until we obtain the approval or clearance, and we may be subject to significant regulatory fines or penalties.

Our products may in the future be subject to product recalls. A recall of our products, either voluntarily or at the direction of the FDA or another governmental authority, or the discovery of serious safety issues with our products, could have a significant adverse impact on us.

The FDA has the authority to require the recall of commercialized products that are subject to FDA regulation in the event of material deficiencies or defects in design or manufacture. We may also, on our own initiative, recall a product. The FDA requires that certain classifications of recalls be reported to the FDA within ten working days after the recall is initiated. In the case of FDA-approved tests, a government-mandated or voluntary recall by us or one of our distributors could occur as a result of an unacceptable risk to health, component failures, malfunctions, manufacturing errors, design or labeling defects or other deficiencies and issues. Recalls of any of our products could impair our ability to produce our products in a cost-effective and timely manner, which would have an adverse effect on our reputation, business, financial condition and results of operations. We may be subject to liability claims, may be required to bear costs or may take other actions that may have a negative impact on our future sales and our ability to generate profits. We may initiate voluntary recalls involving our products in the future that we determine do not require notification to the FDA. If the FDA disagrees with our determinations, the FDA could require us to report those actions and take enforcement action for failing to report the recalls when they were conducted. A future recall announcement could harm our reputation with customers and negatively affect our business, financial condition and results of operations.

If we initiate a correction or removal for one of our tests, issue a safety alert or undertake a field action or recall to reduce a risk to health imposed by the test, this could lead to increased scrutiny by the FDA and our customers regarding the quality and safety of our tests and to negative publicity, including FDA alerts, press releases or administrative or judicial actions. Furthermore, circulation of any such negative publicity could harm our reputation, be used by competitors against us in competitive situations and cause customers to delay purchase decisions or cancel orders.

Our “research use only” and any potential “investigational use only” products could become subject to more onerous regulation by the FDA or other regulatory agencies in the future, which could increase our costs and delay our commercialization efforts, thereby materially and adversely affecting our business, financial condition and results of operations.

In the United States, some of our products are currently available, or may become available, for research use only, or RUO, or for investigational use only, or IUO, depending on the proposed application. We make our RUO and IUO products available to a variety of parties, including pharmaceutical and biotechnology companies

[Table of Contents](#)

and research institutes. Because RUO and IVO products are not intended for use in clinical practice and cannot be advertised or promoted for clinical or diagnostic claims, they are exempt from many regulatory requirements otherwise applicable to medical devices. In particular, while the FDA regulations require that RUO products be labeled “For Research Use Only. Not for use in diagnostic procedures,” and that IVO products be labeled “For Investigational Use Only. The performance characteristics of this product have not been established,” such products are not subject to the FDA’s pre- and post-market controls for medical devices.

A significant change in the laws governing RUO or IVO products or how they are enforced may require us to change our business model in order to maintain compliance. For instance, in November 2013 the FDA issued a guidance document entitled “Distribution of In Vitro Diagnostic Products Labeled for Research Use Only or Investigational Use Only,” or the RUO/IVO Guidance, which highlights the FDA’s interpretation that distribution of RUO or IVO products with any labeling, advertising or promotion that suggests that clinical laboratories can validate the test through their own procedures and subsequently offer it for clinical diagnostic use as an LDT is in conflict with the RUO or IVO status. The RUO/IVO Guidance further articulates the FDA’s position that any assistance offered in performing clinical validation or verification, or similar specialized technical support, to clinical laboratories, is in conflict with RUO or IVO status. If we engage in any activities that the FDA deems to be in conflict with the RUO or IVO status held by any of our products so labeled, we may be subject to immediate, severe and broad FDA enforcement action that would adversely affect our ability to continue operations. Accordingly, if the FDA finds that we are distributing our RUO or IVO products in a manner that is inconsistent with its RUO/IVO Guidance, we may be forced to stop distribution of our RUO/IVO tests until we are in compliance, which would reduce our revenue, increase our costs and adversely affect our business, financial condition and results of operations.

Even if we receive regulatory approval of our products, we will continue to be subject to extensive regulatory oversight.

Medical devices are subject to extensive regulation by the FDA in the United States, the European Commission, European Economic Area, or EEA, Competent Authorities, and comparable regulatory agencies in other territories where we do or may do business. If any of our products are approved by the FDA, the European Commission, EEA Competent Authorities, or other comparable foreign regulatory agencies, we will be required to timely file various reports. If these reports are not filed timely, regulators may impose sanctions and sales of our products may suffer, and we may be subject to product liability or regulatory enforcement actions, all of which could harm our business, financial condition and results of operations. In addition, as a condition of approving a PMA application, the FDA may also require some form of post-approval study or post-market surveillance, whereby the applicant conducts a follow-up study or follows certain patient groups for a number of years and makes periodic reports to the FDA on the clinical status of those patients when necessary to protect the public health or to provide additional safety and effectiveness data for the device. The product labeling must be updated and submitted in a PMA supplement as results, including any adverse event data from the post-approval study, become available. Failure to conduct or timely complete post-approval studies in compliance with applicable regulations, update the product labeling, or comply with other post-approval requirements could result in withdrawal of approval of the PMA, which would harm our business, financial condition and results of operations.

The FDA and the Federal Trade Commission, or FTC, also regulate the advertising and promotion of medical devices to ensure that their promotional claims made are consistent with the applicable marketing authorizations, that there are adequate and reasonable data to substantiate the claims, and that the promotional labeling and advertising is neither false nor misleading in any respect. If the FDA or FTC determines that any of our promotional claims are false, misleading, not substantiated or not permissible, we may be subject to enforcement actions and we may be required to revise our promotional claims and make other corrections or restitutions.

[Table of Contents](#)

The FDA, state and foreign authorities have broad enforcement powers. Our failure to comply with applicable regulatory requirements could result in enforcement action by the FDA, state or foreign regulatory agencies, which may include any of the following sanctions:

- adverse publicity, warning letters, untitled letters, fines, injunctions, consent decrees and civil penalties;
- repair, replacement, refunds, recalls, termination of distribution, administrative detention or seizures of our products;
- operating restrictions, partial suspension or total shutdown of production;
- customer notifications or repair, replacement or refunds;
- refusing our requests for clearances or approvals of new products, new intended uses or modifications to existing products;
- withdrawals of current clearances or approvals, resulting in prohibitions on sales of our products;
- refusal to issue certificates needed to export products for sale in other countries; and
- criminal prosecution.

Any of these sanctions could also result in higher than anticipated costs or lower than anticipated sales of our products and have a material adverse effect on our business, financial condition and results of operations.

In addition, the FDA may change its clearance and approval policies, adopt additional regulations or revise existing regulations, or take other actions which may prevent or delay approval or clearance of our current or future products under development. For example, in November 2018, FDA officials announced forthcoming steps that the FDA intends to take to modernize the premarket notification pathway under Section 510(k) of the FDCA.

Among other things, the FDA announced that it planned to develop proposals to drive manufacturers utilizing the 510(k) pathway toward the use of newer predicates. These proposals included plans to potentially sunset certain older devices that were used as predicates under the 510(k) clearance pathway, and to potentially publish a list of devices that have been cleared on the basis of demonstrated substantial equivalence to predicate devices that are more than 10 years old. In May 2019, the FDA solicited public feedback on these proposals. The FDA requested public feedback on whether it should consider certain actions that might require new authority, such as whether to sunset certain older devices that were used as predicates under the 510(k) clearance pathway. These proposals have not yet been finalized or adopted, and the FDA may work with Congress to implement such proposals through legislation. Accordingly, it is unclear the extent to which any proposals, if adopted, could impose additional regulatory requirements on us that could delay our ability to obtain new 510(k) clearances, increase the costs of compliance, or restrict our ability to maintain our current clearances, or otherwise create competition that may negatively affect our business, financial condition and results of operations.

The FDA may establish performance criteria for classes of devices for which we or our competitors seek or currently have received clearance, and it is unclear the extent to which such performance standards, if established, could impact our ability to obtain new 510(k) clearances or otherwise create competition that may negatively affect our business, financial condition and results of operations.

Any new statutes, regulations or revisions or reinterpretations of existing regulations may impose additional costs or lengthen review times of our current or future products or make it more difficult to obtain clearance or approval for, manufacture, market or distribute our products.

The FDA's and other regulatory authorities' policies may change and additional government regulations may be promulgated that could prevent, limit or delay regulatory clearance or approval of our diagnostic tests.

We also cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative or executive action, either in the United States or abroad.

We may never obtain approval in the EU or in any other foreign country for any of our products and, even if we do, we may never be able to commercialize them in any other jurisdiction, which would limit our ability to realize their full market potential.

In order to eventually market any of our current or future products in any particular foreign jurisdiction, we must comply with numerous and varying regulatory requirements on a jurisdiction-by-jurisdiction basis regarding quality, safety, data privacy, performance and efficacy. In addition, products offered in one country may not be accepted by regulatory authorities in other countries. Approval processes vary among countries and can involve additional product testing and validation and additional administrative review periods.

Seeking foreign regulatory clearance, authorization or approval could result in difficulties and costs for us and require additional studies, trials or investigations which could be costly and time-consuming. Regulatory requirements and ethical approval obligations can vary widely from country to country and could delay or prevent the introduction of our products in those countries. If we or our collaborators fail to comply with regulatory requirements in international markets or to obtain and maintain required regulatory clearances, authorizations or approvals in international markets, or if those approvals are delayed, our target market will be reduced and our ability to realize the full market potential of our products will be unrealized.

Failure to comply with federal, state and foreign laboratory licensing requirements and the applicable requirements of the FDA or any other regulatory authority, could cause us to lose the ability to perform our tests, experience disruptions to our business, or become subject to administrative or judicial sanctions.

We are subject to the CLIA, a federal law that regulates clinical laboratories that perform testing on specimens derived from humans for the purpose of providing information for the diagnosis, prevention or treatment of disease. CLIA regulations establish specific standards with respect to personnel qualifications, facility administration, proficiency testing, quality control, quality assurance and inspections. Any testing subject to CLIA regulation must be performed in a CLIA certified laboratory. CLIA certification is also required in order for us to be eligible to bill state and federal healthcare programs, as well as commercial payers, for our tests. We have a current CLIA certificate to perform our tests at our laboratories in Chicago, Illinois, Atlanta, Georgia and Raleigh, North Carolina. To maintain this certificate, we are subject to survey and inspection every two years. Moreover, CLIA inspectors may make random inspections of our laboratory from time to time.

We are also required to maintain clinical laboratory licenses to perform testing in Illinois and Georgia, and we will be required to maintain these licenses to perform testing at our proposed facility in Raleigh, North Carolina. State laboratory laws establish standards for day-to-day operation of our clinical laboratories, including the training and skills required of personnel and quality control. In addition, some other states require our laboratories to be licensed in the state in order to test specimens from those states. In addition to Illinois and Georgia, our laboratories are licensed in California, Rhode Island, Pennsylvania, New York and Maryland. Although we have obtained licenses from states where we believe we are required to be licensed, it is possible that other states we are not aware of currently require out-of-state laboratories to obtain licensure in order to test specimens from the state, and that other states may adopt similar requirements in the future.

We may also be subject to regulations in foreign jurisdictions as we seek to expand international utilization of our tests or as such jurisdictions adopt new licensure requirements, which may require review of our tests in order to offer them or may have other limitations such as restrictions on the transport of specimens necessary for us to perform our tests that may limit our ability to make our tests available outside of the United States. Complying with licensure requirements in new jurisdictions may be expensive, time-consuming and subject us to significant and unanticipated delays.

[Table of Contents](#)

Failure to comply with applicable clinical laboratory licensure requirements may result in a range of enforcement actions, including suspension, limitation or revocation of our CLIA certificate and/or state licenses, imposition of a directed plan of action, on-site monitoring, civil monetary penalties, criminal sanctions, inability to receive reimbursement from Medicare, Medicaid and commercial payers, as well as significant adverse publicity. Any sanction imposed under CLIA, its implementing regulations, or state or foreign laws or regulations governing clinical laboratory licensure or our failure to renew our CLIA certificate, a state or foreign license or accreditation, could have a material adverse effect on our business, financial condition and results of operations. Even if we were able to bring our laboratory back into compliance, we could incur significant expenses and potentially lose revenue in doing so.

In order to test specimens from New York, LDTs must be approved by the New York State Department of Health, or NYSDOH, on a product-by-product basis before they are offered, and a version of our Tempus|xT test has been approved by NYSDOH. We will need to seek NYSDOH approval of any future LDTs we develop and want to offer for clinical testing to New York residents, and there can be no assurance that we will be able to obtain such approval. As a result, we are subject to periodic inspection by the NYSDOH and are required to demonstrate ongoing compliance with NYSDOH regulations and standards. To the extent NYSDOH identifies any non-compliance and we are unable to implement satisfactory corrective actions to remedy such non-compliance, the State of New York could withdraw approval for our tests.

The College of American Pathologists, or CAP, maintains a clinical laboratory accreditation program. While not required to operate a CLIA-certified laboratory, many private insurers require CAP accreditation as a condition to contracting with clinical laboratories to cover their tests. In addition, some countries outside the United States require CAP accreditation as a condition to permitting clinical laboratories to test samples taken from their citizens. We have obtained CAP accreditation for our Chicago and Atlanta laboratories, and we expect to apply for CAP accreditation for our planned Raleigh, North Carolina laboratory. In order to maintain CAP accreditation, we are subject to survey for compliance with CAP standards every two years. Failure to maintain CAP accreditation could have a material adverse effect on the sales of our tests and the results of our operations.

We are subject to numerous federal and state healthcare statutes and regulations; complying with such laws pertaining to our business is an expensive and time-consuming process, and any failure to comply could result in substantial penalties and a material adverse effect to our business, financial condition and results of operations.

Our operations are subject to other extensive federal, state, local and foreign laws and regulations, all of which are subject to change. These laws and regulations may include, among others:

- the federal Anti-Kickback Statute, or AKS, which prohibits knowingly and willfully offering, paying, soliciting or receiving remuneration, directly or indirectly, overtly or covertly, in cash or in kind (e.g. provision of free or discounted goods, services or items), in return for or to induce such person to refer an individual, or to purchase, lease, order, arrange for or recommend purchasing, leasing or ordering, any good, facility, item or service that is reimbursable, in whole or in part, under a federal healthcare program. The term “remuneration” has been broadly interpreted to include anything of value, such as phlebotomy kits. Although there are a number of statutory exceptions and regulatory safe harbors protecting certain common activities from prosecution or other regulatory sanctions, the exceptions and safe harbors are drawn narrowly, and practices that involve remuneration that are alleged to be intended to induce referrals, purchases or recommendations of covered items or services may be subject to scrutiny if they do not qualify for an exception or safe harbor. Failure to meet all of the requirements of a particular applicable statutory exception or regulatory safe harbor does not make the conduct *per se* illegal under the AKS. Instead, the legality of the arrangement will be evaluated on a case-by-case basis based on a cumulative review of all its facts and circumstances. Several courts have held that if any one purpose of an arrangement involving remuneration is to induce referrals of federal healthcare covered business, the AKS has been violated. Moreover, a person or entity does not need to

have actual knowledge of the statute or specific intent to violate it in order to have committed a violation. Violations are subject to significant civil monetary penalties, plus up to three times the remuneration involved. Violations of the AKS may also result in criminal penalties, including additional fines and imprisonment of up to ten years, and exclusion from Medicare, Medicaid or other governmental healthcare programs;

- the Eliminating Kickbacks in Recovery Act of 2018, or EKRA, which prohibits knowingly and willfully soliciting or receiving any remuneration (including any kickback, bribe or rebate) directly or indirectly, overtly or covertly, in cash or in kind, in return for referring a patient or patronage to a laboratory; or paying or offering any remuneration (including any kickback, bribe or rebate) directly or indirectly, overtly or covertly, in cash or in kind, to induce a referral of an individual to a laboratory or in exchange for an individual using the services of that laboratory. EKRA was enacted to help reduce opioid-related fraud and abuse. However, EKRA defines the term “laboratory” broadly and without reference to any connection to substance use disorder treatment. The EKRA applies to all payers including commercial payers and government payers. Violations of EKRA are subject to significant fines and/or up to 10 years in jail, separate and apart from existing AKS regulations and penalties. The law includes a limited number of exceptions, some of which closely align with corresponding AKS exceptions and safe harbors, and others that materially differ. Currently, there is no regulation interpreting or implementing EKRA, nor any guidance released by a federal agency regarding the scope of EKRA. Accordingly, we cannot guarantee that our relationships with providers, sales representatives, or customers will not be subject to scrutiny or will withstand regulatory challenge under EKRA;
- the Stark Law, which prohibits a physician from making a referral for certain designated health services covered by the Medicare or Medicaid program, including laboratory and pathology services, if the physician or an immediate family member of the physician has a financial relationship with the entity providing the designated health services and prohibits that entity from billing, presenting or causing to be presented a claim for the designated health services furnished pursuant to the prohibited referral, unless an exception applies. Sanctions for violating the Stark Law include denial of payment, significant civil monetary penalties (on a per claim basis and additional penalties for a circumvention scheme), and exclusion from the federal healthcare programs;
- the federal Civil Monetary Penalties Law, which prohibits, among other things, the offering or transfer of remuneration to a Medicare or state healthcare program beneficiary if the person knows or should know it is likely to influence the beneficiary’s selection of a particular provider, practitioner or supplier of services reimbursable by Medicare or a state healthcare program, unless an exception applies. Violations can result in significant civil monetary penalties for each wrongful act;
- federal and state “Anti-Markup” rules, which, among other things, typically prohibit a physician or supplier billing for clinical or diagnostic tests (with certain exceptions) from marking up the price of a purchased test performed by another physician or supplier that does not “share a practice” with the billing physician or supplier;
- the federal Physician Payments Sunshine Act, which requires certain manufacturers of drugs, biologicals, and kits, medical devices or supplies that require premarket approval by or notification to the FDA, and for which payment is available under Medicare, Medicaid or the Children’s Health Insurance Program to report annually to CMS, information related to (i) payments and other transfers of value to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors) and teaching hospitals, and, beginning in 2022, payments and other transfers of value provided to physician assistants, nurse practitioners, clinical nurse specialists, certified registered nurse anesthetists and certified nurse midwives during the previous year; and (ii) ownership and investment interests in such manufacturers held by physicians and their immediate family members. Failure to submit required information may result in significant civil monetary penalties for any payments, transfers of value or ownership or investment interests that are not timely, accurately, and completely reported in an annual submission, and may result in liability under other federal laws or regulations;

[Table of Contents](#)

- the federal government may bring a lawsuit under the False Claims Act, or the FCA, against any party whom it believes has knowingly or recklessly presented, or caused to be presented, a false or fraudulent request for payment from the federal government, or who has made a false statement or used a false record to get a claim for payment approved. The federal government and a number of courts have taken the position that claims presented in violation of certain other statutes, including the AKS or the Stark Law, can also be considered a violation of the FCA based on the theory that a provider impliedly certifies compliance with all applicable laws, regulations, and other rules when submitting claims for reimbursement. An FCA violation may provide the basis for the imposition of administrative penalties as well as exclusion from participation in governmental healthcare programs, including Medicare and Medicaid. A number of states including California have enacted laws that are similar to the federal FCA. Private individuals can bring FCA “*qui tam*” actions, on behalf of the government and such individuals, commonly known as “whistleblowers,” may share in amounts paid by the entity to the government in fines or settlement. When an entity is determined to have violated the FCA, the government may impose civil fines and penalties for each false claim, plus treble damages, and exclude the entity from participation in federal healthcare programs;
- the HIPAA fraud and abuse provisions, which created federal criminal statutes that prohibit, among other things, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program, including private insurers, knowingly and willfully embezzling or stealing from a healthcare benefit program, willfully obstructing a criminal investigation of a healthcare offense, and knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services. A person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009, or HITECH, and their respective implementing regulations, which impose obligations on covered entities, including certain healthcare providers, health plans, and healthcare clearinghouses, as well as their respective business associates that create, receive, maintain or transmit individually identifiable health information for or on behalf of a covered entity, with respect to safeguarding the privacy, security and transmission of individually identifiable health information, and their covered subcontractors;
- federal and state laws related to, among other things, unlawful schemes to defraud, excessive fees for services, unlawful trade practices, insurance fraud, kickbacks, patient inducement and statutory or common law fraud restrict the provision of products, services or items for free or at reduced charge to government or non-government healthcare program beneficiaries. These laws and regulations relating to the provision of items or services for free are complex and are subject to interpretation by the courts and by government agencies;
- other federal and state fraud and abuse laws, such as state anti-kickback, self-referrals, false claims and anti-markup laws, any of which may extend to services reimbursable by any payer, including private insurers;
- state laws that prohibit other specified practices, such as billing physicians for tests that they order; providing tests at no or discounted cost to induce adoption; waiving co-insurance, co-payments, deductibles or other amounts owed by patients; billing a state healthcare program at a price that is higher than what is charged to other payers; or employing, exercising control over or splitting fees with licensed medical professionals; and
- similar foreign laws and regulations in the countries in which we operate or may operate in the future.

As a clinical laboratory, our business practices may face additional scrutiny from various government agencies such as the Department of Justice, the U.S. Department of Health and Human Services Office of Inspector General, or OIG, and CMS. Certain arrangements between clinical laboratories and referring

[Table of Contents](#)

physicians have been identified in fraud alerts issued by the OIG as implicating the AKS. The OIG has stated that it is particularly concerned about these types of arrangements because the choice of laboratory and the decision to order laboratory tests typically are made or strongly influenced by the physician, with little or no patient input. Moreover, the provision of payments or other items of value by a clinical laboratory to a referral source could be prohibited under the Stark Law unless the arrangement meets all criteria of an exception. The government has been active in enforcement of these laws against clinical laboratories.

Numerous states have enacted laws prohibiting business corporations, such as us, from practicing medicine and from employing or engaging physicians and other medical professionals (generally referred to as the prohibition against the corporate practice of medicine), which could include physician laboratory directors. These laws are designed to prevent interference in the medical decision-making process by anyone who is not a licensed medical professional. For example, the medical boards of certain states have indicated that determining the appropriate diagnostic tests for a particular condition and taking responsibility for the ultimate overall care of a patient, including making treatment options available to the patient, would constitute the unlicensed practice of medicine if performed by an unlicensed person. Violation of these laws may result in sanctions and civil or criminal penalties. It is possible that governmental authorities may conclude that our business practices, including our consulting and advisory board arrangements with physicians and other healthcare providers, a small number of whom may receive stock or stock options as compensation for services provided, do not comply with current or future corporate practice of medicine statutes, regulations, agency guidance or case law.

The growth and international expansion of our business may increase the potential of violating applicable laws and regulations. The risk is further increased by the fact that many such laws and regulations have not been fully interpreted by the regulatory authorities or the courts, and their provisions are open to a variety of interpretations. Efforts to ensure that our internal operations and business arrangements with third parties comply with applicable laws and regulations will involve substantial costs. Any action brought against us for violation of these or other laws or regulations, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management's attention from the operation of our business. Any of the foregoing consequences could seriously harm our business, financial condition and results of operations. To the extent our business operations are found to be in violation of any of these laws or regulations, we may be subject to significant civil, criminal and administrative penalties, including, without limitation, damages, monetary fines, individual imprisonment, disgorgement of profits, possible exclusion from participation in Medicare, Medicaid and other healthcare programs, contractual damages, reputational harm, diminished profits and future earnings, additional reporting or oversight obligations if we become subject to a corporate integrity agreement or other agreement to resolve allegations of non-compliance with the law and curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and pursue our strategy. If any of the healthcare providers or other parties with whom we interact or may interact in the future, are found not to be in compliance with applicable laws and regulations, they may be subject to criminal, civil or administrative sanctions, including exclusions from participation in various healthcare programs, which could also negatively affect our business, financial condition and results of operations.

If the validity of an informed consent from patients regarding our tests was challenged, we could be forced to stop offering our products or using our resources, and our business, financial condition and results of operations could be negatively affected.

We seek to ensure that all data and biological samples that we receive from our customers have been collected from patients, subjects or participants who have provided the necessary informed consent for purposes that extend to our development activities. In many instances, this requires the physician or hospital system ordering the diagnostic system to obtain the consent of the patient. We also have certain relationships where data and samples, and certain data licensed to us by third parties, are provided to us in a de-identified manner. The collection and analysis of data and samples in many different jurisdictions results in complex legal questions regarding the adequacy of informed consent and the status of genetic material under a large number of different legal systems. Therefore, with respect to data and samples received from our customers, we rely on physicians

[Table of Contents](#)

and hospital systems to comply, and with regard to data received from our suppliers, we rely on these third parties to comply, with the informed consent requirements and with applicable local law regarding informed consent. The subject's informed consent obtained in any particular jurisdiction could be challenged in the future, and that consent could prove invalid, unlawful or otherwise inadequate for our purposes. Any findings against us, or our customers or suppliers, could deny us access to or force us to stop using some of our data and clinical samples, which would hinder our product development efforts, potentially involve us in costly and prolonged litigation, result in reputational harm and adversely affect our business, financial condition and results of operations.

We may be subject to fines, penalties, licensure requirements, or legal liability, if it is determined that through our test reports we are practicing medicine without a license.

Many of our test reports delivered to physicians provide information regarding therapies and clinical trials that physicians may use in making treatment decisions for their patients and certain other reports provide pharmacogenomic information. We make members of our organization available to discuss the information provided in the reports. Certain state laws prohibit the practice of medicine without a license. Our customer service representatives and medical affairs team provide support to our customers, including assistance in interpreting the test report results. A governmental authority or other parties could allege that the identification of available therapies and clinical trials in our reports and the related customer service we provide constitute the practice of medicine. A state may seek to have us discontinue the inclusion of certain aspects of our test reports or the related services we provide, or subject us to fines, penalties, or licensure requirements. Any determination that we are practicing medicine without a license may result in significant liability to us, and our business, financial condition and results of operations would be harmed.

Our billing and claim processing are complex and time-consuming, and any delay in submitting claims or failure to comply with applicable billing requirements could hinder collection and have an adverse effect on our revenue.

Billing for our diagnostic tests is complex, time-consuming and expensive. Depending on the billing arrangement and applicable law, we bill various payers, such as Medicare, Medicaid, health plans, insurance companies, hospital systems, providers, and patients, all of which may have different billing requirements. Several factors make the billing process complex, including:

- differences between the list prices for our tests and the reimbursement rates of payers;
- compliance with complex federal and state regulations related to billing government healthcare programs, including Medicare and Medicaid, to the extent our tests are covered by such programs;
- differences in coverage among payers and the effect of patient co-payments or co-insurance;
- differences in information, pre-authorization and other billing requirements among payers;
- changes to codes and coding instructions governing our tests;
- incorrect or missing billing information; and
- the resources required to manage the billing and claim appeals process.

These billing complexities and the related uncertainty in obtaining payment for our tests could negatively affect our revenue and cash flow, our ability to achieve profitability and the consistency and comparability of our results of operations. In addition, if claims for our tests are not submitted to payers on a timely basis, or if we fail to comply with applicable billing requirements, it could have an adverse effect on our business, financial condition and results of operations.

In addition, the coding procedure used by third-party payers to identify various procedures, including our tests, during the billing process is complex, does not adapt well to our tests and may not enable coverage and

adequate reimbursement rates. Third-party payers usually require us to identify the test for which we are seeking reimbursement using a CPT code. CPT coding plays a significant role in how our diagnostic tests are reimbursed both from commercial and governmental payers. For example, no CPT code comprehensively describes our NGS oncology tests, so we have historically submitted claims using individual codes or combinations of codes based on the cancer subtype profiled. However, providers, such as the Local MAC, have in the past and may in the future disagree with our CPT code selection and instruct us to submit our claims using a different designated CPT code. Any disputes over appropriate coding, or requirements that we submit claims under codes with lower reimbursement rates, may materially adversely affect our business financial condition and results of operations,

Use of coding for billing our products that does not describe a specific test, requires the claim to be examined to determine what test was provided, whether the test was appropriate and medically necessary, and whether payment should be rendered, which may require a letter of medical necessity from the ordering physician. This process has in the past and may in the future result in a delay in processing the claim, a lower reimbursement amount or denial of the claim. For example, we are currently disputing denials of a substantial number of our NGS oncology tests by the Local MAC. Because billing third-party payers for our tests is an unpredictable, challenging, time-consuming and costly process, we may face long collection cycles and the risk that we may never collect at all, either of which could adversely affect our business, financial condition and results of operations, and we may have to increase collection efforts and incur additional costs.

Changes in healthcare laws, regulations and policies could increase our costs, decrease our sales and revenues and negatively impact reimbursement for our tests.

In March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Affordability Reconciliation Act, or the ACA, became law. This law substantially changed the way health care is financed by both commercial payers and government payers, and significantly impacted our industry. The ACA contains a number of provisions that impacted existing state and federal healthcare programs or result in the development of new programs, including those governing enrollments in state and federal healthcare programs, reimbursement changes and fraud and abuse. Our business, financial condition and results of operations have been and will continue to be affected by the ACA, including in ways we cannot currently predict.

Since its enactment, there have been efforts to repeal all or part of the ACA. For example, on June 17, 2021 the U.S. Supreme Court dismissed a challenge on procedural grounds that argued the ACA is unconstitutional in its entirety because the “individual mandate” was repealed by Congress. Thus, the ACA will remain in effect in its current form. Further, prior to the U.S. Supreme Court ruling on January 28, 2021, President Biden issued an executive order that initiated a special enrollment period for purposes of obtaining health insurance coverage through the ACA marketplace, which began on February 15, 2021 and will remain open through August 15, 2021. The executive order also instructed certain governmental agencies to review and reconsider their existing policies and rules that limit access to healthcare, including among others, reexamining Medicaid demonstration projects and waiver programs that include work requirements, and policies that create unnecessary barriers to obtaining access to health insurance coverage through Medicaid or the ACA. It is possible that other challenges to the ACA will be made in the future. It is unclear how any such challenges and litigation, and the healthcare reform measures of the Biden administration will impact the ACA and our business.

In addition, other legislative changes have been proposed and adopted since the ACA was enacted. On August 2, 2011, the Budget Control Act of 2011 was signed into law, which, among other things, reduced Medicare payments to providers by 2% per fiscal year, effective on April 1, 2013 and, due to subsequent legislative amendments to the statute, will remain in effect through 2030, with a temporary suspension from May 1, 2020 through December 31, 2021 due to the COVID-19 pandemic, unless additional Congressional action is taken.

We anticipate there will continue to be proposals by legislators at both the federal and state levels, regulators and commercial and government payers to reduce healthcare costs while expanding individual

healthcare benefits. Certain of these changes could impose additional limitations on the prices we will be able to charge for our tests, the coverage of, or the amounts of reimbursement available for our tests from commercial and government payers. Further, it is possible that additional governmental action will be taken in response to the COVID-19 pandemic.

We face risks related to handling of hazardous materials and other regulations governing environmental safety.

Our operations are subject to complex and stringent environmental, health, safety and other governmental laws and regulations that both public officials and private individuals may seek to enforce. Our activities that are subject to these regulations include, among other things, our use of hazardous materials in manufacturing and in our products, and the generation, transportation and storage of waste. We could discover that we or our suppliers are not in material compliance with these regulations. Existing laws and regulations may also be revised or reinterpreted, or new laws and regulations may become applicable to us, whether retroactively or prospectively, that may have a negative effect on our business, financial condition and results of operations. It is also impossible to eliminate completely the risk of accidental environmental contamination or injury to individuals. In such an event, we could be liable for any damages that result, which could adversely affect our business, financial condition and results of operations.

Risks Related to Our Intellectual Property

If we are unable to obtain, maintain and enforce sufficient intellectual property protection for our Platform and products, or if the scope of the intellectual property protection obtained is not sufficiently broad, our competitors or other third parties could develop and commercialize products similar or identical to ours, and our ability to successfully commercialize our products may be impaired.

We rely on patent protection as well as trademark, copyright, trade secret and other intellectual property rights protection and contractual restrictions to protect our Platform, products and other proprietary technologies, all of which provide limited protection and may not adequately protect our rights or permit us to gain or keep any competitive advantage. If we fail to protect our intellectual property, third parties may be able to compete more effectively against us. In addition, we have incurred and may continue to incur substantial litigation costs in our attempts to recover or restrict use of our intellectual property.

To the extent our intellectual property offers inadequate protection, or is found to be invalid or unenforceable, we would be exposed to a greater risk of direct competition. If our intellectual property does not provide adequate coverage of our competitors' products, our competitive position could be adversely affected, as could our business, financial condition and results of operations. Both the patent application process and the process of managing patent disputes can be time-consuming and expensive. Our pending and future owned and licensed patent applications may not result in patents being issued which protect our technology, effectively prevent others from commercializing competitive technologies or otherwise provide any competitive advantage. In fact, patent applications may not issue as patents at all. In addition, the coverage claimed in a patent application can be significantly reduced before the patent is issued, and its scope can be reinterpreted after issuance.

As is the case with other biotechnology companies, our success depends in part on our ability to obtain and maintain protection of the intellectual property we own solely and may own jointly with others or we have licensed and may continue to license from others, particularly patents, in the United States and other countries with respect to our products and technologies. We apply for patents covering our products and technologies and uses thereof, as we deem appropriate. However, obtaining and enforcing patents, and specifically biotechnology patents, is costly, time-consuming and complex, and we may fail to apply for patents on important products, services and technologies in a timely fashion or at all, or we may fail to apply for patents in potentially relevant jurisdictions. We may not be able to obtain or maintain patent applications and patents due to the subject matter

[Table of Contents](#)

claimed in such patent applications and patents being in disclosures in the public domain. In some cases, the inventions we attempt to patent may have been previously discovered by others and entered the public domain, which may preclude our ability to obtain patent protection for such inventions. We may not be able to file and prosecute all necessary or desirable patent applications, or maintain, enforce and license any patents that may issue from such patent applications, at a reasonable cost or in a timely manner. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. Although we enter into nondisclosure and confidentiality agreements with parties who have access to confidential or patentable aspects of our research and development output, such as our employees, corporate collaborators, outside scientific collaborators, contract manufacturers, consultants, advisors and other third parties, any of these parties may breach these agreements and disclose such output before a patent application is filed, thereby jeopardizing our ability to seek patent protection. Moreover, we may not have the right to control the preparation, filing and prosecution of patent applications, or to maintain the rights to patents licensed to us. Therefore, these patents and applications may not be prosecuted and enforced in a manner consistent with the best interests of our business.

We own or license numerous U.S. patents and pending U.S. patent applications, with international counterparts in certain countries. It is possible that our or our licensors' pending patent applications will not result in issued patents in a timely fashion or at all, and even if patents are granted, they may not provide a basis for intellectual property protection of commercially viable products or services, may not provide us with any competitive advantages, or may be challenged and invalidated by third parties. It is possible that others will design around our current or future patented technologies to circumvent our owned or licensed patents by developing similar or alternative technologies or therapeutics in a non-infringing manner. If the patent protection provided by the patents and patent applications we own or license is not sufficiently broad to impede such competition, our ability to successfully commercialize our products could be negatively affected, which could have a material adverse effect on our business, financial condition and results of operations. Some of our patent rights may be challenged in the future, including at the United States Patent and Trademark Office, or USPTO, in post-grant proceedings, at the European Patent Office, or EPO, in opposition proceedings. We may not be successful in defending any such challenges made against our owned or licensed patents or patent applications. Any successful third-party challenge to such patent rights could result in their unenforceability or invalidity and increased competition to our business. We have challenged and may choose to challenge the patents or patent applications of third parties. The outcome of patent litigation or other proceeding can be uncertain, and any attempt by us to enforce our patent rights against others or to challenge the patent rights of others may not be successful, or, if successful, may take substantial time and result in substantial cost, and may divert our efforts and attention from other aspects of our business.

The patent positions of life sciences companies can be highly uncertain and involve complex legal and factual questions for which important legal principles remain unresolved. As a result, the issuance, scope, validity, enforceability and commercial value of any patent rights are highly uncertain. No consistent policy regarding the breadth of claims allowed in such companies' patents has emerged to date in the United States or elsewhere. Courts frequently render opinions in the biotechnology field that may affect the patentability of certain inventions or discoveries, including opinions that may affect the patentability of methods for analyzing or comparing DNA sequences.

In particular, the patent positions of companies engaged in the development and commercialization of genomic and algorithmic diagnostic tests, like our current products and services, and our future products, are particularly uncertain. Various courts, including the U.S. Supreme Court, have rendered decisions that affect the scope of patentability of certain inventions or discoveries relating to certain diagnostic tests and related methods. These decisions state, among other things, that a patent claim that recites an abstract idea, natural phenomenon or law of nature (for example, the relationship between particular genetic variants and cancer) are not themselves patentable. Precisely what constitutes an abstract idea, natural phenomenon or law of nature is uncertain, and it is possible that certain aspects of genetic or algorithmic diagnostics tests would be found not patentable. Accordingly, the evolving legal and administrative standards around the world, including in the United States

may adversely affect our ability to obtain patents and may facilitate third-party challenges to any owned or licensed patents. The laws of some foreign jurisdictions do not protect intellectual property rights to the same extent as the laws of the United States, and we may encounter difficulties in protecting and defending such rights in foreign jurisdictions. The legal systems of many foreign jurisdictions do not favor the enforcement of patent rights and other intellectual property protection, particularly those relating to biotechnology, which could make it difficult for us to stop the infringement of our patent rights and other violations of our intellectual property rights thereunder. Proceedings to enforce our patent rights and other intellectual property protection in foreign jurisdictions could result in substantial cost and divert our efforts and attention from other aspects of our business.

Changes in patent law in the United States and other jurisdictions could diminish the value of patents in general, thereby impairing our ability to protect our Platform and products.

Changes in either the patent laws or in interpretations of patent laws in the United States or other countries or regions may diminish the value of our intellectual property. We cannot predict the breadth of claims that may be allowed or enforced in our patents or in third-party patents. We may not develop additional proprietary products, methods and technologies that are patentable.

Assuming that other requirements for patentability are met, prior to March 16, 2013, in the United States, the first to invent the claimed invention was entitled to the patent, while outside the United States, the first to file a patent application was entitled to the patent. On or after March 16, 2013, under the Leahy-Smith America Invents Act, or the America Invents Act, enacted in September 16, 2011, the United States transitioned to a first inventor to file system in which, assuming that other requirements for patentability are met, the first inventor to file a patent application will be entitled to the patent on an invention regardless of whether a third party was the first to invent the claimed invention. A third party that files a patent application in the USPTO on or after March 16, 2013, but before us could therefore be awarded a patent covering an invention of ours even if we had made the invention before it was made by such third party. This will require us to be cognizant of the time from invention to filing of a patent application. Since patent applications in the United States and most other countries are confidential for a period of time after filing or until issuance, we cannot be certain that we or our licensors were the first to either (i) file any patent application related to our products or (ii) invent any of the inventions claimed in our or our licensor's patents or patent applications.

The America Invents Act also includes a number of significant changes that affect the way patent applications are prosecuted and also affect patent litigation. These include allowing third-party submission of prior art to the USPTO during patent prosecution and additional procedures to challenge the validity of a patent by USPTO administered post-grant proceedings, including post-grant review, *inter partes* review and derivation proceedings, to attack the validity of a patent. Because of a lower evidentiary standard in USPTO proceedings compared to the evidentiary standard in United States federal courts necessary to invalidate a patent claim, a third party could potentially provide evidence in a USPTO proceeding sufficient for the USPTO to hold a claim invalid even though the same evidence might not be sufficient to invalidate the claim if presented in a district court action. Accordingly, third parties have used and may continue to use the USPTO proceedings to invalidate our patent claims that would not have been invalidated if first challenged by the third party in a district court action. Therefore, the America Invents Act and its implementation could increase the uncertainties and costs surrounding our or our licensors' prosecution of patent applications and enforcement or defense of issued patents, all of which could have a material adverse effect on our business, financial condition and results of operations.

The patent positions of companies engaged in the development and commercialization of biotechnology and software are particularly uncertain. Court rulings may narrow the scope of patent protection available in certain circumstances and weaken the rights of patent owners in certain situations. We cannot predict how decisions by the courts, the U.S. Congress or the USPTO may impact the value of our patents. Any similar adverse changes in the patent laws of other jurisdictions could also have a material adverse effect on our business, financial condition and results of operations. Depending on future actions by the U.S. Congress, the federal courts and the

USPTO, the laws and regulations governing patents could change in unpredictable ways that could have a material adverse effect on our existing patent portfolio and our ability to protect and enforce our intellectual property in the future. Any of the foregoing could have a material adverse effect on our business, financial condition and results of operations.

Issued patents covering our Platform or products could be found invalid or unenforceable if challenged.

Our owned and licensed patents and patent applications may be subject to priority, validity, inventorship and enforceability disputes. If we or our licensors are unsuccessful in any of these proceedings, such patents and patent applications may be narrowed, invalidated or held unenforceable and we may be required to obtain licenses from third parties, which may not be available on commercially reasonable terms or at all, or we may be required to cease the development, manufacture and commercialization the products we may develop. Any of the foregoing could have a material adverse effect on our business, financial condition and results of operations.

The issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability and our owned and licensed patents may be challenged in courts or patent offices in the United States and abroad. Some of our owned or licensed patent rights may be challenged at a future point in time in opposition, derivation, re-examination, *inter partes* review, post-grant review or interference proceedings and other similar proceedings in foreign jurisdictions. Any successful third-party challenge to our patent rights in this or any other proceeding could result in the narrowing, unenforceability or invalidity, in whole or in part, of such patent rights, which may lead to increased competition to our business, which could harm our business, financial condition and results of operations. In addition, if the breadth or strength of protection provided by our patents and patent applications is threatened, regardless of the outcome, it could dissuade companies from collaborating with us to license, develop or commercialize our current or future products.

We may not be aware of all third-party intellectual property rights potentially relating to our Platform and products. Publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until approximately 18 months after filing or, in some cases, not until such patent applications issue as patents. We might not have been the first to make the inventions covered by each of our pending patent applications and we might not have been the first to file patent applications for these inventions. To determine the priority of these inventions, we may participate in interference proceedings, derivation proceedings or other post-grant proceedings declared by the USPTO that could result in substantial cost to us. The outcome of such proceedings is uncertain. No assurance can be given that other patent applications will not have priority over our patent applications. In addition, changes to the patent laws of the United States allow for various post-grant opposition proceedings that have not been extensively tested, and their outcome is therefore uncertain. Our licensors may also license patent rights to others, and we may not be aware of such licenses before they are granted or such licenses may be subject to disputes or uncertainties that affect patent rights licensed by us or could limit our ability to enforce such patent rights. If third parties bring actions against our owned or licensed patent rights, we could experience significant costs and management distraction.

In patent litigation in the United States or abroad, defendant counterclaims alleging invalidity or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness, written description, non-enablement or failure to claim patent-eligible subject matter. Grounds for an unenforceability assertion could include an allegation that someone connected with prosecution of the patent withheld relevant information from the USPTO or made a misleading statement during prosecution. Similar claims may also be raised before administrative bodies in the United States or abroad, even outside the context of litigation, through mechanisms including re-examination, post-grant review and equivalent proceedings in foreign jurisdictions (e.g., opposition proceedings). Such proceedings could result in revocation or amendment to our patent rights in such a way that they no longer cover our Platform and products. The outcome of patent litigation or patent office proceedings following assertions of invalidity and unenforceability is unpredictable. With respect to the validity question, for

[Table of Contents](#)

example, we cannot be certain that there is no invalidating prior art, of which we and our licensing partners and the patent examiner were unaware during prosecution. If a third party were to prevail on a legal assertion of invalidity and/or unenforceability, we would lose at least part, and perhaps all, of the patent protection on our Platform and products. Such a loss of patent protection could have a material adverse impact on our business, financial condition and results of operations.

We and our licensors may initiate or become involved in legal proceedings against a third party to enforce a patent covering our Platform or one of our products. Defendants in such proceedings could counterclaim that the patents covering our Platform or product are invalid or unenforceable and could institute legal proceedings to challenge such patents both in court and before patent offices.

We rely on licenses from third parties to provide certain products, and if we lose these licenses or if our rights under these licenses are limited, then our business will be adversely impacted.

We are, and we may acquire companies that are, party to various license agreements that grant us rights to use certain intellectual property, including de-identified patient data, artificial intelligence software, and certain patents and patent applications, typically in certain specified fields of use. We may need to obtain additional licenses from others to advance our research, development and commercialization activities. Our future licenses may not provide us with exclusive rights to use the licensed intellectual property and technology, or may not provide us with exclusive rights to use such intellectual property and technology in all relevant fields of use and in all territories in which we may wish to develop or commercialize our technology in the future. As a result, we may not be able to prevent competitors or other third parties from developing and commercializing competitive products, including in territories covered by our licenses.

If these licenses are terminated, or if the underlying intellectual property rights fail to provide the intended rights and protections, our ability to develop and commercialize products and technology covered by these license agreements would be limited or lost, and our competitors or other third parties might have the freedom to develop, produce, seek regulatory approval of, or to market, products identical or similar to ours and we may be required to cease our development and commercialization activities. Our actual or potential licensors could also take action with respect to our licensed intellectual property that may decrease the value of such licensed intellectual property. Any of the foregoing could have a material adverse effect on our business, financial condition and results of operations.

Moreover, disputes could arise with respect to any aspect of our license agreements, including:

- the scope of rights granted under the license agreement and other interpretation-related issues;
- our financial or other obligations under the license agreement;
- the extent to which our Platform, products, and processes infringe, misappropriate, or otherwise violate the intellectual property of the licensor that is not subject to the licensing agreement;
- the licensing of patent and other rights controlled by our licensors or developed under our collaborative development relationships to others;
- the sublicensing of patent and other rights;
- the inventorship and ownership of inventions and know-how licensed to us or resulting from the joint creation or use of intellectual property by our licensors, us and/or our partners; and
- the validity, enforceability or priority of licensed patent rights.

If we do not prevail in such disputes, we may lose any of such license agreements, the license agreements may not be meaningful for our business and operations, and we may be subject to unnecessary or additional payment obligations.

[Table of Contents](#)

In addition, the agreements under which we currently license intellectual property or technology from third parties are complex, and certain provisions in such agreements could be susceptible to multiple interpretations. The resolution of any such contract interpretation disagreement could narrow what we believe to be the scope of our rights to the relevant intellectual property or technology, or increase what we believe to be our financial or other obligations under the relevant agreement, either of which could have a material adverse effect on our business, financial condition and results of operations. Moreover, if disputes over licensed intellectual property impair our ability to enforce licensed intellectual property against third parties or use it to defend ourselves in litigation, the value of such licensed intellectual property may be diminished.

Additionally, our licenses may be subject to certain rights of third parties, and, as a result, our current and future licenses may not provide us with exclusive rights to use the licensed intellectual property and technology. Such licenses may be subject to reservations of rights including certain non-commercial rights reserved by universities and certain rights retained by the U.S. government, including march-in rights. Patents licensed to us could be put at risk of being invalidated or interpreted narrowly in litigation filed by or against our licensors or another licensee or in administrative proceedings brought by or against our licensors or another licensee in response to such litigation or for other reasons. As a result, we may not be able to prevent competitors or other third parties from developing and commercializing competitive products, including in territories covered by our licenses.

If we fail to maintain our current licensing arrangements on commercially acceptable terms, we may be unable to successfully develop and commercialize the affected product, which could have a material adverse effect on our business, financial condition and results of operations. If any of these license agreements is terminated, if the licensor fails to abide by the terms of the license agreement, if the licensor fails to prevent infringement, misappropriation, or other violations by third parties, or if the licensed patent or other rights are found to be invalid or unenforceable, we may lose our rights to develop and market our technology, may be unable to achieve our business goals and our results of operations and financial condition could be adversely affected. In addition, we may seek to obtain additional licenses from our licensors and, in connection with obtaining such licenses, we may agree to amend our existing licenses in a manner that may be more favorable to the licensors, including by agreeing to terms that could enable third parties, including our competitors, to receive licenses to a portion of the intellectual property that is subject to our existing licenses and to compete with our products. Absent the license agreements, we could infringe, misappropriate or otherwise violate patents or other intellectual property rights subject to those agreements, and if the license agreements are terminated, we may be subject to litigation by the licensor. Litigation could result in substantial costs and be a distraction to management. If we do not prevail, we may be required to pay damages, including treble damages, attorneys' fees, costs and expenses, royalties or, be enjoined from selling our products and services, including our tests, which could adversely affect our ability to offer products, and our business, financial condition and results of operations.

If we cannot license and maintain rights to use third-party intellectual property on reasonable terms, we may not be able to successfully commercialize our products. Our licensed or acquired technology may lose value or utility over time.

From time to time, we may identify third-party intellectual property we may need, including to develop or commercialize new products. We may also need to negotiate licenses before or after introducing a commercial product, and we may not be able to obtain necessary licenses to such intellectual property. The licensing or acquisition of third party intellectual property rights is a competitive area, and several more established companies may pursue strategies to license or acquire third party intellectual property rights that we may consider attractive or necessary. These established companies may have a competitive advantage over us due to their size, capital resources and greater clinical development and commercialization capabilities. In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. We also may be unable to license or acquire third party intellectual property rights on terms that would allow us to make an appropriate return on our investment or at all. If we are unable to enter into the necessary licenses on acceptable

terms or at all, if any necessary licenses are subsequently terminated, if the licensors fail to abide by the terms of the licenses or fail to prevent infringement, misappropriation, or other violations by third parties, or if the licensed patents or other rights are found to be invalid or unenforceable, our business, financial condition and results of operations may suffer. In addition, any technology licensed or acquired by us may lose value or utility, including as a result of a change in the industry, in our business objectives, others' technology, our dispute with the licensor, and other circumstances outside our control. In return for the use of a third party's technology, we may agree to pay the licensor royalties based on sales of our products or services. Royalties are a component of the cost of products and affect the margins on our products. If we are unable to negotiate reasonable royalties or if we have to pay royalties on technology that becomes less useful for us or ceases to provide value to us, our profit margin will be reduced and we may suffer losses.

We may not be able to protect or enforce our intellectual property rights adequately throughout the world.

Filing, prosecuting and defending patents and trademarks on our Platform and products in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some territories outside the United States are less extensive than those in the United States. In some cases, we or our licensors may not be able to obtain patent or trademark protection for certain technology outside of the United States. In addition, the laws of some foreign countries and regions do not protect intellectual property rights to the same extent as the federal and state laws in the United States, and we may encounter difficulties in protecting and defending such rights in foreign jurisdictions where we do pursue patent or trademark protection. Consequently, we may not be able to prevent third parties from practicing our inventions in all jurisdictions, or from selling or importing products made using our inventions in and into the United States or other jurisdictions. Competitors may use our inventions in jurisdictions where we have not pursued and obtained patent protection to develop their own products and may also export otherwise infringing products to territories where we have patent protection, but enforcement is not as strong as that in the United States. These products may compete with our products. Our patents or other intellectual property rights existing outside the United States may not be effective or sufficient to prevent them from competing. Similarly, intellectual property rights may be exhausted in certain situations, and others could import our products sold abroad and compete with us domestically.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries and regions, and particularly developing countries, do not favor the enforcement of patents, trademarks, trade secrets and other intellectual property protection, particularly those relating to biotechnology products, which could make it difficult for us to stop the infringement, misappropriation or other violations of our patents, trademarks or other intellectual property, or marketing of competing products in violation of our intellectual property rights generally in such jurisdictions. Proceedings to enforce our patent or other intellectual property rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents or other intellectual property at risk of being invalidated or interpreted narrowly and our patent applications at risk of not issuing, and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded to us, if any, may not be commercially meaningful. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage.

Many countries have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. In addition, many countries limit the enforceability of patents against government agencies or government contractors. In these countries, the patent owner may have limited remedies, which could materially diminish the value of such patent. If we or any of our licensors is forced to grant a license to third parties with respect to any patents relevant to our business, our business, financial condition and results of operations could be materially and adversely affected.

If we are unable to protect the confidentiality of our trade secrets, the value of our Platform and other technology could be materially adversely affected and our business could be harmed.

In addition to pursuing patents on our Platform and other technology, we take steps to protect our intellectual property and proprietary know-how and technology that is not patentable or that we elect not to patent, including certain of our algorithms and software. We seek to protect our trade secrets and proprietary know-how and technology by entering into agreements, including confidentiality agreements, non-disclosure agreements and intellectual property assignment agreements, with our employees, consultants, academic institutions, corporate partners and, when needed, our advisers. However, we cannot be certain that such agreements have been entered into with all relevant parties, and we cannot be certain that our trade secrets and other proprietary information will not be disclosed or that competitors or other third parties will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. For example, any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. Such agreements may not be enforceable or may not provide meaningful protection for our trade secrets or other proprietary information in the event of unauthorized use or disclosure or other breaches of the agreements, and we may not be able to prevent such unauthorized use or disclosure. If we are required to assert our rights against such party, it could result in significant cost and distraction.

Monitoring unauthorized use or disclosure is difficult, and we do not know whether the steps we have taken to prevent such use or disclosure are, or will be, adequate. If we were to enforce a claim that a third party had illegally obtained and was using our trade secrets, it would be expensive and time-consuming, and the outcome would be unpredictable. In addition, trade secrets can be difficult to protect and some courts inside and outside the United States are less willing or unwilling to protect trade secrets.

We also seek to preserve the integrity and confidentiality of our proprietary information by maintaining physical security of our premises and physical and electronic security of our information technology systems, but it is possible that these security measures could be breached and we may not have adequate remedies for any breach. If any of our confidential proprietary information were to be lawfully obtained or independently developed by a competitor, absent patent protection, we would have no right to prevent such competitor from using that technology or information to compete with us, which could harm our competitive position.

We may be subject to claims that our employees, consultants or independent contractors have wrongfully used or disclosed confidential information of third parties or that our employees have wrongfully used or disclosed trade secrets of their former employers.

We have employed or engaged and expect to employ or engage individuals who were previously employed at or associated with universities or other companies, including our competitors or potential competitors. Although we try to ensure that our employees, consultants and independent contractors do not use the proprietary information or know-how of others in their work for us, we have in the past been, and may again in the future be, subject to claims that our employees, consultants or independent contractors have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers or other third parties, or to claims that we have improperly used or obtained such trade secrets. Litigation may be necessary to defend against these claims. If we lose, in addition to paying monetary damages, we may be deprived of valuable intellectual property and face increased competition. A loss of key research personnel or work product could hamper or prevent our ability to commercialize potential products, which could harm our business. Even if we are successful in defending against these claims, litigation could result in damage to our reputation and substantial costs and be a distraction to management and affected individuals.

We may not be able to protect and enforce our trademarks and we could infringe or otherwise violate others' trademarks and if our trademarks are not adequately protected, then we may not be able to build name recognition in our markets of interest.

We have not yet registered trademarks in all of our potential markets, although we have registered Tempus and certain diagnostic test names for certain classes of goods and services in the United States. If we apply to register additional trademarks in the United States and other countries, our applications may not be allowed for registration in a timely fashion or at all, and our registered trademarks may not be maintained or enforced and our trademarks may be challenged, infringed, circumvented or declared generic or determined to be infringing on or otherwise violating another mark. For example, opposition or cancellation proceedings may be filed against our trademark applications and registrations, and our trademarks may not survive such proceedings. Such proceedings can be expensive and time-consuming, particularly for a company of our size. If we do not timely register and enforce marks used in connection with our Platform or products, we may encounter difficulty in enforcing them against third parties, and if these marks are registered by others, we could infringe or otherwise violate such trademarks.

We may not be able to protect our rights to these trademarks, which we need to build name recognition among potential partners or customers in our markets of interest. At times, competitors or other third parties may adopt trademarks similar to ours, thereby impeding our ability to build brand identity and possibly leading to market confusion. In addition, there could be potential trademark infringement or other violation claims brought by owners of other registered trademarks or trademarks that incorporate variations of our registered or unregistered trademarks. Over the long term, if we are unable to establish name recognition based on our trademarks, then we may not be able to compete effectively and our business may be adversely affected. Our efforts to enforce or protect our proprietary rights related to trademarks may be ineffective and could result in substantial costs and diversion of resources. Any of the foregoing could have a material adverse effect on our business, financial condition and results of operations.

We may be subject to claims challenging the inventorship or ownership of our owned or licensed intellectual property or claims asserting ownership of what we regard as our own intellectual property.

While it is our policy to require our employees and contractors who may be involved in the conception or development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who, in fact, conceives or develops intellectual property that we regard as our own. Moreover, even when we obtain agreements assigning intellectual property to us, the assignment of intellectual property rights may not be self-executing or the assignment agreements may be breached, and we may be forced to bring claims against third parties, or defend claims that they may bring against us, to determine the ownership of what we regard as our intellectual property. Furthermore, individuals executing agreements with us may have preexisting or competing obligations to a third party, such as an academic institution, and thus an agreement with us may be ineffective in perfecting ownership of inventions developed by that individual. Disputes about the ownership of intellectual property that we may own may have a material adverse effect on our business, financial condition and results of operations.

We or our licensors may be subject to claims that former employees, collaborators or other third parties have an interest in or right to our owned or licensed patents, trade secrets or other intellectual property. For example, we or our licensors may have inventorship disputes arise from conflicting obligations of employees, consultants or others who are involved in developing such intellectual property. Litigation may be necessary to defend against these and other claims challenging inventorship or ownership of our owned or licensed patents, trade secrets or other intellectual property. If we or our licensors fail in defending against any such claims, in addition to paying monetary damages, we may lose exclusive ownership of, or right to use, valuable intellectual property. An inability to incorporate such technologies or features would harm our business and may prevent us from successfully commercializing our products or at all. In addition, we may lose personnel as a result of such claims and any such litigation or the threat thereof may adversely affect our ability to hire employees or contract

with independent contractors. A loss of key personnel or their work product could hamper or prevent our ability to commercialize our products. Even if we are successful in defending against such claims, litigation could result in damage to our reputation and substantial costs and be a distraction to management and other employees. Any of the foregoing could have a material adverse effect on our business, financial condition and results of operations.

We may become involved in litigation and other legal proceedings alleging that we are infringing, misappropriating or otherwise violating third-party intellectual property rights, or asserting our intellectual property rights, which could be time-intensive and costly and may adversely affect our business, financial condition and results of operations.

We may become involved with litigation or USPTO actions with various third parties. We expect that the number of such claims may increase as the number of our products grows, and the level of competition in our industry segments increases. Given the vast number of patents in our field of technology, we cannot be certain or guarantee that we do not infringe existing patents or that we will not infringe patents that may be granted in the future. Many companies and institutions have filed, and continue to file, patent applications related to the development and commercialization of genomic and algorithmic diagnostic tests. Some of these patent applications have already been allowed or issued and others may issue in the future. Since this area is competitive and of strong interest to biotechnology companies, there will likely be additional patent applications filed and additional patents granted in the future, as well as additional research and development programs expected in the future. If a patent holder believes the manufacture, use, sale or importation of our products infringe its patent, the patent holder may sue us even if we own or have licensed other patent protection for our technology. The biotechnology industry is characterized by extensive and complex litigation regarding patents and other intellectual property rights. Moreover, we may face patent infringement claims from nonpracticing entities that have no relevant product revenue and against whom our owned or licensed patent portfolio may therefore have no deterrent effect. Any infringement claim, regardless of its validity, could harm our business by, among other things, resulting in time-consuming and costly litigation, diverting management's time and attention from the development of our business, or requiring the payment of monetary damages (including treble damages, attorneys' fees, costs and expenses if we are found to have willfully infringed) and ongoing royalties.

Litigation may be necessary for us to enforce our intellectual property and proprietary rights or to determine the scope, coverage and validity of the intellectual property and proprietary rights of others. The outcome of such lawsuits, as well as any other litigation or proceeding, is inherently uncertain and might not be favorable to us. Further, we could encounter delays in product introductions, or interruptions in the sale of products, as we develop alternative products. In addition, if we resort to legal proceedings to enforce our intellectual property rights or to determine the validity, scope and coverage of the intellectual property or other proprietary rights of others, the proceedings could be burdensome and expensive, even if we were to prevail. If we do not prevail in such legal proceedings, we may be required to pay damages, and we may lose significant intellectual property protection for our products, such that competitors could copy our products. Any litigation that may be necessary in the future could result in substantial costs and diversion of resources and could have a material adverse effect on our business, financial condition and results of operations.

As we move into new markets and applications for our Platform or products, incumbent participants in such markets may assert their patents and other intellectual property or proprietary rights against us as a means of slowing our entry into such markets or as a means to extract substantial license and royalty payments from us. As our business matures and our public profile grows, we may also be subject to an increased number of allegations of patent infringement, whether by our competitors or other patent owners, both in the United States and throughout the world wherever we seek to commercialize our products. Our competitors and others may have significantly larger and more mature patent portfolios than we have. In addition, while we can assert our own patents or other rights during litigation, our own patents may provide little or no deterrence or protection against patent holding companies or other patent owners who have no relevant product or service revenue. Therefore, our commercial success may depend in part on our non-infringement of the patents or other rights of third parties and on our success in defending ourselves in litigation.

However, our research, development and commercialization activities may be subject to claims that we infringe or otherwise violate patents or other intellectual property rights owned or controlled by third parties. There is a substantial amount of litigation and other patent challenges, both within and outside the United States, involving patent and other intellectual property rights in the biotechnology industry, including patent infringement lawsuits, interferences, oppositions and *inter partes* review proceedings before the USPTO, and corresponding proceedings before foreign patent offices. Numerous U.S. and foreign issued patents and pending patent applications, which are owned by third parties, exist in the fields in which we are developing products. As the intelligent medicine and healthcare data analytics industries expand and more patents are issued, the risk increases that our Platform or products may be subject to claims of infringement of the patent rights of third parties. Numerous significant intellectual property issues have been litigated, are being litigated and will likely continue to be litigated, between existing and new participants in our existing and targeted markets, and our competitors have asserted and may in the future assert that our Platform or products infringe, misappropriate or otherwise violate their intellectual property rights as part of a business strategy to impede our successful entry into or growth in those markets, and we may enforce our owned or licensed intellectual property rights against our competitors and other parties.

Third parties may assert that we are employing their patents, proprietary technology or trade secrets without authorization. By interacting with us, our licensors may learn more about our business or technology and could assert additional patent rights against us, such as patent rights that are not currently licensed to us or patent rights that may be obtained by any such licensors in the future, which may occur if such patent rights are not available for licensing or if they are not offered on acceptable or commercially reasonable terms. Because patent applications can take many years to issue and are not publicly available until a certain period of time passes from filing, there may be currently pending patent applications which may later result in issued patents that our current or future products and services may infringe. In addition, similar to what other companies in our industry have experienced, we expect our competitors and others may develop or obtain patents with our Platform or products in mind and claim that making, having made, using, selling, offering to sell or importing our products infringes these patents.

Patent and other types of intellectual property litigation can involve complex factual and legal questions, and their outcome is uncertain. Even if we believe such claims are without merit, a court of competent jurisdiction could hold that these third-party patents are valid, enforceable and infringed, which could adversely affect our ability to commercialize our technology. In order to successfully challenge the validity of any such U.S. patent in federal court, we would need to overcome a presumption of validity. As this burden is a high one requiring us to present clear and convincing evidence as to the invalidity of any such U.S. patent claim, there can be no assurance that a court of competent jurisdiction would invalidate the claims of any such U.S. patent or find that our technology did not infringe any such claims. Further, even if we were successful in defending against any such claims, such claims could require us to incur substantial costs and divert financial resources and the attention of our management and technical personnel in defending against any of these claims. Parties making claims against us may be able to sustain the costs of complex patent litigation more effectively than we can, for example, because they have substantially greater resources.

If any third-party patent were to be asserted against us, there can be no assurance that any defenses will be successful. If our defenses to such assertion were unsuccessful, the third-party making claims against us may be able to obtain injunctive or other relief, including by court order, which could block our ability to develop, commercialize and sell certain products, and could result in the award of substantial damages against us, including treble damages, attorney's fees, costs and expenses if we are found to have willfully infringed. In the event of a successful claim of infringement against us, we may be required to pay damages and ongoing royalties, and obtain one or more licenses from third parties, or be prohibited from selling certain products. Further, we may be required to redesign our technology in a non-infringing manner which may not be commercially feasible. We could also be required or may choose to obtain a license from such third party to continue developing, manufacturing and marketing our technology. However, we may not be able to obtain these licenses on acceptable or commercially reasonable terms, if at all, or these licenses may be non-exclusive, which

could result in our competitors gaining access to the same intellectual property. In addition, we could encounter delays in product introductions while we attempt to develop alternative products to avoid infringing third-party patents or otherwise violating proprietary rights. Defense of any lawsuit or failure to obtain any of these licenses could prevent us from commercializing products, and the prohibition of sale of any of our products could materially affect our business and our ability to gain market acceptance for our products. Any of the foregoing could have a material adverse effect on our business, financial condition and results of operations.

Even if resolved in our favor, litigation or other legal proceedings relating to intellectual property claims may cause us to incur significant expenses and could distract our scientific and management personnel from their normal responsibilities. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. In addition, during the course of this kind of litigation, there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock. Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing or distribution activities.

In addition, our agreements with some of our customers, suppliers or other entities with whom we do business require us to defend or indemnify these parties to the extent they become involved in infringement claims, including the types of claims described above. We could also voluntarily agree to defend or indemnify third parties in instances where we are not obligated to do so if we determine it would be important to our business relationships. If we are required or agree to defend or indemnify third parties in connection with any infringement claims, we could incur significant costs and expenses that could adversely affect our business, financial condition and results of operations.

Obtaining and maintaining our patent and trademark protection depends on compliance with various required procedures, document submissions, fee payments and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

Periodic maintenance fees, renewal fees, annuity fees and various other governmental fees on patents and/or applications and trademarks and trademark applications will be due to be paid to the USPTO and various governmental patent agencies outside of the United States at several stages over the lifetime of the patents and/or applications and trademarks and trademark applications. We have systems in place to remind us to pay these fees, and we rely on our outside counsel to pay these fees due to U.S. and non-U.S. patent and trademark agencies. The USPTO and various foreign governmental patent and trademark agencies require compliance with a number of procedural, documentary, fee payment and other similar requirements during the patent and trademark application processes. In many cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with the applicable rules. However, there are situations in which non-compliance can result in abandonment or forfeiture of the patent or patent application or trademark or trademark application and thus the partial or complete loss of patent or trademark rights in the relevant jurisdiction. Such an event would allow our competitors to enter the unprotected market and have a material adverse effect on our business, financial condition and results of operations.

Patent terms may be inadequate to protect our competitive position for an adequate amount of time.

Patents have a limited lifespan. In the United States, if all maintenance fees are timely paid, the natural expiration of a patent is generally 20 years from its earliest U.S. non-provisional filing date. Various extensions may be available, but the life of a patent, and the protection it affords, is limited. Even if patents covering our Platform or products are obtained, once the patent life has expired, we may be open to competition. Given the amount of time required for the development, testing and regulatory review of our new products, patents

protecting them might expire before or shortly after they are commercialized. As a result, our owned and licensed patent portfolio may not provide us with a sufficient exclusivity period to exclude others from commercializing products similar or identical to ours.

Intellectual property rights do not necessarily address all potential threats.

The degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations, and may not adequately protect our business or permit us to maintain our competitive advantage. For example:

- others may be able to make products that are similar to ours, but that are not covered by the claims of the patents that we license or may own in the future;
- we, or our license partners or future collaborators, might not have been the first to make the inventions covered by the issued patent or pending patent applications that we license or may own in the future;
- we, or our license partners or future collaborators, might not have been the first to file patent applications covering certain of our or their inventions;
- others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our owned or licensed intellectual property rights;
- it is possible that our pending licensed patent applications or those that we may own in the future will not lead to issued patents;
- issued patents that we hold rights to now or in the future may be held invalid or unenforceable, including as a result of legal challenges by our competitors;
- others may have access to the same intellectual property rights licensed to us in the future on a nonexclusive basis;
- our competitors might conduct research and development activities in countries where we do not have patent rights and then use the information learned from such activities to develop competitive products for sale in our major commercial markets;
- we may not develop additional proprietary technologies that are patentable;
- the patents or other intellectual property rights of others may have an adverse effect on our business; or
- we may choose not to file a patent for certain trade secrets or know-how, and a third party may subsequently file a patent covering such intellectual property.

Any of the foregoing could have a material adverse effect on our business, financial condition and results of operations.

Our products contain third-party open source software components and failure to comply with the terms of the underlying open source software licenses could restrict our ability to sell our products or may require us to publicly disclose our proprietary software.

Our products contain software tools licensed by third parties under open source software licenses. Use and distribution of open source software may entail greater risks than use of third-party commercial software, as open source software licensors generally do not provide warranties or other contractual protections regarding infringement or other violation claims or the quality of the code. Some open source software licenses contain requirements that the licensee make its source code publicly available if the licensee creates modifications or derivative works using the open source software or provide software services at no cost to the user, depending on the type of open source software the licensee uses and how the licensee uses it. If we combine our proprietary software with open source software in a certain manner, we could, under certain open source software licenses, be required to release the source code of our proprietary software to the public for free. This would allow our

[Table of Contents](#)

competitors to create similar products with less development effort and time and ultimately could result in a loss of product sales and revenue. In addition, some companies that use third-party open source software have faced claims challenging their use of such open source software, seeking enforcement of open source license provisions, asserting ownership of open source software incorporated in products and demanding compliance with the terms of the applicable open source license. We may be subject to suits by third parties claiming ownership of what we believe to be open source software, or claiming non-compliance with the applicable open source licensing terms. Use of open source software may also present additional security risks because the public availability of such software may make it easier for hackers and other third parties to compromise or attempt to compromise our Platform and systems. If an author or other third party that distributes such open source software were to allege that we had not complied with the conditions of an open source license, we could incur significant legal costs defending ourselves against such allegations. In the event such claims were successful, we could be subject to significant damages or be enjoined from the distribution of our products.

There is little legal precedent and the terms of many open source software licenses have not been interpreted by United States courts, and there is a risk that these licenses could be construed in a way that could impose unanticipated conditions or restrictions on our ability to commercialize our products. Moreover, we cannot assure investors that our processes for monitoring and controlling our use of open source software in our products will be effective. If we are held to have breached the terms of an open source software license, we could be required to seek licenses from third parties to continue offering our products on terms that are not economically feasible, to re-engineer our product, to discontinue the sale of our products if re-engineering could not be accomplished on a timely basis, or to make generally available, in source code form, our proprietary code, any of which could adversely affect our business, financial condition and results of operations.

General Risk Factors

The COVID-19 global pandemic and the worldwide attempts to contain it could harm our business and our results of operations have been and could continue to be adversely impacted by such pandemic.

The COVID-19 global pandemic and the various attempts throughout the world to contain it, have created significant volatility, uncertainty and disruption. In response to government directives and guidelines, health care advisories and employee and customer concerns, we altered certain aspects of our operations. Many of our employees worked remotely from home and those on site followed social distance guidelines, which have impacted their productivity. Any resurgence of COVID-19 could cause us or government authorities to reimpose these operating restrictions.

We also experienced significant reduction in access to our customers, including restrictions on our ability to market and distribute our tests and to collect samples. Our partners, vendors and customers similarly had their operations altered or temporarily suspended. Due to impacts and measures resulting from the COVID-19 pandemic, we experienced and could again experience unpredictable reductions in the demand for our tests as healthcare customers divert medical resources and priorities toward the treatment of the virus. To the extent the COVID-19 pandemic continues to cause or again causes severe disruption, vendors of equipment and reagents for our operations could also reduce production or even go out of business, resulting in supply constraints for us. The COVID-19 pandemic has resulted in, and could continue to cause, increased costs or delays to production and development of our products.

The full extent to which the COVID-19 pandemic and the various responses to it impacts our business, operations and financial results will depend on numerous evolving factors that we may not be able to accurately predict, including: the duration and scope of the pandemic, including any resurgence in the United States; governmental, business and individuals' actions that have been and continue to be taken in response to the pandemic; the availability, cost to access and effectiveness of COVID-19 tests, vaccines and medicines; the effect on our customers and customer demand for and ability to pay for our tests; restrictions on our employees' ability to work and travel; disruptions related to the distribution of our tests, including impacts on logistics of

[Table of Contents](#)

shipping and receiving blood collection kits; and any stoppages, disruptions or increased costs associated with development, production and marketing of our products. During the COVID-19 pandemic, we may not be able to maintain the same level of customer outreach and service, which could negatively impact our customers' perception of us. We will continue to actively monitor the issues raised by the COVID-19 pandemic and may take further actions that alter our operations, as may be required by federal, state, local or foreign authorities, or that we determine are in the best interests of our employees, customers and stockholders. It is not clear what the potential effects any such alterations or modifications may have on our business, including the effects on our financial results.

The COVID-19 pandemic has also led to uncertainties related to our growth, forecast and trends. Our historic results such as revenues, operating margins, cash flows, tests performed, and other financial and operating metrics, may not be indicative of our results for future periods. For example, we expect our COVID-19 diagnostic testing revenue to decline substantially over time as the COVID-19 pandemic wanes and demand for testing subsides. In addition, increases in the number of diagnostic tests performed by us prior to the COVID-19 pandemic may reflect an acceleration of growth that we may not see during or after the COVID-19 pandemic. The COVID-19 pandemic and its future developments present uncertainties with respect to our performance, financial condition, volume of business, results of operations, and cash flows. Due to the uncertain scope and duration of the COVID-19 pandemic and uncertain timing of any recovery or normalization, we are currently unable to estimate the resulting impacts on our operations and financial results. In addition to the impacts to our business, the global economy is likely to be significantly weakened as a result of actions taken in response to the COVID-19 pandemic. To the extent that such a weakened global economy impacts customers' ability or willingness to pay for our tests, our business, financial condition and results of operations could be negatively impacted.

We may acquire businesses, form joint ventures or make investments in companies or technologies that could negatively affect our operating results, distract management's attention from other business concerns, dilute our stockholders' ownership, and significantly increase our debt, costs, expenses, liabilities and risks.

We have made acquisitions of businesses, technologies and assets and may pursue additional acquisitions in the future. We also may pursue strategic alliances and additional joint ventures that leverage our Platform and industry experience to expand our product offerings or distribution. We have limited experience with acquisitions and forming strategic partnerships. We compete for those opportunities with others including our competitors, some of which have greater financial or operational resources than we do. We may not be able to identify suitable acquisition candidates or strategic partners, we may have inadequate access to information or insufficient time to complete due diligence, and we may not be able to complete such transactions on favorable terms, if at all. If we make any acquisitions, we may not be able to integrate these acquisitions successfully into our existing business, and we could assume unknown or contingent liabilities. Difficulties in assimilating acquired businesses include redeployment or loss of key employees and their severance, combination of teams and processes in various functional areas, reorganization or closures of facilities, relocation or disposition of excess equipment, and increased litigation, regulatory and compliance risks, any of which could be expensive and time consuming and adversely affect us. Integration of an acquired business also may disrupt our ongoing operations and require management resources that we would otherwise focus on developing our existing business. In addition, any acquisition could result in the incurrence of debt, contingent liabilities or future write-offs of intangible assets or goodwill, any of which could have a material adverse effect on our financial condition, results of operations and cash flows. We may also experience losses related to investments in other companies, which could have a material negative effect on our business, financial condition and results of operations. We may not realize the anticipated benefits of any acquisition, technology license, strategic alliance or joint venture.

To finance any acquisitions, joint ventures or investments, we may choose to issue shares of our common stock as consideration, which would dilute the ownership of our stockholders. Additional funds may not be available on terms that are favorable to us, or at all. If the price of our common stock is low or volatile, we may not be able to acquire other companies or fund a joint venture project using our stock as consideration.

Our ability to use our net operating loss carryforwards and certain other tax attributes may be limited.

We have incurred net losses since our inception and we may never achieve or sustain profitability. Generally, losses incurred will carry forward until such losses expire (for losses generated prior to January 1, 2018) or are used to offset future taxable income, if any. Under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, or the IRC, if a corporation undergoes an “ownership change,” generally defined as a greater than 50 percentage point change (by value) in its equity ownership by certain stockholders over a three-year period, the corporation’s ability to use its pre-change net operating loss, or NOL, carryforwards and other pre-change tax attributes (such as research tax credits) to offset its post-change income or taxes may be limited. We have not completed a study to assess whether one or more ownership change for purposes of Section 382 or 383 have occurred since our inception. For purposes of Section 382 or 383, we may have experienced ownership changes in the past and may experience ownership changes in the future as a result of shifts in our stock ownership (some of which shifts are outside our control). As a result, if we earn net taxable income, our ability to use our pre-change NOL carryforwards to offset such taxable income will be subject to limitations. Similar provisions of state tax law may also apply to limit our use of accumulated state tax attributes. Therefore, if we attain profitability, we may be unable to use a material portion of our NOL carryforwards and other tax attributes, which could adversely affect our future cash flows. In addition, the Tax Cuts and Jobs Act of 2017 imposes a reduction to the maximum deduction allowed for NOLs generated in tax years beginning after December 31, 2017. These changes may adversely affect our future cash flow.

Taxing authorities may successfully assert that we should have collected or in the future should collect sales and use, value added, or similar taxes, and we could be subject to tax liabilities with respect to past or future sales, which could adversely affect our results of operations.

We do not collect sales and use, value added, and similar taxes in all jurisdictions in which we have sales, based on our belief that such taxes are not applicable or that we are not required to collect such taxes with respect to the jurisdiction. Sales and use, value added, and similar tax laws and rates vary greatly by jurisdiction. Certain jurisdictions in which we do not collect such taxes may assert that such taxes are applicable, which could result in tax assessments, penalties, and interest, and we may be required to collect such taxes in the future. Such tax assessments, penalties, and interest or future requirements may adversely affect our results of operations.

If our estimates or judgments relating to our critical accounting policies are based on assumptions that change or prove to be incorrect, our operating results could fall below our publicly announced guidance or the expectations of securities analysts and investors, resulting in a decline in the market price of our common stock.

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America, or GAAP, requires management to make estimates and assumptions that affect the amounts reported in our financial statements and accompanying notes. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets, liabilities, equity, revenue and expenses that are not readily apparent from other sources. Actual results could therefore differ materially from these estimates under different assumptions or conditions. For example, in connection with adopting and implementing the new revenue recognition standard, FASB ASC Topic 606, *Revenue from Contracts with Customers*, management has made and will continue to make judgments and assumptions based on our interpretation of the new standard. The new revenue recognition standard is principle-based and interpretation of those principles may vary from company to company based on their unique circumstances. It is possible that interpretation, industry practice and guidance may evolve as we work toward implementing these new accounting standards. If our assumptions change or if actual circumstances differ from our assumptions, our operating results may be adversely affected and could fall below our publicly announced guidance or the expectations of analysts and investors, resulting in a decline in the market price of our common stock.

We are highly dependent on the services of Eric Lefkofsky and other members of our senior management team and the loss of any member of our senior management team or our inability to attract and retain highly skilled scientists, clinicians, sales representatives and business development managers could adversely affect our business, financial condition and results of operations.

Our success depends on the skills, experience and performance of key members of our senior management team. In particular, we are highly dependent on the services of Eric Lefkofsky, our Founder, Chief Executive Officer, and Chairman of our board of directors. Mr. Lefkofsky spends substantially all of his professional time with us, and he is highly active in our management; however, he does devote some of his time and attention to other endeavors. Mr. Lefkofsky is also a co-founder and serves as Executive Chairman of the board of Pathos AI, Inc., an AI-enabled drug development company that has entered into an agreement with us, is the managing partner and co-founder of Lightbank LLC, a private venture capital firm specializing in investments in technology companies that has invested in us, and is a member of the board of directors of Groupon, Inc., which he co-founded.

The individual and collective efforts of Mr. Lefkofsky and our other employees will be important as we continue to develop our Platform and additional products, and as we expand our commercial activities. The loss or incapacity of existing members of our executive management team could adversely affect our operations if we experience difficulties in hiring qualified successors. Our executive officers signed offer letters when first joining our company, and have entered into subsequent employment agreements, and we cannot guarantee their retention for any period of time. We do not maintain “key person” insurance on any of our employees, including Mr. Lefkofsky. Additionally, we have a number of key employees whose equity ownership in our company gives them a substantial amount of personal wealth. As a result, it may be difficult for us to continue to retain and motivate these employees, and this wealth could affect their decisions about whether or not they continue to work for us or at all.

Our research and development programs and laboratory operations depend on our ability to attract and retain highly skilled scientists and technicians. We may not be able to attract or retain qualified scientists and technicians in the future due to the competition for qualified personnel among life science businesses, particularly near our laboratories in Chicago and Atlanta and our planned laboratory in Raleigh, North Carolina. We also face competition from universities and public and private research institutions in recruiting and retaining highly qualified scientific personnel. In addition, we may have difficulties locating, recruiting or retaining qualified sales representatives and business development managers, as well as software engineers. Recruiting and retention difficulties can limit our ability to support our research and development and sales programs. All of our employees are at-will, which means that either we or the employee may terminate their employment at any time.

Further, certain macroeconomic conditions, which have been referred to as the Great Resignation, may result in higher than normal attrition in the sectors in which we operate, and in our business in particular. Our ability to manage human capital, and attract and retain the resources necessary to operate our business successfully, may suffer as a result.

We have identified a material weakness in our internal control over financial reporting.

In connection with the preparation of our consolidated financial statements, we identified a material weakness in our internal control over financial reporting as of December 31, 2021, as described below. A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our consolidated financial statements will not be prevented or detected on a timely basis.

We did not design or maintain an effective control environment due to an insufficient complement of personnel with the appropriate level of technical accounting and financial reporting knowledge and experience commensurate with our financial reporting requirements.

This material weakness did not result in a material misstatement to the financial statements. However, this material weakness could result in material misstatements potentially impacting one or more of the financial statement accounts and disclosures that would not be prevented or detected.

[Table of Contents](#)

We have taken steps to remediate this material weakness by hiring a Chief Accounting Officer and other key technical accounting and financial reporting roles to further develop and document our accounting policies and financial reporting procedures, including ongoing senior management review. Management will continue to work to remediate this material weakness by hiring additional qualified accounting and financial reporting personnel, training existing personnel, and further evolving our accounting processes. At this time, we do not anticipate the costs associated with remediating this material weakness will be material. We expect that completion of the remediation of the material weakness could extend beyond December 31, 2022. There is no assurance that we will be able to remediate the material weakness in a timely manner or that in the future additional material weaknesses will not exist or otherwise be discovered. If we are not able to remedy this material weakness, we may not be able to manage our business effectively or accurately report our financial performance on a timely basis, which could cause a decline in our common stock price and adversely affect our business, financial condition, and results of operations.

If we fail to maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results or prevent fraud.

Upon completion of this offering, we will be required to document and test our internal controls over financial reporting pursuant to Section 404 of Sarbanes-Oxley Act of 2002, or Section 404, so that our management can certify as to the effectiveness of our internal controls over financial reporting. Likewise, our independent registered public accounting firm will be required to provide an attestation report on the effectiveness of our internal control over financial reporting at such time as we cease to be an “emerging growth company,” as defined in the Jumpstart our Business Startups Act of 2012, or the JOBS Act. At such time, our independent registered public accounting firm may issue a report that is adverse if a material weakness is identified.

We have recently commenced the costly and challenging process of compiling the system and processing documentation necessary to perform the evaluation needed to comply with Section 404, but we may not be able to complete our evaluation, testing and any required remediation in a timely fashion once initiated. Our compliance with Section 404 will require that we incur substantial expenses and expend significant management efforts. We will need to hire additional accounting and financial staff with appropriate public company experience and technical accounting knowledge and compile the system and process documentation necessary to perform the evaluation needed to comply with Section 404 and to remediate our material weakness described above.

If our management is unable to conclude that we have effective internal controls over financial reporting, or to certify the effectiveness of such controls, or if our independent registered public accounting firm cannot render an unqualified opinion on management’s assessment and the effectiveness of our internal control over financial reporting, or if we are unable to remediate our material weakness described above, or if material weaknesses in our internal controls are identified in the future, we could be subject to regulatory scrutiny and a loss of public confidence, which could have a material adverse effect on our business and our stock price. In addition, if we do not maintain adequate financial and management personnel, processes and controls, we may not be able to manage our business effectively or accurately report our financial performance on a timely basis, which could cause a decline in our common stock price and adversely affect our business, financial condition, and results of operations.

Our disclosure controls and procedures may not prevent or detect all errors or acts of fraud.

We are subject to the periodic reporting requirements of the Exchange Act. We designed our disclosure controls and procedures to provide reasonable assurance that information we must disclose in reports we file or submit under the Exchange Act is accumulated, communicated to management, recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC. We believe that any disclosure controls and procedures, no matter how well-conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by an unauthorized override of the

controls. Accordingly, because of the inherent limitations in our control system, misstatements due to error or fraud may occur and not be detected.

Our employees, principal investigators, consultants and commercial partners may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements and insider trading.

We are exposed to the risk of fraud or other misconduct by our employees, principal investigators, consultants and commercial partners. Misconduct by these parties could include intentional failures to comply with the regulations of the FDA, CMS and non-U.S. regulators, comply with healthcare fraud and abuse laws and regulations in the United States and abroad, report financial information or data accurately or disclose unauthorized activities to us. In particular, sales, marketing, and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, misconduct, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. Such misconduct could also involve the improper use of information obtained in the course of clinical studies, which could result in regulatory sanctions and cause serious harm to our reputation. We currently have a code of conduct applicable to all of our employees, but it is not always possible to identify and deter employee misconduct, and our code of conduct and the other precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses, or in protecting us from governmental investigations, lawsuits or other actions stemming from a failure to comply with these laws or regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could result in the imposition of significant civil, criminal and administrative penalties, including, without limitation, damages, monetary fines, individual imprisonment, disgorgement of profits, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs or from coverage of commercial payers, contractual damages, reputational harm, diminished profits and future earnings, additional reporting or oversight obligations if we become subject to a corporate integrity agreement or other agreement to resolve allegations of non-compliance with the law and curtailment or restructuring of our operations, which could have a significantly adverse impact on our business, financial condition and results of operations. Whether or not we are successful in defending against such actions, we could incur substantial costs and expenses, including legal fees, and divert the attention of management from the operation of our business.

Legal claims and proceedings could adversely impact our business.

We have been and may in the future be subject to threatened or actual legal claims and regulatory proceedings. We consider our historical experiences with such claims and proceedings to be in the normal course of our business or typical for our industry; however, it is difficult to assess the outcome of these matters, and we may not prevail in any current or future proceedings or litigation. For example, we have received a demand from a significant stockholder to provide certain of our books and records pursuant to Section 220 of the Delaware Corporation Law, and any future litigation related to this request could materially adversely affect us. Regardless of their merit, any threatened or actual claims or proceedings can require significant time and expense to investigate and defend. Since litigation is inherently uncertain, there is no guarantee that we will be successful in defending ourselves against such claims or proceedings, or that our assessment of the materiality of these matters, including any reserves taken in connection therewith, will be consistent with the ultimate outcome of such matters.

Certain of our officers, directors and principal stockholders may pursue corporate opportunities independent of us that could present conflicts with our and our stockholders' interests.

Certain of our officers, directors and principal stockholders are in the business of making or advising on investments in companies and hold (and may from time to time in the future acquire) interests in or provide advice or services to businesses that may directly or indirectly compete with our business or be suppliers or

[Table of Contents](#)

customers of ours. These persons may also pursue acquisitions that may be complementary to our business or enter into lines that we may otherwise be well positioned to enter, and, as a result, those acquisition opportunities may not be available to us. For example our Chief Executive Officer, Founder, and Chairman, Eric Lefkofsky, is a co-founder and serves as Executive Chairman of the board of Pathos AI, Inc., a company engaged in the discovery and development of therapeutics and with whom we have a commercial relationship, as well as Lightbank LLC, a private venture capital firm specializing in investments in technology companies. Our charter provides that none of our officers or directors who are also an officer, director, employee, partner, managing director, principal, independent contractor or other affiliate of our principal stockholders will be liable to us or our stockholders for breach of any fiduciary duty by reason of the fact that any such individual pursues or acquires a corporate opportunity for its own account or the account of an affiliate, as applicable, instead of us, directs a corporate opportunity to any other person, instead of us or does not communicate information regarding a corporate opportunity to us.

If we were to be sued for product liability or professional liability, we could face substantial liabilities that exceed our resources.

The marketing, sale and use of our products could lead to the filing of product liability claims were someone to allege that our products identified inaccurate or incomplete information regarding the sample or information analyzed, reported inaccurate or incomplete information concerning the available therapies for a disease, or otherwise failed to perform as designed. We may also be subject to professional liability for errors in, a misunderstanding of, or inappropriate reliance upon, the information we provide in the ordinary course of our business activities. A product liability or professional liability claim could result in substantial damages and be costly and time-consuming for us to defend.

We maintain product and professional liability insurance, but this insurance may not fully protect us from the financial impact of defending against product liability or professional liability claims. Any product liability or professional liability claim brought against us, with or without merit, could increase our insurance rates or prevent us from securing insurance coverage in the future. Additionally, any product liability or professional liability lawsuit could damage our reputation or cause current clinical customers to terminate existing agreements with us and potential clinical customers to seek other partners, any of which could adversely impact our results of operations.

We depend on information technology systems, including on-premises, co-located and third-party data centers and platforms, and any interruptions of service or failures may impair and harm our business, financial condition and results of operations.

We depend on information technology and telecommunications systems for significant elements of our operations, including our laboratory information management system, our computational biology system, our artificial intelligence algorithms, our knowledge management system, and our customer reporting. We have installed, and expect to expand, a number of enterprise software systems that affect a broad range of business processes and functional areas, including for example, systems handling human resources, financial controls and reporting, contract management, regulatory compliance and other infrastructure operations. In addition to the aforementioned business systems, we intend to extend the capabilities of both our preventative and detective security controls by augmenting the monitoring and alerting functions, the network design and the automatic countermeasure operations of our technical systems. These information technology and telecommunications systems support a variety of functions, including laboratory operations, test validation, sample tracking, quality control, customer service support, billing and reimbursement, research and development activities, scientific and medical curation and general administrative activities. In addition, our third-party provider of billing and collections services for late-stage clinical testing in the United States depends upon technology and telecommunications systems provided by its outside vendors.

We also rely on on-premises, co-located and third-party infrastructure throughout the United States to perform computationally demanding analysis tasks for our algorithmic diagnostic products and our data business,

[Table of Contents](#)

as well as for our research and development program and for other business purposes. Information technology and telecommunications systems are vulnerable to damage from a variety of sources, including telecommunications or network failures, malicious human acts and natural disasters. Moreover, despite network security and back-up measures, some of the servers upon which we rely are potentially vulnerable to physical or electronic break-ins, computer viruses and similar disruptive problems. Despite the precautionary measures we have taken to prevent problems that could affect our information technology and telecommunications systems, failures or significant downtime of our information technology or telecommunications systems or those used by our third-party service providers could prevent us from preparing and providing reports to physicians, billing payers, processing reimbursement appeals, handling patient or physician inquiries, conducting research and development activities and managing the administrative aspects of our business.

In the event of any technical problems that may arise in connection with our on-premises, co-located or third-party data centers, we could experience interruptions in our ability to provide AI-enabled products to our customers or in our internal functions, including research and development, which rely on such services, or to operate the other administrative aspects of our business. Interruptions or failures may be caused by a variety of factors, including infrastructure changes, human or software errors, viruses, worms, ransomware, security attacks, fraud, spikes in customer usage and denial of service issues. Interruptions or failures in our data analytics operations may reduce our revenue, result in the loss of customers, adversely affect our ability to attract new customers or harm our reputation. Significant interruptions to our research and development programs could cause us to delay the introduction of new products or improvements to existing products, which could adversely impact our business, financial condition, results of operations and the competitiveness of our products. In such events, our insurance policies may not adequately compensate us for losses that we may incur but such events could subject us to liability and cause us to issue credits or cause customers to abandon our products.

In addition, we currently use the Google Cloud Platform, or Google Cloud, for a substantial portion of our computing, storage, data processing, networking and other services. Any significant disruption of, or interference with, our use of Google Cloud could adversely affect our business, financial condition and results of operations. Google has broad discretion to change and interpret the terms of service and other policies with respect to us, and those actions may be unfavorable to our business operations. Google may also take actions beyond our control that could seriously harm our business, including discontinuing or limiting our access to one or more services, increasing pricing terms, terminating or seeking to terminate our contractual relationship altogether or altering how we are able to process data in a way that is unfavorable or costly to us. If our arrangements with Google Cloud were terminated, we could experience interruptions in our ability to conduct our diagnostic tests or to make our data product available to customers, as well as delays and additional expenses in arranging for alternative cloud infrastructure services. Any transition to new cloud providers would be difficult to implement and would cause us to incur significant delays and expense.

Additionally, we are vulnerable to service interruptions experienced by Google Cloud and other providers, and we expect to experience interruptions, delays or outages in service availability in the future due to a variety of factors, including infrastructure changes, human, hardware or software errors, hosting disruptions and capacity constraints. The level of service provided by these providers, or regular or prolonged interruptions in that service, could also affect the use of, and our customers' satisfaction with, our products and could harm our business and reputation. In addition, hosting costs will increase as our customer base grows, which could harm our business if we are unable to grow our revenue faster than the cost of using these services or the services of other providers. Any of these factors could further reduce our revenue or subject us to liability, any of which could adversely affect our business, financial condition and results of operations.

Cyber-based attacks, security breaches, loss of data and other disruptions in relation to our information systems and computer networks could compromise sensitive information related to our business, prevent us from accessing it and expose us to substantial liability, which could adversely affect our business and reputation.

Cyber-attacks, security breaches, computer virus infections, malware execution, and other incidents could cause misappropriation, exposure, loss or other unauthorized disclosure of confidential data, personal information, materials or information, including those concerning our customers and employees. Increasingly complex methods have been used in cyber-attacks, including ransomware, phishing, supply chain attacks, structured query language injections and distributed denial-of-service attacks. A cyber-attack can also be in the form of unauthorized access to our network resources (or a blocking of authorized access). Ransomware attacks are becoming increasingly prevalent and severe and can lead to significant interruptions, delays, or outages in our operations, disruption of clinical trials, loss of data (including data related to clinical trials), loss of income, significant extra expenses to restore data or systems, reputational loss and the diversion of funds. To alleviate the financial, operational and reputational impact of a ransomware attack, ransomware attack victims may prefer to make payment demands, but if we were to be a victim of such an attack, we may be unwilling or unable to do so (including, for example, if applicable laws or regulations prohibit such payments). Similarly, supply chain attacks have increased in frequency and severity, and we cannot guarantee that third parties and infrastructure in our supply chain have not been compromised or that they do not contain exploitable defects or bugs that could result in a breach or disruption of our systems and networks or the systems or networks of third parties that support us. Despite the security controls we have in place, such attacks are difficult to avoid. Although we are not aware of any such breaches or incidents of our or our third-party vendors' systems or information, we can provide no assurance that we or our vendors will be able to detect, prevent or contain the effects of such attacks or other information security risks, vulnerabilities or threats in the future. The costs of attempting to protect against the foregoing risks and the costs of responding to and remediating systems from a cyber-attack are significant. Large scale data breaches at other entities increase the challenge we and our vendors face in maintaining the security of our information technology systems and of our customers' sensitive information. Following a cyber-attack, our and/or our vendors' remediation efforts may not be successful, and a cyber-attack could result in interruptions, delays or cessation of service, and loss of existing or potential customers. In addition, breaches of our and/or our vendors' security measures and the unauthorized dissemination or availability of sensitive personal information or proprietary information or confidential information about us, our customers or other third parties, could expose our customers' private information and our customers to the risk of financial or medical identity theft, or expose us or other third parties to a risk of loss or misuse of this information, and result in investigations, regulatory enforcement actions, material fines and penalties, loss of customers, litigation or other actions which could have a material adverse effect on our business, financial condition and results of operations. In addition, if we fail to adhere to our privacy policy and other published statements about our privacy or cybersecurity practices, or applicable laws concerning our processing, use, transmission and disclosure of protected information, or if our statements or practices are found to be deceptive or misrepresentative, we could face regulatory actions, fines and other liability. See "Risk Factors—Risks Related to Our Highly Regulated Industry." Our collection, processing, use and disclosure of personally identifiable information, including patient and employee information, is subject to privacy and security regulations, and our failure to comply with those regulations or to adequately secure the information in our possession could result in significant liability or reputational harm."

In the ordinary course of our business, we collect and store sensitive data, including PHI, personally identifiable information, credit card and other financial information, intellectual property and proprietary business information owned or controlled by us or other parties such as customers and payers. We manage and maintain our applications and data utilizing a combination of on-site systems and cloud-based data centers. We utilize external security and infrastructure vendors to manage parts of our data centers. We also communicate sensitive data, including patient data, through phone, Internet, facsimile, multiple third-party vendors and their subcontractors or integrations with third-party electronic medical records. These applications and data encompass a wide variety of information critical to our business, including research and development information, patient data, commercial information and business and financial information. We face a number of risks related to

[Table of Contents](#)

protecting this critical information, including loss of access, intentional or accidental inappropriate use or disclosure, unauthorized access, inappropriate modification and the risk of our being unable to adequately monitor, audit or modify our controls over such critical information. This risk extends to the third-party vendors and subcontractors we use to manage this sensitive data or otherwise process it on our behalf.

The secure processing, storage, maintenance and transmission of this critical information are vital to our operations and business strategy, and we devote significant resources to a variety of mechanisms, including administrative, physical and technical measures, intended to protect such information. Although we take measures designed to protect sensitive data from unauthorized access, use, modification or disclosure, no security measures can be perfect or protect against all threats or vulnerabilities and our information technology infrastructure could be vulnerable to hackers, phishing scams, malware, viruses, security flaws, errors by employees or others who have authorized access to our network, and other malfeasance or inadvertent disruptions. Any breach or interruption of our security measures or information technology infrastructure could compromise our networks, and the information stored there could be accessed by unauthorized parties, publicly disclosed, lost or stolen. Any such access, breach, or other loss of information could result in legal claims or proceedings, and liability under federal, state or foreign laws that protect the privacy of personal information, such as HIPAA or HITECH, and regulatory penalties.

Notice of HIPAA breaches must be made to affected individuals, the Secretary of the Department of Health and Human Services or other state, federal or foreign regulators, including State Attorneys General, and for extensive breaches, notice may need to be made to the media. Such a notice could harm our reputation and our ability to compete. Although we have implemented security measures and an enterprise security program to prevent unauthorized access to patient data, such data is currently accessible through multiple channels, and there is no guarantee we can protect all data from breach or exposure. Unauthorized access, loss or dissemination could disrupt our operations (including our ability to perform our analysis, provide test results, bill payers or patients, process claims and appeals, provide customer assistance, conduct research and development, develop intellectual property, collect, process and prepare financial information, provide information about our tests and continue other patient and physician education and outreach efforts, and manage our business) and damage our reputation, any of which could adversely affect our business, financial condition and results of operations. For example, the loss of clinical trial data from completed or future clinical trials could result in delays in or cancellation of our regulatory approval efforts and significantly increase our costs to recover or reproduce the lost data. We may also rely on third parties for their products or services on which we depend, and similar events relating to their computer systems could also have a material adverse effect on our business, financial condition and results of operations. To the extent that any disruption or security incident were to result in any loss, destruction, or alteration of, or damage or unauthorized access to, our data or other information that is processed or maintained on our behalf, or inappropriate disclosure of or dissemination of any such information, the further development and commercialization of our product candidates could be delayed. We continue to prioritize security and the development of practices and controls to protect our systems. As cyber threats evolve, we may be required to expend significant additional resources to continue to modify or enhance our protective measures or to investigate and remediate any information security vulnerabilities, and these efforts may not be successful.

We have contingency plans and insurance coverage for certain potential claims, liabilities, and costs relating to security incidents that may arise from our business or operations; however, the coverage may not be sufficient to cover all claims, liabilities, and costs arising from the incidents, including fines and penalties. In addition, we cannot be certain that insurance for cybersecurity incidents will continue to be available to us on economically reasonable terms, or at all, or that any insurer will not deny coverage as to any future claim. It could be difficult to predict the ultimate resolution of any such incidents or to estimate the amounts or ranges of potential loss, if any, that could result therefrom. If we cannot successfully resolve a security incident or contain any potential loss, it could materially impact our business, financial condition and results of operations.

International expansion of our business exposes us to business, regulatory, political, operational, financial, and economic risks associated with doing business outside of the United States.

We currently have limited international operations, but our business strategy incorporates potentially significant international expansion. We plan to conduct physician and patient association outreach activities, to extend laboratory capabilities, to expand payer relationships and to market our Data business to pharmaceutical and biotechnology customers outside of the United States. Doing business internationally involves a number of risks, including:

- multiple, conflicting and changing laws and regulations such as privacy regulations, including regulations that limit our ability to collect and distribute de-identified patient data, tax laws, export and import restrictions, economic sanctions and embargoes, employment laws, healthcare regulatory requirements, including those governing diagnostic testing and reimbursement, and other governmental approvals, permits and licenses;
- failure by us, our distributors, our local partners to obtain regulatory approvals for the use of our products in various countries;
- additional potentially blocking or relevant third-party patent or other intellectual property rights;
- complexities and difficulties in obtaining intellectual property protection and enforcing our intellectual property;
- difficulties in staffing and managing foreign operations;
- complexities associated with managing multiple payer reimbursement regimes, government payers, or patient self-pay systems;
- logistics and regulations associated with shipping blood samples, including infrastructure conditions and transportation delays;
- patient populations that are underrepresented in our databases;
- limits in our ability to penetrate international markets if we are not able to perform our tests locally;
- financial risks, such as longer payment cycles, difficulty collecting accounts receivable, the impact of local and regional financial crises on demand and payment for our products and exposure to foreign currency exchange rate fluctuations, currency controls and cash repatriation restrictions;
- natural disasters, political and economic instability, including wars (such as the armed conflict between Russia and Ukraine), terrorism, and political unrest, boycotts, curtailment of trade and other business restrictions;
- public health or similar issues, such as epidemics or pandemics, including the current outbreak of COVID-19, that could cause business disruption, and
- regulatory and compliance risks that relate to maintaining accurate information and control over sales and distributors' activities that may fall within the purview of the U.S. Foreign Corrupt Practices Act, or FCPA, its books and records provisions, or its anti-bribery provisions.

In late February 2022, Russian military forces launched a significant military action against Ukraine, and sustained conflict and disruption in the region is likely. The impact to Ukraine, as well as actions taken by other countries, including new and stricter sanctions by Canada, the United Kingdom, the European Union, the United States and other countries and organizations against officials, individuals, regions, and industries in Russia, Ukraine and Belarus, and each country's potential response to such sanctions, tensions, and military actions could damage or disrupt international commerce and the global economy, and could have a material adverse effect on our business and results of operations. While our business and operations are currently not impacted, it is not possible to predict the broader or longer-term consequences of this crisis. Consequences of the crisis could include further sanctions, embargoes, regional instability, geopolitical shifts and adverse effects on macroeconomic conditions, security conditions, currency exchange rates and financial markets. There can be no assurance that the Russia-Ukraine crisis, including any resulting sanctions, export controls or other restrictive actions, will not have a material adverse impact on our future operations and results.

[Table of Contents](#)

Any of these factors could significantly harm our future international expansion and operations and, consequently, our revenue and results of operations.

Our existing debt may affect our flexibility in operating and developing our business and our ability to satisfy our obligations.

As of December 31, 2020 and December 31, 2021, we had indebtedness of \$250 million and \$238.2 million, respectively, under the convertible promissory note, or Note, that we issued to Google LLC, or Google. For as long as the Note is outstanding, it may have significant negative effects on our future operations, including:

- impairing our ability to obtain additional financing in the future (or to obtain such financing on acceptable terms) for working capital, capital expenditures, acquisitions or other important needs;
- requiring us to repay the principal and accrued interest on the Note if we terminate our agreement with Google for use of Google Cloud or as a result of an event of default under the operating covenants in the Note, which could impair our liquidity and reduce the availability of our cash flow to fund working capital, capital expenditures, acquisitions and other important needs;
- limiting our ability to adjust to rapidly changing conditions in the industry, reducing our ability to withstand competitive pressures and making us more vulnerable to a downturn in general economic conditions or business than our competitors with relatively lower levels of debt.

In addition, the Note contains restrictions on our ability to incur additional debt. Complying with these covenants may cause us to take actions that make it more difficult to successfully execute our business strategy and we may face competition from companies not subject to such restrictions.

We could be adversely affected by violations of the FCPA and other anti-bribery laws.

We are subject to the FCPA, which prohibits companies and their intermediaries from making payments in violation of law to non-U.S. government officials for the purpose of obtaining or retaining business or securing any other improper advantage, as a result of our international operations. We are also subject to similar anti-bribery laws in the jurisdictions in which we operate, including the United Kingdom's Bribery Act of 2010, which also prohibits commercial bribery and makes it a crime for companies to fail to prevent bribery. These laws are complex and far-reaching in nature, and, as a result, we cannot assure that we would not be required in the future to alter one or more of our practices to be in compliance with these laws or any changes in these laws or the interpretation thereof. Any violations of these laws, or allegations of such violations, could disrupt our operations, involve significant management distraction, cause us to incur significant costs and expenses, including legal fees, and result in a material adverse effect on our business, financial condition and results of operations. We could also suffer severe penalties, including criminal and civil penalties, disgorgement and other remedial measures.

Risks Related to Ownership of Our Class A Common Stock

The dual class structure of our common stock will have the effect of concentrating voting control with our Chief Executive Officer, Founder and Chairman, which will limit your ability to influence the outcome of important decisions.

Our Class B common stock has 30 votes per share and our Class A common stock, which is the stock we are offering hereby, has one vote per share. Our Chief Executive Officer, Founder, and Chairman, Eric Lefkofsky, who, collectively with his controlled entities, holds all our outstanding shares of Class B common stock, will beneficially own shares representing approximately % of the voting power of our outstanding capital stock following the completion of this offering. As a result, Mr. Lefkofsky will have the ability to control the outcome of matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions, such as a merger or other sale of our company or our assets, even if his stock ownership represents less than 50% of the outstanding aggregate number of shares of our capital stock. This concentration

of voting control will limit the ability of other stockholders to influence corporate matters and may cause us to make strategic decisions that could involve risks to you or that may not be aligned with your interests. In addition, Mr. Lefkofsky will serve as an observer on our nominating and corporate governance committee, and accordingly, may have substantial influence over the individuals nominated to serve as directors. As a board member, Mr. Lefkofsky owes a fiduciary duty to our stockholders and is legally obligated to act in good faith and in a manner he reasonably believes to be in the best interests of our stockholders. As a stockholder, Mr. Lefkofsky is entitled to vote his shares in his own interests, which may not always be in the interests of our stockholders generally. Mr. Lefkofsky's control may adversely affect the market price of our Class A common stock.

We have not elected to take advantage of the “controlled company” exemption to the corporate governance rules for publicly listed companies but may do so in the future.

Because our Chief Executive Officer, Founder, and Chairman, Eric Lefkofsky, who, collectively with his controlled entities, holds all our outstanding shares of Class B common stock, will beneficially own shares representing in excess of 50% of the voting power of our outstanding capital stock following the completion of this offering, we are eligible to elect the “controlled company” exemption to the corporate governance rules for publicly listed companies. We have not elected to do so. If we decide to become a “controlled company” under the corporate governance rules for publicly listed companies, we would not be required to have a majority of our board of directors be independent, nor would we be required to have a compensation committee or an independent nominating function. If we choose controlled company status in the future, our status as a controlled company could cause our Class A common stock to be less attractive to certain investors or otherwise harm our trading price.

We cannot predict the impact our dual class structure may have on the market price of our Class A common stock.

We cannot predict whether our dual class structure, combined with the concentrated control of our Chief Executive Officer, Founder and Chairman, who beneficially owns all of the outstanding shares of our Class B common stock, will result in a lower or more volatile market price of our Class A common stock or in adverse publicity or other adverse consequences. Certain index providers have announced restrictions on including companies with multiple-class share structures in certain of their indexes. For example, in July 2017, FTSE Russell and Standard & Poor's announced that they would cease to allow most newly public companies utilizing dual or multi-class capital structures to be included in their indices. Under the announced policies, our dual class capital structure would make us ineligible for inclusion in any of these indices. Given the sustained flow of investment funds into passive strategies that seek to track certain indexes, exclusion from stock indexes would likely preclude investment by many of these funds and could make our Class A common stock less attractive to other investors. As a result, the market price of our Class A common stock could be adversely affected.

No public market for our Class A common stock currently exists, and an active public trading market may not develop or be sustained following this offering.

No public market for our Class A common stock currently exists. An active public trading market for our Class A common stock may not develop following the completion of this offering or, if developed, it may not be sustained. The lack of an active market may impair your ability to sell your shares at the time you wish to sell them or at a price that you consider reasonable. The lack of an active market may also reduce the fair value of your shares. An inactive market may also impair our ability to raise capital to continue to fund operations by selling shares and may impair our ability to acquire other companies or technologies by using our shares as consideration.

We will have broad discretion in the use of the net proceeds to us from this offering and may not use them effectively.

We will have broad discretion in the application of the net proceeds to us from this offering, including for any of the purposes described in the section titled “Use of Proceeds,” and you will not have the opportunity as

[Table of Contents](#)

part of your investment decision to assess whether the net proceeds are being used appropriately. Because of the number and variability of factors that will determine our use of the net proceeds from this offering, our ultimate use may vary substantially from our currently intended use. Investors will need to rely upon the judgment of our management with respect to the use of proceeds. Pending use, we may invest the net proceeds from this offering in short-term, investment-grade, interest-bearing securities, such as money market accounts, certificates of deposit, commercial paper, and guaranteed obligations of the U.S. government that may not generate a high yield for our stockholders. We may use a portion of the net proceeds to acquire complementary businesses, products, services, or technologies. At this time, we do not have agreements or commitments to enter into any material acquisitions. If we do not use the net proceeds that we receive in this offering effectively, our business, financial condition and results of operations could be harmed and the market price of our Class A common stock could decline.

Future sales of our Class A common stock in the public market could cause the market price of our Class A common stock to decline.

Sales of a substantial number of shares of our Class A common stock in the public market following the completion of this offering, or the perception that these sales might occur, could depress the market price of our Class A common stock and could impair our ability to raise capital through the sale of additional equity securities. Many of our existing equity holders have substantial unrecognized gains on the value of the equity they hold based upon the price of this offering, and therefore they may take steps to sell their shares or otherwise secure the unrecognized gains on those shares. We are unable to predict the timing of or the effect that such sales may have on the prevailing market price of our Class A common stock.

All of the Class A common stock sold in this offering will be freely tradable without restrictions or further registration under the Securities Act of 1933, as amended, or the Securities Act, except for any shares held by our affiliates as defined in Rule 144 under the Securities Act, or Rule 144, and shares subject to lock-up agreements described below.

All of our directors and executive officers, the selling stockholders, and the holders of substantially all of our Class A common stock, Class B common stock and securities exercisable for, or convertible into, our Class A common stock outstanding immediately on the closing of this offering, are subject to lock-up agreements with the underwriters or agreements with market stand-off provisions with us pursuant to which they have agreed that they will not, and will not publicly disclose an intention to, during the period ending on the 180th day after the date of this prospectus, or the restricted period, offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any of our shares of common stock, any options or warrants to purchase any of our shares of common stock or any securities convertible into or exchangeable for or that represent the right to receive shares of our common stock or enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of our common stock; provided that Morgan Stanley & Co. LLC and J.P. Morgan Securities LLC on behalf of the underwriters may release any of the securities subject to these lock-up agreements at any time, subject to the applicable notice requirements.

In addition, the restricted period may be shortened with respect to a portion of the locked-up securities held by certain lock-up parties, and the lock-up agreements are subject to a number of exceptions. These agreements are further described in the sections titled “Shares Eligible for Future Sale” and “Underwriting.” If not earlier released, all of the shares of Class A common stock not sold in this offering will become eligible for sale upon expiration of the restricted period, except for any shares held by our affiliates as defined in Rule 144.

In addition, there were 210,000 shares of Class A common stock issuable upon the exercise of a stock option outstanding as of December 31, 2021 and 10,344,419 shares of Class A common stock issuable upon the vesting and settlement of restricted stock units outstanding as of December 31, 2021. The shares of Class A common stock will become eligible for sale in the public market to the extent such options are exercised or restricted stock units vested and settled, subject to the lock-up agreements described above and compliance with

[Table of Contents](#)

applicable securities laws. We intend to register all of the shares of Class A common stock issuable upon the vesting and settlement of outstanding restricted stock units, and other equity incentives we may grant in the future, for public resale under the Securities Act.

Further, based on shares outstanding as of December 31, 2021, holders of approximately _____ shares of Class A common stock (assuming the issuance of the Additional Class A Conversion Shares, as discussed under “Prospectus Summary” above, and assuming no exercise of the underwriters’ option to purchase additional shares) and approximately _____ shares of Class B common stock, or _____ % of our capital stock after the completion of this offering, will have rights, subject to some conditions, to require us to file registration statements covering the sale of their shares or to include their shares in registration statements that we may file for ourselves or other stockholders.

Sales, short sales, or hedging transactions involving our equity securities, whether before or after this offering and whether or not we believe them to be prohibited, could adversely affect the price of our Class A common stock.

You will experience immediate and substantial dilution in the net tangible book value of the shares of Class A common stock you purchase in this offering.

The initial public offering price of our Class A common stock will be substantially higher than the pro forma net tangible book value per share of our common stock immediately after this offering. If you purchase shares of our Class A common stock in this offering, you will suffer immediate dilution of \$ _____ per share, or \$ _____ per share if the underwriters exercise their option to purchase additional shares in full, representing the difference between our pro forma as adjusted net tangible book value per share as of _____ 2021, after giving effect to the sale of Class A common stock in this offering and the assumed public offering price of \$ _____ per share, the midpoint of the price range set forth on the cover page of this prospectus. See the section titled “Dilution.”

We do not intend to pay dividends for the foreseeable future and, as a result, your ability to achieve a return on your investment will depend on appreciation in the price of our Class A common stock.

While we have in the past paid dividends to holders of our convertible preferred stock, we do not intend to pay any cash dividends in the foreseeable future. Any determination to pay dividends in the future will be at the discretion of our board of directors. Accordingly, you may need to rely on sales of our Class A common stock after price appreciation, which may never occur, as the only way to realize any future gains on your investment.

We are an “emerging growth company,” and we cannot be certain if the reduced reporting and disclosure requirements applicable to emerging growth companies will make our Class A common stock less attractive to investors.

We are an “emerging growth company,” as defined in the JOBS Act, and we may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not “emerging growth companies,” including the auditor attestation requirements of Section 404, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. Pursuant to Section 107 of the JOBS Act, as an emerging growth company, we have elected to use the extended transition period for complying with new or revised accounting standards until those standards would otherwise apply to private companies. As a result, our consolidated financial statements may not be comparable to the financial statements of issuers who are required to comply with the effective dates for new or revised accounting standards that are applicable to public companies, which may make our Class A common stock less attractive to investors. In addition, if we cease to be an emerging growth company, we will no longer be able to use the extended transition period for complying with new or revised accounting standards.

[Table of Contents](#)

We will remain an emerging growth company until the earliest of: (1) the last day of the fiscal year following the fifth anniversary of this offering; (2) the last day of the first fiscal year in which our annual gross revenue is \$1.07 billion or more; (3) the date on which we have, during the previous rolling three-year period, issued more than \$1.0 billion in non-convertible debt securities; and (4) the last day of the fiscal year in which the market value of our Class A common stock held by non-affiliates exceeded \$700 million as of June 30 of such fiscal year.

We cannot predict if investors will find our Class A common stock less attractive if we choose to rely on these exemptions. If some investors find our Class A common stock less attractive, there may be a less active trading market for our Class A common stock and our stock price may be more volatile.

Anti-takeover provisions in our charter documents and under Delaware law could make an acquisition of our company more difficult, limit attempts by our stockholders to replace or remove our current management and limit the market price of our Class A common stock.

In addition to the effects of our dual class structure, provisions in our amended and restated certificate of incorporation and amended and restated bylaws, as they will be in effect upon the completion of this offering, may have the effect of delaying or preventing a change in control or changes in our management. Our amended and restated certificate of incorporation and amended and restated bylaws will include provisions that may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, which is responsible for appointing the members of our management.

In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which generally, subject to certain exceptions, prohibits a Delaware corporation from engaging in any of a broad range of business combinations with any “interested” stockholder for a period of three years following the date on which the stockholder became an “interested” stockholder. Any of the foregoing provisions could limit the price that investors might be willing to pay in the future for shares of our Class A common stock, and they could deter potential acquirers of our company, thereby reducing the likelihood that you would receive a premium for your shares of our Class A common stock in an acquisition.

Our amended and restated certificate of incorporation will provide that the Court of Chancery of the State of Delaware and the federal district courts of the United States of America will be the exclusive forums for substantially all disputes between us and our stockholders, which could limit our stockholders’ ability to obtain a favorable judicial forum for disputes with us or our directors, officers, or employees.

Our amended and restated certificate of incorporation, as will be in effect upon the completion of this offering, will provide that the Court of Chancery of the State of Delaware is the exclusive forum for the following types of actions or proceedings under Delaware statutory or common law:

- any derivative claim or cause of action brought on our behalf;
- any claim or cause of action asserting a breach of fiduciary duty;
- any claim or cause of action against us arising under the Delaware General Corporation Law;
- any claim or cause of action arising under or seeking to interpret our amended and restated certificate of incorporation or our amended and restated bylaws; and
- any claim or cause of action against us that is governed by the internal affairs doctrine.

The provisions would not apply to suits brought to enforce a duty or liability created by the Securities Exchange Act of 1934, or the Exchange Act. Furthermore, Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all such Securities Act actions. Accordingly, both state and federal courts have jurisdiction to entertain such claims. To prevent having to litigate claims in multiple jurisdictions and the threat of inconsistent or contrary rulings by different courts, among other considerations, our amended and

[Table of Contents](#)

restated certificate of incorporation will further provide that the federal district courts of the United States of America will be the exclusive forum for resolving any complaint asserting a cause or causes of action arising under the Securities Act, including all causes of action asserted against any defendant to such complaint. For the avoidance of doubt, this provision is intended to benefit and may be enforced by us, our officers and directors, the underwriters to any offering giving rise to such complaint, and any other professional entity whose profession gives authority to a statement made by that person or entity and who has prepared or certified any part of the documents underlying the offering.

While the Delaware courts have determined that such choice of forum provisions are facially valid, a stockholder may nevertheless seek to bring a claim in a venue other than those designated in the exclusive forum provisions. In such an instance, we would expect to vigorously assert the validity and enforceability of the exclusive forum provisions of our amended and restated certificate of incorporation. This may require significant additional costs associated with resolving such action in other jurisdictions and there can be no assurance that the provisions will be enforced by a court in those other jurisdictions.

These exclusive forum provisions may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers, or other employees, which may discourage lawsuits against us and our directors, officers, and other employees. If a court were to find either exclusive-forum provision in our amended and restated certificate of incorporation to be inapplicable or unenforceable in an action, we may incur further significant additional costs associated with resolving the dispute in other jurisdictions, all of which could seriously harm our business, financial condition and results of operations.

Our stock price may be volatile, and the value of our Class A common stock may decline.

The market price of our Class A common stock may be highly volatile and may fluctuate or decline substantially as a result of a variety of factors, some of which are beyond our control, including:

- actual or anticipated fluctuations in our financial condition or results of operations;
- variance in our financial performance from expectations of securities analysts;
- changes in the pricing of our products;
- changes in our projected operating and financial results;
- changes in laws or regulations applicable to our Platform and products, including changes in the regulation of data or in the structure of healthcare payment systems;
- announcements by us or our competitors of significant business developments, acquisitions, or new products;
- significant data breaches, disruptions to or other incidents involving our products;
- our involvement in litigation or governmental investigations;
- future sales of our Class A common stock by us or our stockholders, as well as the anticipation of lock-up releases;
- changes in senior management or key personnel;
- the issuance of new or changed securities analysts' reports or recommendations;
- the trading volume of our Class A common stock;
- changes in the anticipated future size and growth rate of our market; and
- economic and market conditions in general, or in our industry in particular.

[Table of Contents](#)

Broad market and industry fluctuations, as well as general economic, political, regulatory, and market conditions, may also negatively impact the market price of our Class A common stock. In addition, technology stocks have historically experienced high levels of volatility. In the past, companies that have experienced volatility in the market price of their securities have been subject to securities class action litigation. We may be the target of this type of litigation in the future, which could result in substantial expenses and divert our management's attention.

If securities or industry analysts do not publish research or publish unfavorable or inaccurate research about our business, the market price and trading volume of our Class A common stock could decline.

The market price and trading volume of our Class A common stock following the completion of this offering will be heavily influenced by the way analysts interpret our financial information and other disclosures. We do not have control over these analysts. If few securities analysts commence coverage of us, or if industry analysts cease coverage of us, our stock price would be negatively affected. If securities or industry analysts do not publish research or reports about our business, downgrade our Class A common stock, or publish negative reports about our business, our stock price would likely decline. If one or more of these analysts cease coverage of us or fail to publish reports on us regularly, demand for our Class A common stock could decrease, which might cause our stock price to decline and could decrease the trading volume of our Class A common stock.

We will incur increased costs as a result of operating as a public company, and our management will be required to devote substantial time to compliance with our public company responsibilities and corporate governance practices.

As a public company, we will incur significant legal, accounting and other expenses that we did not incur as a private company, which we expect to further increase after we are no longer an "emerging growth company." The Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act, the Exchange Act, the listing requirements of the Nasdaq Stock Market and other applicable securities rules and regulations impose various requirements on public companies. Our management and other personnel devote a substantial amount of time to compliance with these requirements. Moreover, these rules and regulations will increase our legal and financial compliance costs and will make some activities more time-consuming and costly, such as maintaining directors' and officers' liability insurance. We cannot predict or estimate the amount of additional costs we will incur as a public company or the specific timing of such costs, and any such costs may adversely affect our business, financial condition and results of operations.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements about us and our industry that involve substantial risks and uncertainties. All statements other than statements of historical facts contained in this prospectus, including statements regarding our future results of operations or financial condition, business strategy and plans and objectives of management for future operations, are forward-looking statements. In some cases, you can identify forward-looking statements because they contain words such as “anticipate,” “believe,” “contemplate,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “potential,” “predict,” “project,” “should,” “target,” “will” or “would” or the negative of these words or other similar terms or expressions. These forward-looking statements include, but are not limited to, statements concerning the following:

- the evolving treatment paradigm for cancer, including physicians’ use of molecular data and targeted oncology therapeutics and the market size for our current and future products;
- our ability to expand our business beyond oncology into new disease areas;
- estimates of our addressable market and our expectations regarding our revenue, expenses, capital requirements and operating results;
- our ability to develop new products and services, including our goals and strategy regarding development and commercialization of Algos;
- our ability to maintain and grow our datasets, including in new disease areas and geographies;
- any expectation that the growth of our datasets will improve the quality of our products and services and accelerate their adoption;
- our ability to capture, aggregate, analyze or otherwise utilize genomic data in new ways and in additional diagnostic modalities;
- any expectation that we will continue to commercialize de-identified records and license them to multiple customers;
- the acceptance of our publications in peer-reviewed journals or of our presentations at scientific and medical conference presentations;
- the implementation of our business model and strategic plans for our products, technologies and businesses;
- competitive companies and technologies and our industry;
- the potential of Intelligent Diagnostics to be disruptive across a broad set of disease areas and the clinical trial process;
- our ability to manage and grow our business by expanding our sales to existing customers or introducing our products to new customers;
- third-party payer reimbursement and coverage decisions, including our strategy to increase reimbursement;
- our ability to establish and maintain intellectual property protection for our products or avoid claims of infringement;
- potential effects of evolving and/or extensive government regulation;
- the timing or likelihood of regulatory filings and approvals;
- our ability to hire and retain key personnel;
- our ability to expand internationally;

Table of Contents

- our ability to protect and enforce our intellectual property rights, including our trade secret protected proprietary rights in our platform;
- our anticipated cash needs and our needs for additional financing; and
- anticipated trends and challenges in our business and the markets in which we operate.

You should not rely on forward-looking statements as predictions of future events. We have based the forward-looking statements contained in this prospectus primarily on our current expectations and projections about future events and trends that we believe may affect our business, financial condition and operating results. The outcome of the events described in these forward-looking statements is subject to risks, uncertainties and other factors described in the section titled “Risk Factors” and elsewhere in this prospectus. Moreover, we operate in a very competitive and rapidly changing environment. New risks and uncertainties emerge from time to time, and it is not possible for us to predict all risks and uncertainties that could have an impact on the forward-looking statements contained in this prospectus. The results, events and circumstances reflected in the forward-looking statements may not be achieved or occur, and actual results, events or circumstances could differ materially from those described in the forward-looking statements.

In addition, statements that “we believe” and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based on information available to us as of the date of this prospectus. And while we believe that information provides a reasonable basis for these statements, that information may be limited or incomplete. Our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all relevant information. These statements are inherently uncertain, and investors are cautioned not to unduly rely on these statements.

The forward-looking statements made in this prospectus relate only to events as of the date on which the statements are made. We undertake no obligation to update any forward-looking statements made in this prospectus to reflect events or circumstances after the date of this prospectus or to reflect new information or the occurrence of unanticipated events, except as required by law. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments.

MARKET, INDUSTRY AND OTHER DATA

This prospectus contains statistical data, estimates and forecasts that are based on independent industry publications or other publicly available information, as well as other information based on our internal sources. While we believe the industry and market data included in this prospectus are reliable and are based on reasonable assumptions, these data involve many assumptions and limitations, and you are cautioned not to give undue weight to these estimates. We have not independently verified the accuracy or completeness of the data contained in these industry publications and other publicly available information. None of the industry publications referred to in this prospectus were prepared on our or on our affiliates' behalf or at our expense. The industry in which we operate is subject to a high degree of uncertainty and risk due to a variety of factors, including those described in the sections titled "Risk Factors" and "Special Note Regarding Forward-Looking Statements." Among other items, certain of the market research included in this prospectus was published prior to the outbreak of the COVID-19 pandemic and did not anticipate the virus or the impact it has caused on our industry. We have utilized this pre-pandemic market research in the absence of updated sources. These and other factors could cause results to differ materially from those expressed in the projections and estimates made by the independent third parties and us. See the section titled "Risk Factors—Risks Related to Our Business and Strategy—The sizes of the markets for our current and future products have not been established with precision, and may be smaller than we estimate."

The sources of certain statistical data, estimates and forecasts contained in this prospectus are the following independent industry publications, reports and other publicly available information:

- Mordor Intelligence, Biomarkers Market—Growth, Trends, COVID-19 Impact, and Forecast (2021-2026), 2021
- Mordor Intelligence, Clinical Trials Market—Growth, Trends, COVID-19 Impact, and Forecast (2021-2026), 2021
- Evaluate Pharma, World Preview 2020, Outlook to 2026, July 2020
- American Clinical Laboratory Association, Value of Lab Testing, 2021
- National Cancer Institute, Cancer Statistics, September 2020
- ClinicalTrials.gov database, 2020: U.S. National Library of Medicine
- GLOBOCAN 2020 database, 2020: Global Cancer Observatory
- National Institute of Mental Health, Major Depression, September 2018
- Anxiety & Depression Association of America, Facts & Statistics, 2021
- Cancers (Basel), PARP Inhibitors in the Treatment of Early Breast Cancer: The Step Beyond?, June 2020
- Gynecologic Oncology, Frequencies of BRCA1 and BRCA2 Mutations Among 1,342 Unselected Patients with Invasive Ovarian Cancer, May 2011
- Journal of Oncology, BRCA Mutations in Prostate Cancer: Prognostic and Predictive Implications, 2020
- World Journal of Urology, Efficacy of Routine Follow-up After First-Line Treatment of Testicular Cancer, October 2004
- The Global Economic Burden of Non-communicable Diseases, Harvard School of Public Health, World Economic Forum (September 2011)
- Mental Health and Substance Use, Mental Health in the Workplace, World Health Organization

[Table of Contents](#)

- World Cancer Report 2014, International Agency for Research on Cancer, World Health Organization (2014)
- CoronavirusUpdate: COVID-19 likely to cost economy \$1 trillion during 2020, says UN trade agency, United Nations, UN News (March 9, 2020)
- American Cancer Society, Cancer Treatment & Survivorship Facts & Figures 2019-2021, 2019
- The Cancer Atlas, The Burden of Cancer, 2019.

USE OF PROCEEDS

We estimate that we will receive net proceeds from this offering of approximately \$ _____ million based on an assumed initial public offering price of \$ _____ per share of Class A common stock, the midpoint of the estimated price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. We will not receive any of the proceeds from any sale of Class A common stock in this offering by the selling stockholders identified in this prospectus in the event that the underwriters exercise their option to purchase additional shares to cover over-allotments, although we will pay the expenses, other than the underwriting discounts and commissions, associated with the sale of those shares.

Each \$1.00 increase (decrease) in the assumed initial public offering price of \$ _____ per share of Class A common stock, the midpoint of the estimated price range set forth on the cover page of this prospectus, would increase (decrease) the net proceeds to us from this offering by approximately \$ _____ million, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting estimated underwriting discounts and commissions. Similarly, each increase (decrease) of 1,000,000 shares in the number of shares of Class A common stock offered by us would increase (decrease) the net proceeds to us from this offering by approximately \$ _____ million, assuming the assumed initial public offering price of \$ _____ per share of Class A common stock remains the same, and after deducting estimated underwriting discounts and commissions.

The principal purposes of this offering are to increase our capitalization and financial flexibility, create a public market for our Class A common stock and facilitate our future access to the capital markets. As of the date of this prospectus, we cannot specify with certainty all of the particular uses for the net proceeds to us from this offering. However, we currently intend to use the net proceeds we receive from this offering for general corporate purposes, including working capital, operating expenses and capital expenditures. We may also use a portion of the net proceeds to acquire complementary businesses, products, services or technologies. At this time, we do not have agreements or commitments to enter into any material acquisitions.

We will have broad discretion over how to use the net proceeds to us from this offering. We intend to invest the net proceeds to us from this offering that are not used as described above in investment-grade, interest-bearing instruments.

DIVIDEND POLICY

Since our incorporation in 2015, we have paid an aggregate of \$21.2 million in cash dividends to holders of our preferred stock in satisfaction of dividend obligations accruing pursuant to our certificate of incorporation in effect prior to this offering. As of the date of this prospectus, shares of our convertible preferred stock have accrued approximately \$ million in unpaid dividends, which are payable, at our option, in cash or shares of our common stock. We expect to pay these dividends in shares of our common stock in connection with the closing of this offering. See “Prospectus Summary—The Offering” for more information about shares of common stock to be issued in satisfaction of these dividend obligations.

Our amended and restated certificate of incorporation to be in effect upon the closing of this offering will not provide for accruing dividends. We currently intend to retain all available funds and future earnings, if any, to fund the development and expansion of our business, and we do not anticipate paying any cash dividends in the foreseeable future. Any future determination regarding the declaration and payment of dividends, if any, will be at the discretion of our board of directors and will depend on then-existing conditions, including our financial condition, operating results, contractual restrictions, capital requirements, business prospects and other factors our board of directors may deem relevant.

CAPITALIZATION

The following table sets forth our cash, cash equivalents and restricted cash and capitalization as of December 31, 2021:

- on an actual basis;
- on a pro forma basis, giving effect to (1) the Series G-3 Financing; (2) the automatic conversion of all of our outstanding shares of Series B redeemable convertible preferred stock into 5,374,899 shares of Class B common stock, which will occur upon the closing of this offering; (3) the automatic conversion of all of our outstanding shares of redeemable convertible preferred stock, other than our Series B preferred stock, into _____ shares of Class A common stock, assuming an initial public offering price of \$ _____ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, which will occur upon the closing of this offering, which will occur upon the closing of this offering; (4) the issuance of _____ Additional Class A Conversion Shares, assuming an initial public offering price of \$ _____ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, which will occur upon the conversion of all outstanding shares of our redeemable convertible preferred stock and upon the closing of this offering; (5) the automatic conversion of all of our nonvoting common stock into 4,612,450 shares of Class A common stock, which will occur upon the closing of this offering; (6) the issuance of _____ shares of Class A common stock upon settlement of RSUs for which the service-based vesting condition was satisfied on or before _____, 2022 and for which the performance-based vesting condition will be satisfied in connection with this offering, which settlement will occur upon the expiration of the lock-up period in connection with this offering; (7) stock-based compensation expense of approximately \$ _____ million related to the vesting of RSUs and PSUs for which the service-based vesting condition was satisfied on or before _____, 2022 and for which the performance-based vesting condition will be satisfied in connection with this offering, as further described in Note 9 to our consolidated financial statements included elsewhere in this prospectus; and (8) the filing and effectiveness of our amended and restated certificate of incorporation, which will occur upon the closing of this offering; and
- on a pro forma as adjusted basis, giving effect to (1) the pro forma adjustments set forth above and (2) our receipt of \$ _____ million in net proceeds from the sale of shares of Class A common stock that we are offering at an assumed initial public offering price of \$ _____ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

See “Prospectus Summary—The Offering” for a description of the Additional Class A Conversion Shares, as the number of Additional Class A Conversion Shares that will be issued depends on the initial public offering price of our Class A common stock.

You should read this table together with the section titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements and related notes included elsewhere in this prospectus.

[Table of Contents](#)

	As of December 31, 2021		
	Actual	Pro Forma	Pro Forma As Adjusted
	(in thousands except share and per share amounts)		
Cash, cash equivalents and restricted cash	\$ 278,466		
Convertible promissory note	238,236		
Redeemable convertible preferred stock, \$0,0001 par value, 64,760,746 shares authorized, 61,078,813 shares issued and outstanding, actual; no shares authorized, issued and outstanding, pro forma and pro forma as adjusted	898,291		
Stockholders' (deficit) equity:			
Preferred stock, \$0.0001 par value, no shares authorized, issued and outstanding, actual; 20,000,000 shares authorized, no shares issued and outstanding, pro forma and pro forma as adjusted	—		
Non-voting common stock, \$0.001 par value, 63,946,627 shares authorized, 4,612,450 shares issued and outstanding, actual; no shares authorized, issued and outstanding, pro forma and pro forma as adjusted	0		
Class A common stock, \$0.001 par value, 181,700,285 shares authorized, 58,367,961 shares issued and outstanding, actual; 1,000,000,000 shares authorized, shares issued and outstanding, pro forma and shares issued and outstanding, pro forma as adjusted	6		
Class B common stock, \$0.001 par value, 5,374,899 shares authorized, no shares issued and outstanding, actual; 5,500,000 shares authorized, shares issued and outstanding, pro forma and pro forma as adjusted	0		
Additional paid-in capital	—		
Accumulated other comprehensive (loss) income	(11)		
Accumulated deficit	(807,486)		
Total stockholders' (deficit) equity	\$ (807,491)		
Total capitalization	\$ 329,036		

A \$1.00 increase (decrease) in the assumed initial public offering price of \$ per share of Class A common stock, the midpoint of the estimated price range set forth on the cover page of this prospectus, would increase (decrease) each of our pro forma as adjusted cash, cash equivalents and restricted cash, additional paid-in capital, total stockholders' (deficit) equity and total capitalization by approximately \$ million, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting estimated underwriting discounts and commissions. Similarly, each increase (decrease) of 1,000,000 shares in the number of shares of Class A common stock offered by us would increase (decrease) each of our pro forma as adjusted cash, cash equivalents and restricted cash, additional paid-in capital, total stockholders' (deficit) equity and total capitalization by approximately \$ million, assuming the assumed initial public offering price of \$ per share of Class A common stock remains the same, and after deducting estimated underwriting discounts and commissions.

The number of shares of Class A common stock and Class B common stock that will be outstanding immediately after this offering as noted above is based on shares of Class A common stock and 5,374,899 shares of Class B common stock outstanding as of (after giving effect to the Series G-3 Financing and assuming the conversion of all outstanding shares of redeemable convertible preferred stock, other than our Series B redeemable convertible preferred stock and non-voting common stock into Class A

[Table of Contents](#)

common stock, assuming an initial public offering price of \$ _____ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, which will occur upon the closing of this offering, and all outstanding shares of Series B redeemable convertible preferred stock into Class B common stock), and excludes:

- _____ shares of Class A common stock issuable on the vesting and settlement of RSUs outstanding as of December 31, 2021 under our 2015 Plan, for which the performance-based vesting condition will be satisfied in connection with this offering, but for which the service-based vesting condition will not be satisfied on or before _____, 2022;
- _____ shares of Class A common stock that may become issuable upon the vesting and settlement of PSUs outstanding as of December 31, 2021 under our 2015 Plan, for which the performance-based vesting condition may be satisfied in connection with this offering, but for which the service-based vesting condition will not be satisfied on or before _____, 2022;
- 10,000,000 shares of Class A common stock reserved for future issuance under our 2022 Plan, as well as any future increases, including annual automatic evergreen increases, in the number of shares of Class A common stock reserved for issuance under the 2022 Plan;
- 3,000,000 shares of Class A common stock reserved for future issuance under the ESPP, as well as any future increases, including annual automatic evergreen increases, in the number of shares of Class A common stock reserved for issuance under the ESPP;
- 210,000 shares of Class A common stock issuable on the exercise of a stock option outstanding as of December 31, 2021 under the 2015 Plan, with an exercise price of \$0.8542 per share;
- _____ shares of Class A common stock issuable upon conversion of an outstanding convertible promissory note, which is convertible beginning in March 2026 into a number of shares determined by dividing (i) the then outstanding principal amount of such note (which was \$238.2 million as of December 31, 2021) plus accrued and unpaid interest by (ii) the average of the last trading price of the Company's Class A common stock on each trading day during the twenty day period ending immediately prior to March 22, 2026, as more fully described in the section of this prospectus titled "Description of Capital Stock—Convertible Promissory Note";
- _____ shares of Class A common stock, assuming an initial public offering price of \$ _____ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, issuable upon the exercise of the warrant issued to AstraZeneca with an exercise price equal to the initial public offering price, as more fully described in the section of this prospectus titled "Business—Operations—Our Strategic Collaboration with AstraZeneca";
- up to \$ _____ million in shares of Class A common stock, assuming an initial public offering price of \$ _____ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, issuable to one of our stockholders pursuant to a contingent payment right, which payment may be made in cash or shares of Class A common stock, upon mutual agreement of the Company and such stockholder;
- up to \$4.0 million in shares of Class A common stock which may become issuable as contingent consideration in connection with our acquisition of Highline Consulting, LLC, as more fully described in the section of this prospectus titled "Management's Discussion and Analysis of Financial Condition and Results of Operations—Acquisition of Highline Consulting, LLC"; and
- the expected issuance on or around December 9, 2022 of 145,466 shares of Class A common stock to former stockholders of AKESOgen, Inc. in connection with our purchase of all of the outstanding shares of AKESOgen, Inc. See Note 3 to our consolidated financial statements included elsewhere in this prospectus.

DILUTION

If you invest in our Class A common stock in this offering, your interest will be diluted to the extent of the difference between the initial public offering price per share of Class A common stock and the pro forma as adjusted net tangible book value per share immediately after this offering.

Our pro forma net tangible book value as of December 31, 2021 was \$ _____ million, or \$ _____ per share. Our pro forma net tangible book value per share represents the amount of our total tangible assets less our total liabilities, divided by the number of our shares of common stock outstanding as of December 31, 2021, after giving effect to (1) the Series G-3 Financing; (2) the automatic conversion of all outstanding shares of our Series B redeemable preferred stock into 5,374,899 shares of Class B common stock, which will occur upon the closing of this offering; (3) the automatic conversion of all outstanding shares of our redeemable convertible preferred stock, other than our Series B preferred stock, into an aggregate of _____ shares of Class A common stock, assuming an initial public offering price of \$ _____ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, which will occur upon the closing of this offering; (4) the issuance of _____ Additional Class A Conversion Shares, assuming an initial public offering price of \$ _____ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, which will occur upon the conversion of all outstanding shares of our redeemable convertible preferred stock and upon the closing of this offering; (5) the automatic conversion of all of our nonvoting common stock into 4,612,450 shares of Class A common stock, which will occur upon the closing of this offering; (6) the issuance of _____ shares of Class A common stock upon settlement of RSUs for which the service-based vesting condition was satisfied on or before _____, 2022 and for which the performance-based vesting condition will be satisfied in connection with this offering, which settlement will occur upon the expiration of the lock-up period in connection with this offering; (7) stock-based compensation expense of approximately \$ _____ million related to the vesting of RSUs and PSUs for which the service-based vesting condition was satisfied on or before _____, 2022 and for which the performance-based vesting condition will be satisfied in connection with this offering, as further described in Note 9 to our consolidated financial statements included elsewhere in this prospectus; and (8) the filing and effectiveness of our amended and restated certificate of incorporation, which will occur upon the closing of this offering. See “Prospectus Summary—The Offering” for a description of the Additional Class A Conversion Shares, as the number of Additional Class A Conversion Shares that will be issued depends on the initial public offering price of our Class A common stock.

After giving effect to the sale by us of _____ shares of Class A common stock in this offering at an assumed initial public offering price of \$ _____ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of December 31, 2021 would have been \$ _____ million, or \$ _____ per share. This amount represents an immediate increase in pro forma as adjusted net tangible book value of \$ _____ per share to our existing stockholders and an immediate dilution of \$ _____ per share to new investors purchasing Class A common stock in this offering. We determine dilution by subtracting the pro forma as adjusted net tangible book value per share after this

[Table of Contents](#)

offering from the initial public offering price per share paid by investors purchasing Class A common stock in this offering. The following table illustrates this dilution on a per share basis:

Assumed initial public offering price per share	\$
Historical net tangible book value per share as of December 31, 2021	\$0.53
Decrease per share attributable to the pro forma adjustments described above	
Pro forma net tangible book value per share as of December 31, 2021	
Increase in pro forma as adjusted net tangible book value per share attributable to new investors purchasing shares in this offering	
Pro forma as adjusted net tangible book value per share after giving effect to this offering	
Dilution per share to new investors in this offering	\$

The dilution information discussed above is illustrative only and may change based on the actual initial public offering price and other terms of this offering. Each \$1.00 increase (decrease) in the assumed initial public offering price of \$ per share of Class A common stock, the midpoint of the estimated price range set forth on the cover page of this prospectus, would increase (decrease) our pro forma as adjusted net tangible book value per share by \$ per share and increase (decrease) the dilution to new investors by \$ per share, in each case assuming the number of shares of Class A common stock offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting estimated underwriting discounts and commissions. Similarly, each increase (decrease) of 1,000,000 shares in the number of shares of Class A common stock offered by us would increase (decrease) our pro forma as adjusted net tangible book value by approximately \$ per share and decrease (increase) the dilution to new investors by approximately \$ per share, in each case assuming the assumed initial public offering price of \$ per share of Class A common stock remains the same, and after deducting estimated underwriting discounts and commissions.

The following table summarizes, as of December 31, 2021, on a pro forma as adjusted basis as described above, the aggregate number of shares of our Class A common stock and Class B common stock, the total consideration and the average price per share (1) paid to us by existing stockholders, and (2) to be paid by new investors acquiring our Class A common stock in this offering at an assumed initial public offering price of \$ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, before deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

	Shares Purchased		Total Consideration		Average Price
	Number	Percent	Amount	Percent	Per Share
Existing stockholders		%		%	\$
New investors					\$
Totals		<u>100.0%</u>	<u>\$</u>	<u>100.0%</u>	

Sales by the selling stockholders upon the exercise in full of the underwriters' option to purchase additional shares to cover over-allotments, if any, would cause the number of shares held by existing stockholders to be reduced to shares, or % of the total number of shares of our capital stock outstanding following the closing of this offering, and would increase the number of shares held by new investors to shares, or % of the total number of shares of our capital stock outstanding following the closing of this offering.

Each \$1.00 increase (decrease) in the assumed initial public offering price of \$ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, would increase (decrease) the total consideration paid by new investors and total consideration paid by all stockholders by

[Table of Contents](#)

\$ _____ million, assuming that the number of shares of Class A common stock offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions. Similarly, each increase (decrease) of 1,000,000 shares in the number of shares of Class A common stock offered by us would increase (decrease) the total consideration paid by new investors and total consideration paid by all stockholders by \$ _____ million, assuming the assumed initial public offering price of \$ _____ per share of Class A common stock remains the same, and after deducting estimated underwriting discounts and commissions.

The number of shares of Class A common stock and Class B common stock that will be outstanding immediately after this offering as noted above is based on _____ shares of Class A common stock and 5,374,899 shares of Class B common stock outstanding as of _____ (after giving effect to the Series G-3 Financing and assuming the conversion of all outstanding shares of redeemable convertible preferred stock, other than our Series B redeemable convertible preferred stock and non-voting common stock into Class A common stock, assuming an initial public offering price of \$ _____ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, and all outstanding shares of Series B redeemable convertible preferred stock into Class B common stock), and excludes:

- _____ shares of Class A common stock issuable on the vesting and settlement of RSUs outstanding as of December 31, 2021 under our 2015 Plan, for which the performance-based vesting condition will be satisfied in connection with this offering, but for which the service-based vesting condition will not be satisfied on or before _____, 2022;
- _____ shares of Class A common stock that may become issuable upon the vesting and settlement of PSUs outstanding as of December 31, 2021 under our 2015 Plan, for which the performance-based vesting condition may be satisfied in connection with this offering, but for which the service-based vesting condition will not be satisfied on or before _____, 2022;
- 10,000,000 shares of Class A common stock reserved for future issuance under our 2022 Plan, as well as any future increases, including annual automatic evergreen increases, in the number of shares of Class A common stock reserved for issuance under the 2022 Plan;
- 3,000,000 shares of Class A common stock reserved for future issuance under the ESPP, as well as any future increases, including annual automatic evergreen increases, in the number of shares of Class A common stock reserved for issuance under the ESPP;
- 210,000 shares of Class A common stock issuable on the exercise of a stock option outstanding as of December 31, 2021 under the 2015 Plan, with an exercise price of \$0.8542 per share;
- _____ shares of Class A common stock issuable upon conversion of an outstanding convertible promissory note, which is convertible beginning in March 2026 into a number of shares determined by dividing (i) the then outstanding principal amount of such note (which was \$238.2 million as of December 31, 2021) plus accrued and unpaid interest by (ii) the average of the last trading price of the Company's Class A common stock on each trading day during the twenty day period ending immediately prior to March 22, 2026, as more fully described in the section of this prospectus titled "Description of Capital Stock—Convertible Promissory Note";
- _____ shares of Class A common stock, assuming an initial public offering price of \$ _____ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, issuable upon the exercise of the warrant issued to AstraZeneca with an exercise price equal to the initial public offering price, as more fully described in the section of this prospectus titled "Business—Operations—Our Strategic Collaboration with AstraZeneca";
- up to \$ _____ million in shares of Class A common stock, assuming an initial public offering price of \$ _____ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, issuable to one of our stockholders pursuant to a contingent payment right, which payment may be made in cash or shares of Class A common stock, upon mutual agreement of the Company and such stockholder;

[Table of Contents](#)

- up to \$4.0 million in shares of Class A common stock which may become issuable as contingent consideration in connection with our acquisition of Highline Consulting, LLC, as more fully described in the section of this prospectus titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Acquisition of Highline Consulting, LLC”; and
- the expected issuance on or around December 9, 2022 of 145,466 shares of Class A common stock to former stockholders of AKESOgen, Inc. in connection with our purchase of all of the outstanding shares of AKESOgen, Inc. See Note 3 to our consolidated financial statements included elsewhere in this prospectus.

To the extent that any outstanding options are exercised, outstanding RSUs vest and settle or new options or RSUs are issued under our stock-based compensation plans, or we issue additional shares of Class A common stock in the future, there will be further dilution to investors participating in this offering. If all outstanding options under the 2015 Plan and RSUs under the 2015 Plan as of December 31, 2021 were exercised or vested and settled, as applicable, then our existing stockholders, including the holders of these options and RSUs, would own % and our new investors would own % of the total number of shares of our Class A common stock and Class B common stock outstanding on the closing of this offering.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with the consolidated financial statements and related notes included elsewhere in this prospectus. Some of the information contained in this discussion and analysis, including information with respect to our planned investments in our sales and marketing, research and development, and general and administrative functions, includes forward-looking statements that involve risks and uncertainties. You should review the sections titled "Special Note Regarding Forward-Looking Statements" and "Risk Factors" for a discussion of forward-looking statements and important factors that could cause actual results to differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

Overview

Tempus is a technology company focused on healthcare that straddles two converging worlds. We strive to combine deep healthcare expertise, providing next-generation diagnostics across multiple disease areas, with leading technology capabilities, harnessing the power of data and analytics to help personalize medicine. We endeavor to unlock the true power of precision medicine by creating Intelligent Diagnostics through the practical application of artificial intelligence, or AI, in healthcare. Intelligent Diagnostics use artificial intelligence to make laboratory tests more accurate, tailored, and personal. Unlike traditional diagnostic labs, we can incorporate unique patient information, such as clinical, molecular, and imaging data, with the goal of making our tests more intelligent and our results more insightful. Unlike other technology companies, we are deeply rooted in clinical care delivery as one of the largest sequencers of cancer patients, and patients with other diseases, in the United States. Straddling both worlds is advantageous as we believe Intelligent Diagnostics represent the future of precision medicine, informing more personalized and data-driven therapy selection and development. We believe their adoption could empower physicians to deliver better care and researchers to develop more precise therapies, with the potential to save millions of lives.

In order to bring AI to healthcare at scale, we believe the foundation of how data flows throughout the ecosystem needs to be rebuilt. We established new data pipes, going to and from providers, to allow for the free exchange of data between physicians, who interpret data, and diagnostic and therapeutic companies, who provide data. Without this capability, we believe that data would continue to accumulate without impacting patient care. To accomplish this, we built both a technology platform to free healthcare data from silos and an operating system to make this data useful. We refer to the combination of those as our Platform. Our Platform connects multiple stakeholders within the larger healthcare ecosystem, often in real time, to assemble and integrate the data we collect, thereby providing an opportunity for physicians to make data-driven decisions in the clinic and for researchers to discover and develop therapeutics. We aim to help physicians find the best therapies for their patients, help pharmaceutical and biotechnology companies make the best drugs possible, and enable patients to access emerging therapies and clinical trials when appropriate.

We primarily operate in the United States and generated total revenue of \$188.0 million and \$257.9 million in the years ended December 31, 2020 and 2021, respectively. In the year ended December 31, 2020, revenue from one customer accounted for approximately 16.6% of our total revenues. Revenues from this customer did not represent a significant portion of total revenues for the year ended December 31, 2021. We also incurred net losses of \$209.9 million and \$259.2 million in the years ended December 31, 2020 and 2021, respectively.

Our Business Model

We currently offer three product lines: Genomics, Data, and Algos. Each product line is designed to enable and enhance the others, thereby creating network effects in each of the markets in which we operate. We are able to commercialize records multiple times, both at the time a test is run and thereafter. As a result, we differ from traditional diagnostic companies that need to focus on maximizing gross profit when performing a test. At its

[Table of Contents](#)

core, our business model consists of generating, ingesting and structuring vast amounts of multimodal data through our Genomics product line and commercializing de-identified copies of such data through partnerships with our pharmaceutical customers to aid their drug discovery and development efforts.

We invest in our database by generating high-quality molecular data and ingesting and structuring the longitudinal clinical records for many of the patients we sequence. While this investment in our business model comes with additional upfront costs, these investments benefit key stakeholders in the healthcare ecosystem over time:

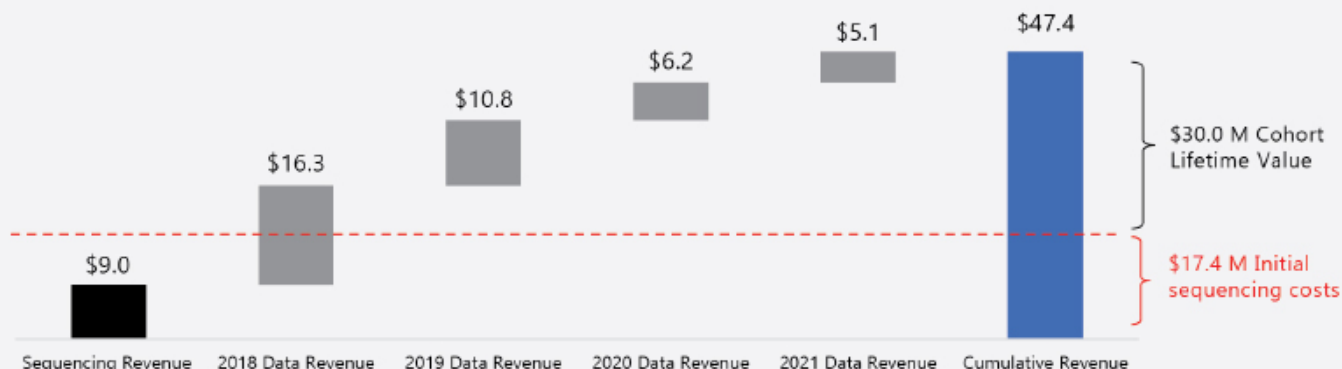
- Healthcare providers benefit from a tailored test result that provides information that can be used in routing patients to the most effective therapy.
- Pharmaceutical and biotechnology companies benefit by licensing deep molecular data and longitudinal clinical data that they can leverage in their drug development efforts.
- We benefit by leveraging the multimodal data to make our current tests more precise and/or to develop new algorithmic tests in the future.

Although we are only five years old, the network effects described above have already been demonstrated with the cohort of records that were added to our database in 2018, 2019, 2020, and 2021. To evaluate the revenue stream in our Data product line, we rely on “Cohort Lifetime Value.” We define “Cohort Lifetime Value” as the cumulative revenue attributable to a specific cohort of de-identified records, including revenue derived both from the initial sequencing (Genomics) and licensing (Data and other), less the initial sequencing costs incurred to generate the data ultimately licensed. In 2018, the first full year that we operated a laboratory, we sequenced samples from approximately 7,500 patients. From that 2018 cohort of sequenced patients, through December 31, 2021, we generated \$47.4 million of combined revenue from sequencing, data licensing of de-identified data derived from those records, and clinical trials matching, which is approximately 5.3 times the revenue we received from sequencing at the onset. The total cost to sequence the 2018 cohort was \$17.4 million, of which \$9.0 million was covered by reimbursement for the corresponding sequencing tests. We then generated \$16.3 million of data revenue from that cohort in 2018, finishing the year with a “Cohort Lifetime Value” of \$7.9 million. As more customers licensed de-identified records from the 2018 cohort in subsequent years, we generated additional revenue in 2019, 2020 and 2021 from the 2018 cohort, and as of December 31, 2021, the 2018 “Cohort Lifetime Value” for this cohort was \$30.0 million. We maintained similar trends for the 2019, 2020 and 2021 cohorts. As of December 31, 2021, the 2019 “Cohort Lifetime Value” was \$34.2 million, the 2020 “Cohort Lifetime Value” was \$19.2 million and the 2021 “Cohort Lifetime Value” was \$17.1 million.

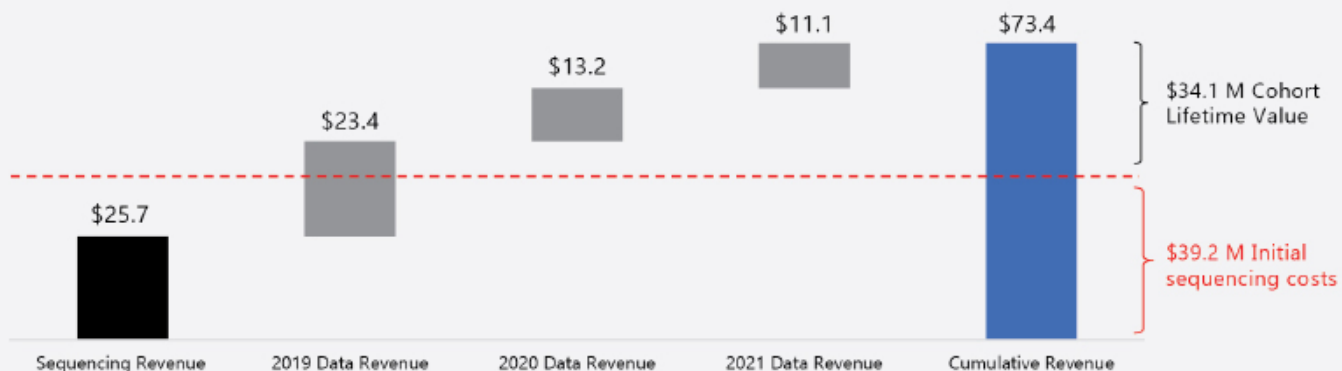
The below charts which illustrate our 2018, 2019, 2020 and 2021 “Cohort Lifetime Values,” demonstrate that we are not only able to generate revenue when we run an assay, but that we are also able to continue to commercialize the de-identified records for years following running the initial test. As a result, our focus is driving growth in our Genomics product line, which creates the opportunity to drive further growth in our other product lines.

COHORT LIFETIME VALUE (see definition above) from 2018 to 2021 Sequenced Cohorts

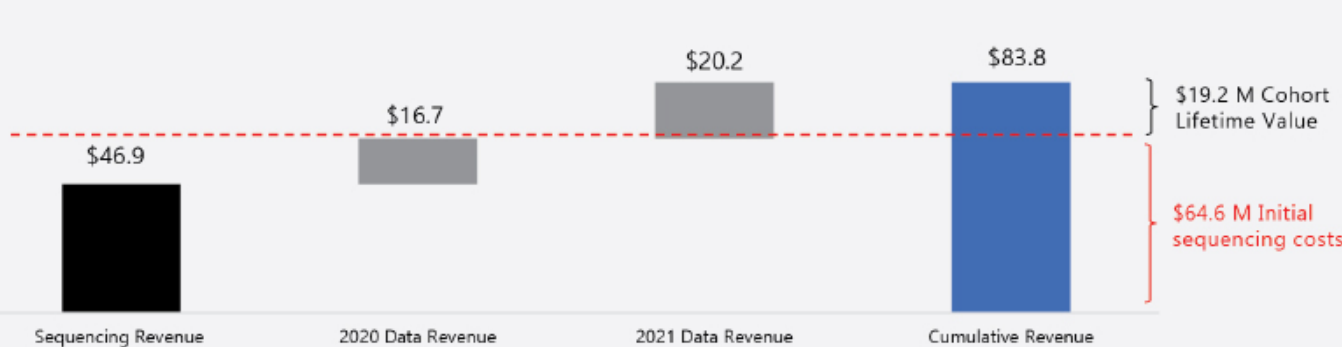
2018 COHORT LIFETIME VALUE

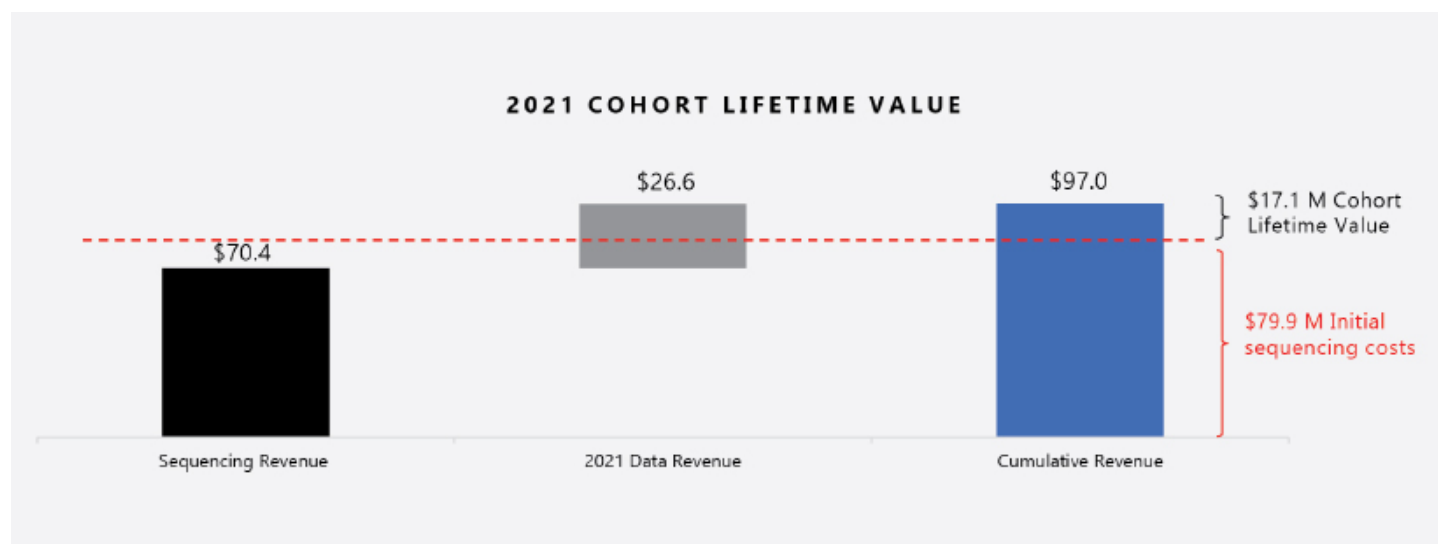


2019 COHORT LIFETIME VALUE



2020 COHORT LIFETIME VALUE





Below is a description of each product line:

Genomics

Our Genomics product line leverages our state-of-the-art laboratories to provide next generation sequencing, or NGS, diagnostics, polymerase chain reaction, or PCR, profiling, molecular genotyping and other anatomic and molecular pathology testing to healthcare providers, pharmaceutical companies, biotechnology companies, researchers, and other third parties.

When providing services to healthcare providers, we typically bill commercial payers or government-funded programs (i.e., Medicare and Medicaid) after delivering a test result. We typically operate as an out-of-network provider and the amount that we charge varies depending on the assay being run, the party being billed and other information about the patient's diagnosis. Revenue is generally recognized when we have met the performance obligation relating to an order. We have determined our sole performance obligation to be the delivery of the testing results to the ordering party.

When providing services to pharmaceutical companies, biotechnology companies, researchers, or other third parties, we will invoice the third party after delivering a test result. The amount that is invoiced and recognized as revenue is based on the sequencing of patient samples pursuant to contract terms.

Genomics revenue was \$151.9 million and \$195.0 million for the years ended December 31, 2020 and 2021, respectively. COVID-19 PCR testing accounted for \$89.5 million and \$94.7 million of revenue for the years ended December 31, 2020 and 2021, respectively.

Data and Other

The data generated in our lab or ingested into our Platform as part of the Genomics product line is structured and de-identified, prior to commercialization. This de-identified database is then commercialized to our pharmaceutical and biotechnology partners to facilitate drug discovery and development through two primary Data products, Insights and Therapies.

Through our Insights product, we license libraries of linked clinical, molecular, and imaging de-identified data and provide a suite of analytical services to analytic and cloud-and-compute tools to pharmaceutical and biotechnology companies. Licensing fee prices are consistent across customers and priced based on the characteristics of the data being provided (i.e., number of clinical fields, type of data modalities, etc.). Revenue from our Insights product is generally recognized upon the delivery of licensed records or upon the completion of performance obligations for related services.

[Table of Contents](#)

Our Therapies product is designed to leverage the broad network of physicians we work with in oncology to provide clinical trial matching services for pharmaceutical companies that are looking to reach hard-to-find and underserved patient populations. This product is built on top of our real-time data feeds and harnesses AI to accelerate the connection between patients, clinical trial providers (hospitals), and clinical trial sponsors (life sciences companies). The fees charged to sponsors are typically fixed and based on a per match and/or per enrollment basis. Revenue from our Therapies product is generally recognized upon a match between a patient and a trial in our network or upon enrollment of a patient that we matched to a trial in our network.

Data revenue was \$36.1 million and \$62.8 million for the years ended December 31, 2020 and 2021, respectively. Our Data revenue is typically back-weighted towards the second half of the year based on the budgeting cycles of our customers.

Algos

Our newest product line, Algos, is focused on developing and providing diagnostics that are algorithmic in nature. Algos are tests that can be run without chemistry or biology; they are simply 0's and 1's running on digitized data derived from a laboratory test. Algos leverage AI-driven insights to produce clinically validated and actionable information for physicians.

We launched our Algos product line in the fourth quarter of 2020 and currently offer three algorithmic tests in oncology: our Tumor Origin, TO, test, our Homologous Recombination Deficiency, HRD, test, and our Dihydropyrimidine Dehydrogenase Deficiency, DPYD, test. Similar to our Genomics product line, we typically bill commercial payers or government-funded programs (i.e., Medicare and Medicaid) after delivering a test result. The amount that we charge varies depending on the algorithms being run, the party being billed and other information about the patient's diagnosis. Revenue is generally recognized based on estimated cash receipts determined by historical and current payment trends. We currently report our Algos revenue within our Data and Other product line.

While our Algos product line does not currently generate significant revenue, we believe it represents a significant opportunity for us and we will incur significant expenses over the next several years as we work to identify and develop algorithms that we can deploy into a clinical setting.

Strategic Collaboration with AstraZeneca

In November 2021, we entered into a Master Services Agreement, or the MSA, with, and issued a warrant to, AstraZeneca AB, or AstraZeneca. Under the MSA, we agreed, on a non-exclusive basis, to provide AstraZeneca with certain of our products and services, including licensed data, sequencing, clinical trial matching, organoid modeling services, algorithm development, and others. In exchange for certain discounted prices, AstraZeneca has committed to spend a minimum of \$200 million on such products and services during the term of the MSA. The term of the MSA will continue through December 31, 2026, unless terminated sooner. The minimum commitment may increase to \$300 million upon the occurrence of any of the following events: (i) at AstraZeneca's election on or before December 31, 2024, (ii) the date that AstraZeneca exercises the warrant issued pursuant to the terms thereof (as described below), or (iii) in the event of our initial public offering, if the average closing price of our common stock exceeds two times the offering price for any 30-day trading period following the one-year anniversary of such initial public offering.

Under the warrant, AstraZeneca has the right to purchase \$100 million in shares of our Class A common stock at an exercise price equal to the price per share at which our common stock is valued in connection with the consummation of this initial public offering. The warrant may be exercised any time following the date that is 180 days following the pricing of our initial public offering. AstraZeneca will be entitled to substantially the same registration rights with respect to the shares under the warrant as those granted to holders of registrable securities pursuant to our Ninth Amended and Restated Investors' Rights Agreement, dated November 19, 2020.

[Table of Contents](#)

See “Description of Capital Stock — Warrant.” The warrant will be automatically cancelled and terminated for no consideration, if not previously exercised, in the event AstraZeneca declines to extend its financial commitment before December 31, 2024. If AstraZeneca exercises the warrant, AstraZeneca will be required to increase its minimum commitment under the MSA to \$300 million. See “Business—Operations—Our Strategic Collaboration with AstraZeneca.”

Acquisition of Highline Consulting, LLC

On January 4, 2022, we entered into a Unit Purchase Agreement with Highline Consulting, LLC, a California limited liability company, or Highline, Highline Consulting Parent, LLC, and the unitholders of Highline, or collectively, the Sellers, pursuant to which we acquired all of the issued and outstanding equity interests in Highline, which transaction we refer to as the “Highline Acquisition.”

We acquired Highline for a purchase price of \$35.5 million, subject to customary cash and net working capital adjustments. In addition, following the closing, the Sellers will be entitled to receive contingent consideration from us in an aggregate amount of up to \$5.0 million, payable in a combination of cash and shares of our Class A common stock, contingent upon certain individual Sellers remaining employed by us as of the first and second anniversary of the closing. In addition, we established a retention bonus pool of restricted stock units with an aggregate value of \$4.0 million to be allocated among Highline employees retained by us. The retention bonus pool will be recorded as compensation expense over the requisite service period.

The preliminary valuation of the acquired assets and liabilities is not yet complete, and as such, we have not yet completed our allocation of the purchase price for the Highline Acquisition.

Factors Affecting Our Performance

We believe there are several important factors that have impacted and that we expect will impact our operating performance and results of operations. While each of these areas presents significant opportunities for us, they also pose significant risks and challenges that we must address. See “Risk Factors” for more information.

Research and Development, and New Products

We expect to maintain high levels of investment in product innovation over the coming years as we continue to develop new laboratory assays, develop algorithms, and expand our Platform into new disease areas. These investments will include laboratory costs incurred in validating new or improving current assays, licensing of data sets to accelerate our efforts in new diseases, and development and validation costs for new Algos products. We invested \$45.4 million and \$61.2 million during the years ended December 31, 2020 and 2021, respectively, in research and development. Our ability to develop new products, obtain regulatory approvals when required, launch them into the market, and drive adoption of these products by our customers will continue to play a key role in our results.

Customer Acquisition and Expansion

To grow our business requires both identifying new customers and expanding our partnerships with existing ones across each of our product lines. For Genomics, this entails our field salesforce developing relationships with individual physicians and hospital systems, demonstrating the power our Platform has in enabling them to provide personalized care to their patients. For Data, this entails our pharmaceutical business development teams demonstrating the power our Platform and database have in enabling drug discovery, development and clinical trial matching for our pharmaceutical partners. For Algos, this entails demonstrating the utility of these algorithms in a clinical setting. Since our inception, our offerings have been used by more than 5,000 oncologists and 40 pharmaceutical and biotechnology customers licensing data through our Insights product, including 16 of the 20 largest public pharmaceutical companies based on 2020 revenue. Our financial performance relies heavily on our ability to add customers to our Platform and expand the relationships with our current customers through adoption of our new products.

Investments in Technology

Technology is at the core of everything we do. From receiving orders and ingesting data through our various provider integrations to delivering test results and access to our analytical platform, our Platform plays a key role in driving our business. We will continue to make significant investments in our Platform to continually improve our user experience and allow us to generate, ingest and structure data more efficiently as we expand our offerings. We invested \$45.9 million and \$67.2 million during the years ended December 31, 2020 and 2021, respectively, in technology. We expect to maintain high levels of investment in our technology over the coming years as we continue to develop new features to support our current and future business needs. Our ability to execute on the development of such technology will continue to play a key factor in our results.

Payer Coverage and Reimbursement

Our financial performance relies heavily on our ability to secure reimbursement from payers and government health benefits programs. A substantial majority of the genomic testing we perform is clinical in nature. We typically receive reimbursement for these tests from commercial payers and from government health benefits programs, such as Medicare and Medicaid. The amount of payment we receive varies widely and depends on a variety of factors, including the payer, the assay run, and other characteristics about the patient. We received payment on approximately 45% of our clinical oncology NGS tests performed from January 1, 2020 through June 30, 2021. For the years ended December 31, 2020 and 2021, our average reimbursement for NGS tests billed to insurance in oncology was approximately \$1,100. We will continue to invest significantly in various efforts aimed at improving our average reimbursement, including performing clinical studies to generate evidence of clinical utility, seeking regulatory approval for our tests, and opening additional lab locations. Any changes to medical policies impacting how our tests are reimbursed could have a significant impact on our results.

COVID-19 Global Pandemic

The global outbreak of the novel coronavirus in December 2019, or COVID-19, negatively affected our business in 2020 as testing was delayed due to patients delaying visits and our pharmaceutical partners delaying some of their drug development efforts due to office interruptions or paused clinical trial recruitment. In July 2020, we launched our iD test (COVID-19 PCR test) and received the FDA's emergency use authorization for use in the detection of the COVID-19 and thereafter obtained additional emergency use authorizations for other similar tests, ran some COVID-19 testing as LDTs, and also licensed and used the Saliva Direct assay to perform other COVID-19 testing. This testing generated \$89.5 million and \$94.7 million of revenue for the years ended December 31, 2020 and 2021, respectively. Given the unpredictability surrounding the COVID-19 testing needs going forward, we are unable to predict testing volumes for our test on a go-forward basis, although there is a reasonable likelihood that levels will decline. We expect revenue from COVID-19 testing to decrease materially as a result of a lower prevalence of COVID-19 from successful containment efforts and the vaccination of a substantial majority of Americans, reduced testing needs of many of our clients, including as a result of the expiration and renegotiation of our COVID-19 testing agreement with CVS Pharmacy, Inc. in July 2021 and November 2021, respectively, and the entrance of other testing providers into the market. In addition, our agreement with CVS, which accounted for 24.0% of our revenue for the year ended December 31, 2020, expired in July 2021. Effective October 2021, we entered into a substantially similar agreement with CVS under which CVS has agreed to purchase certain COVID-19 testing products and services from us without a minimum purchase commitment. Sales of COVID-19 tests and related services to CVS accounted for 27.5% of our revenue for the year ended December 31, 2021.

Components of Results of Operations

Revenue

We currently primarily derive our revenue from two product lines: (1) Genomics and (2) Data and Other.

[Table of Contents](#)

Genomics

Genomics primarily includes revenue from diagnostics, PCR profiling, and other anatomic and molecular pathology testing to healthcare providers, pharmaceutical companies, biotechnology companies, researchers, and other third parties.

Data and Other

Data and Other primarily includes revenue from de-identified data generated through our Genomics product line to our pharmaceutical and biotechnology partners for use in their drug development efforts. These transactions consist of data licensing agreements, AI-enabled clinical trial matching, and analytical services. Our Data revenue is typically back-weighted towards the second half of the year based on the budgeting cycles of our customers. We currently report our Algos revenue within this line item as it is immaterial.

Cost and Operating Expenses

We incur costs to generate revenue for each of our two primary product lines. Cost of revenues for our Genomics product line is a higher percentage of the Genomics revenue than cost of revenues for Data and Other is as a percentage of Data and Other revenue. As revenue shifts between these product lines, total cost of revenue as a percentage of revenue will be impacted. Our total cost of revenues will also increase in the quarter in which this offering occurs due to stock-based compensation expenses of approximately million related to RSUs and PSUs for which the service-based vesting condition was satisfied and for which the performance-based vesting condition will be satisfied in connection with this offering.

Cost of Revenues, Genomics

Cost of revenues for Genomics primarily includes personnel lab expenses, including salaries, bonuses, employee benefits and stock-based compensation expenses (which we refer to as “personnel costs”), and amortization of intangible assets, cost of laboratory supplies and consumables, third-party administration fees associated with COVID-19 testing, depreciation of laboratory equipment and shipping costs. Costs associated with performing our tests are recorded as the tests are processed at the time of report delivery. We expect these costs will increase in absolute dollars as our Genomics revenue continues to grow.

Cost of Revenues, Data and Other

Cost of revenues for Data and Other primarily includes data acquisition and royalty fees, and personnel costs related to delivery of our data services and platform, and certain allocated overhead expenses. Costs associated with performing data product services are recorded as incurred. We expect these costs will increase in absolute dollars as our Data and Other revenues continue to grow. We currently report our Algos cost of revenue within this line item as it is immaterial.

Research and Development

Research and development expense primarily includes costs incurred to develop new assays and products, including validation costs, research and development and allocated lab personnel costs, salaries and benefits of the company’s scientific and laboratory research and development teams, amortization of intangible assets, inventory costs, overhead costs, contract services and other related costs. Research and development costs are expensed as incurred. We plan to continue to invest in new assay development and expansion into new disease areas. As a result, we expect that research and development expenses will increase in absolute dollars for the foreseeable future as we continue to invest to support these activities. Our research and development expense will increase in the quarter in which this offering occurs due to stock-based compensation expenses of approximately million related to RSUs and PSUs for which the service-based vesting condition was satisfied and for which the performance-based vesting condition will be satisfied in connection with this offering.

[Table of Contents](#)

Technology research and development

Technology research and development expense primarily includes personnel costs incurred related to the research and development of our technology platform and applications and the research and development of new products that we hope to bring to the market. Technology research and development costs are expensed as incurred. We plan to continue to invest in technology personnel to support our Platform and new algorithm development. We expect that technology research and development expenses will increase in absolute dollars for the foreseeable future as we continue to invest to support these activities. Our technology research and development expense will increase in the quarter in which this offering occurs due to stock-based compensation expenses of approximately million related to RSUs and PSUs for which the service-based vesting condition was satisfied and for which the performance-based vesting condition will be satisfied in connection with this offering.

Selling, General and Administrative

Our selling, general and administrative expense primarily includes personnel costs for our sales, executive, accounting and finance, legal and human resources functions, commissions, and other general corporate expenses, including software and tools, professional services, real estate costs, and travel costs.

We expect that our selling, general and administrative expenses will continue to increase in absolute dollars after this offering, primarily due to increased headcount and costs associated with operating as a public company, including expenses related to legal, accounting, regulatory, maintaining compliance with exchange listing and requirements of the SEC, director and officer insurance premiums and investor relations. These expenses, though expected to increase in absolute dollars, are expected to decrease modestly as a percentage of revenue in the long term, though they may fluctuate as a percentage from period to period due to the timing and extent of these expenses. Our selling, general and administrative expense will increase in the quarter in which this offering occurs due to stock-based compensation expenses of approximately million related to RSUs and PSUs for which the service-based vesting condition was satisfied and for which the performance-based vesting condition will be satisfied in connection with this offering.

Interest Income

Interest income consists of interest earned on our cash and cash equivalents.

Interest Expense

Interest expense consists primarily of interest from our convertible debt, and capital leases. In 2020, we recorded a loss on extinguishment of debt relating to the conversion of convertible debt into Series G-2 preferred shares. Interest expense related to our convertible debt will continue, but should decrease over time as the principal amount decreases.

Other Income (Expense), Net

Other income (expense), net consists of foreign currency exchange gains and losses. Foreign currency exchange gains and losses relate to transactions and asset and liability balances denominated in currencies other than the U.S. dollar. We expect our foreign currency gains and losses to continue to fluctuate in the future due to changes in foreign currency exchange rates.

Provision for (Benefit from) Income Tax

Provision for (benefit from) income taxes consists of U.S. federal and state income taxes and income taxes in certain foreign jurisdictions in which we conduct business, as adjusted for non-deductible expenses, and changes in the valuation of our deferred tax assets and liabilities. We maintain a full valuation allowance on our U.S. federal and state deferred tax assets as we have concluded that it is more likely than not that the deferred tax assets will not be realized.

[Table of Contents](#)**Earnings (Losses) from Equity Method Investments**

Earnings (losses) from equity method investments consist of earnings from our joint venture entered during the third quarter of 2020.

Results of Operations

The following table sets forth the significant components of our results of operations for the periods presented.

	Year Ended December 31,	
	2020	2021
	(in thousands)	
Revenue:		
Genomics	\$ 151,911	\$ 195,012
Data and Other	36,093	62,841
Total revenue	<u>\$ 188,004</u>	<u>\$ 257,853</u>
Cost and operating expenses:		
Cost of revenues, genomics	152,198	162,276
Cost of revenues, data and other	7,092	11,933
Technology research and development	45,861	67,190
Research and development	45,415	61,161
Selling, general and administrative	130,892	199,004
Total cost and operating expenses	<u>381,458</u>	<u>501,564</u>
Loss from operations	<u>\$ (193,454)</u>	<u>\$ (243,711)</u>
Interest income	1,495	623
Interest expense	(18,929)	(15,184)
Other expenses, net	(466)	(316)
Loss before provision for income taxes	<u>\$ (211,354)</u>	<u>\$ (258,588)</u>
Provision for (benefit from) income taxes	—	—
Earnings (losses) from equity method investments	1,500	(604)
Net loss	<u>\$ (209,854)</u>	<u>\$ (259,192)</u>

Comparison of the Years Ended December 31, 2020 and 2021**Revenue**

Total revenue was \$188.0 million for the year ended December 31, 2020 compared to \$257.9 million for the year ended December 31, 2021, an increase of \$69.9 million, or 37.2%. Adjusted for the impact of COVID-19 PCR testing, revenue increased \$64.6 million or 65.6%, from \$98.5 million for the year ended December 31, 2020, compared to \$163.1 million for the year ended December 31, 2021. The increase in revenue is due to increased volume of clinical oncology tests performed in Genomics and increased data deliveries in our Data product line.

Genomics

Genomics, adjusted for the impact of COVID-19 PCR testing, increased \$37.9 million, or 60.7%, from \$62.4 million for the year ended December 31, 2020, compared to \$100.3 million for the year ended December 31, 2021. This increase was primarily driven by increases in the number of next generation sequencing tests delivered in oncology, which increased from 44,667 tests for the year ended December 31, 2020 to 69,223 tests in the year ended December 31, 2021.

Data and Other

Data and Other increased \$26.7 million, or 74.1%, from \$36.1 million for the year ended December 31, 2020, compared to \$62.8 million for the year ended December 31, 2021. Generally, increases in revenue are a result of increases in adoption of our products and services within our existing customer base or adoption by new customers.

Cost and Operating Expenses

Cost of Revenues

Cost of revenues was \$159.3 million for the year ended December 31, 2020 compared to \$174.2 million for the year ended December 31, 2021, an increase of \$14.9 million, or 9.4%. Adjusted for the impact of COVID-19 PCR testing, cost of revenue increased \$25.7 million, or 31.2%, from \$82.8 million for the year ended December 31, 2020, compared to \$108.5 million for the year ended December 31, 2021. This increase was primarily due to an increase of \$15.6 million of material and service costs and \$3.1 million in personnel costs.

Cost of Revenues, Genomics

Cost of revenues, Genomics was \$75.7 million for the year ended December 31, 2020 compared to \$96.6 million for the year ended December 31, 2021, an increase of \$20.9 million, or 27.6%. This increase was primarily due to an increase of \$15.6 million in material and service costs and a \$1.8 million increase in inventory write-downs.

Cost of Revenues, Data and Other

Cost of revenues, Data and Other was \$7.1 million for the year ended December 31, 2020 compared to \$11.9 million for the year ended December 31, 2021, an increase of \$4.8 million, or 68.2%. This increase was primarily due to an increase in personnel costs.

Research and development

Research and development expenses were \$45.4 million for the year ended December 31, 2020 compared to \$61.2 million for the year ended December 31, 2021, an increase of \$15.7 million, or 34.6%. This increase was primarily due to a \$14.0 million increase in personnel-related costs for employees in our research and development group, as we increased our spend and headcount to support continued investment in our technology.

Technology research and development

Technology research and development expenses were \$45.9 million for the year ended December 31, 2020 compared to \$67.2 million for the year ended December 31, 2021, an increase of \$21.3 million, or 46.5%. This increase was primarily due to an increase in personnel-related costs associated with the investment in our cloud infrastructure and new lines of business.

Selling, General and Administrative

Selling, general and administrative expenses were \$130.9 million for the year ended December 31, 2020 compared to \$199.0 million for the year ended December 31, 2021, an increase of \$68.1 million, or 52.0%. This increase was primarily due to an increase of \$27.1 million in personnel-related costs, inclusive of \$7.0 million of software licenses, as a result of an increase in our headcount, an increase of \$29.6 million related to cloud storage costs, an increase of \$3.1 million in rent expense as a result of increased office space to accommodate our increased headcount, and an increase of \$1.8 million professional service expenses related to accounting and marketing.

[Table of Contents](#)

Interest Income

Interest income was \$1.5 million for the year ended December 31, 2020 compared to \$0.6 million for the year ended December 31, 2021, a decrease of \$0.9 million, or 58.3%. This decrease was primarily due to a significant decrease in interest rate as the U.S. Federal Reserve lowered the risk-free interest rate to nearly zero.

Interest Expense

Interest expense was \$18.9 million for the year ended December 31, 2020 compared to \$15.2 million for the year ended December 31, 2021, a decrease of \$3.7 million, or 19.8%. This decrease was primarily due to \$8.9 million of loss on extinguishment of \$80 million of our promissory note which was converted in November 2020, offset by a \$5.1 million increase in interest expense.

Other Expense, Net

For the year ended December 31, 2020, other expense was \$0.5 million compared to other expense of \$0.3 million for the year ended December 31, 2021, a decrease of \$0.2 million, or 32.2%. The decrease was driven by a \$0.2 million decrease in bad debt expense.

Earnings (losses) from Equity Method Investments

We entered into a joint venture in September 2020, which had earnings of \$1.5 million for the year ended December 31, 2020 compared to a loss of \$0.6 million for the year ended December 31, 2021, resulting in a decrease of \$2.1 million, or 140.3%. Losses from equity method investments consist of earnings from our joint venture into which we entered during the third quarter of 2020.

Quarterly Results of Operations

The following table sets forth our unaudited quarterly consolidated statement of operations data for each of the eight quarters in the period ended December 31, 2021. The information for each of these quarters has been prepared in accordance with GAAP in the United States of America and on the same basis as our audited consolidated financial statements included elsewhere in this prospectus and, in the opinion of management, reflects all adjustments, which include only normal recurring adjustments, necessary for the fair presentation of our results of operations. This data should be read in conjunction with our audited financial statements and related notes included elsewhere in this prospectus. These quarterly operating results are not necessarily indicative of our operating results for the full year or any future period.

	Three Months Ended								
	March 31, 2020	June 30, 2020	September 30, 2020	December 31, 2020	March 31, 2021	June 30, 2021	September 30, 2021	December 31, 2021	
	(in thousands)								
Net revenue									
Genomics(1)	\$ 13,645	\$ 12,500	\$ 47,079	\$ 78,687	\$ 59,830	\$ 53,070	\$ 41,614	\$ 40,498	
Data and Other	4,597	5,677	3,654	22,165	10,280	8,915	10,834	32,812	
Total net revenue	\$ 18,242	\$ 18,177	\$ 50,733	\$ 100,852	\$ 70,110	\$ 61,985	\$ 52,448	\$ 73,310	
Cost and operating expenses									
Cost of revenues, genomics(1)	16,832	17,226	46,358	71,782	58,152	39,351	31,780	32,993	
Cost of revenues, data products	1,411	1,478	2,139	2,064	2,249	2,668	3,031	3,985	
Loss from operations	\$ (47,674)	\$ (51,432)	\$ (52,300)	\$ (42,048)	\$ (61,434)	\$ (62,874)	\$ (64,607)	\$ (54,796)	
Net Loss	\$ (47,102)	\$ (51,100)	\$ (57,510)	\$ (54,142)	\$ (65,020)	\$ (66,849)	\$ (68,342)	\$ (58,981)	
(l) Revenue and cost of revenue from COVID-19 testing									
Genomics		—	—	29,489	60,015	38,887	32,680	13,373	9,783
Cost of revenue, genomics		—	—	26,367	50,120	36,095	17,740	6,498	5,329

Quarterly Revenue Trends

Beginning in the second quarter of 2020, revenue from COVID-19 testing impacted the Genomics revenue line as illustrated in the table above.

Our Data and Other revenue experienced fluctuations due to seasonality driven by the procurement and budgeting cycles of many of our customers. As a result, the majority of our data deliveries occurred during the fourth quarter of 2020 and 2021, resulting in approximately 60% and 50% of Data and Other revenue for the years ended December 31, 2020 and 2021, respectively, recognized in the fourth quarter of the applicable year.

Quarterly Costs and Operating Expense Trends

Beginning in the second quarter of 2020, costs associated with COVID-19 testing impacted the Cost of revenues, genomics line as illustrated in the table above.

Our costs and operating expenses primarily increased during the periods presented due to the addition of personnel in connection with the growth of our business. The fluctuations in Cost of revenues, genomics as a result of COVID-19 testing is due to testing related expenses associated with our customer mix.

Liquidity and Capital Resources

We have incurred significant losses and negative cash flows from operations since our inception, and as of December 31, 2021, we had an accumulated deficit of \$807.5 million.

We expect to incur additional operating losses in the near future and our operating expenses will increase as we continue to invest in clinical trials and develop new offerings, expand our sales organization, and increase our marketing efforts to drive market adoption of our tests. As demand for our tests continues to increase from physicians and biopharmaceutical companies, we anticipate that our capital expenditure requirements could also increase if we require additional laboratory capacity.

We have funded our operations to date principally from the sale of stock, convertible debt and sales of our products. As of December 31, 2021, we had cash, cash equivalents and restricted cash of \$278.5 million. On January 4, 2022, we funded through cash on hand, the \$35.5 million acquisition of Highline Consulting, LLC (which purchase price is subject to customary cash and net working capital adjustments). From April 18 to April 22, 2022, we sold an aggregate of 1,483,242 shares of our Series G-3 convertible preferred stock at a price per share of \$57.3069 for an aggregate purchase price of approximately \$85.0 million in private placements to accredited investors.

Based on our current business plan, we believe our current cash and cash equivalents and anticipated cash flows from operations will be sufficient to meet our anticipated cash requirements for more than twelve months from the date of this prospectus. We will raise additional capital to expand our business, to pursue strategic investments, to take advantage of financing opportunities or for other reasons. As we grow our revenue, our accounts receivable and inventory balances will increase. Any increase in accounts receivable and inventory may not be completely offset by increases in accounts payable and accrued expenses, which could result in greater working capital requirements.

If our available cash and cash equivalents and anticipated cash flows from operations are insufficient to satisfy our liquidity requirements including because of lower demand for our products as a result of lower than currently expected rates of reimbursement from our customers or other risks described elsewhere in this prospectus, we may seek to sell additional common or preferred equity or convertible debt securities, enter into a credit facility or another form of third-party funding or seek other debt financing. The sale of equity and convertible debt securities, or exercise of warrants may result in dilution to our stockholders and, in the case of preferred equity securities or convertible debt, those securities could provide for rights, preferences or privileges senior to those of our common stock. The terms of debt securities issued or borrowings pursuant to a credit agreement could impose significant restrictions on our operations. If we raise funds through collaborations and licensing arrangements, we might be

[Table of Contents](#)

required to relinquish significant rights to our platform technologies or products or grant licenses on terms that are not favorable to us. Additional capital may not be available to us on reasonable terms, or at all. The failure to obtain any required future financing may require us to reduce or eliminate certain existing operations.

Convertible Promissory Note

On June 22, 2020, in connection with our entry into an agreement for use of Google LLC's, or Google's, Google Cloud Platform, we issued Google a convertible promissory note, or the Note, in the original principal amount of \$330.0 million. On November 19, 2020, in connection with our Series G-2 convertible preferred stock financing, we issued Google \$80 million of our Series G-2 preferred stock, at a 10% discount to the purchase price per share in such financing, in partial satisfaction of the outstanding principal amount under the Note, and we amended and restated the terms of the Note.

The amended and restated Note, or the Amended Note, has a principal amount of \$250.0 million, and bears interest at the rate set forth therein. The principal amount is automatically reduced each year based on a formula taking into account the aggregate value of the Google Cloud Platform services used by us. We account for the principal reductions as an offset to our cloud and compute spend within selling, general and administrative expense in our Consolidated Statements of Operations and Comprehensive Loss. The outstanding principal and accrued interest under the Amended Note, or the Outstanding Amount, is due and payable on the earlier of (1) March 22, 2026, which is the maturity date of the Amended Note, (2) upon the occurrence and during the continuance of an event of default, and (3) upon the occurrence of an acceleration event, which includes any termination by us of our Google Cloud Platform agreement. We generally may not prepay the Outstanding Amount, except that we may, at our option, prepay the Outstanding Amount in an amount such that the principal amount remaining outstanding after such repayment is \$150.0 million.

If the Amended Note is outstanding at the maturity date, Google may, at its option, convert the then outstanding principal amount and interest accrued under the Amended Note into a number of shares of our Class A common stock equal to the quotient obtained by dividing (1) the Outstanding Amount on the maturity date, by (2) the average of the last trading price on each trading day during the twenty day period ending immediately prior to the maturity date.

Cash Flows

The following table summarizes our cash flows for the periods presented:

	<u>Year Ended December 31,</u>	
	<u>2020</u>	<u>2021</u>
	<u>(in thousands)</u>	
Net cash used in operating activities	\$ (206,562)	\$ (211,984)
Net cash used in investing activities	(13,416)	(21,724)
Net cash provided by (used in) financing activities	506,107	(2,039)

Operating Activities

Cash used in operating activities during the year ended December 31, 2020 was \$206.6 million, which resulted from a net loss of \$209.9 million and net change in our operating assets and liabilities of \$35.5 million, offset by non-cash charges of \$38.7 million. Non-cash charges primarily consisted of \$23.1 million of depreciation and amortization and a \$8.9 million relating to loss on extinguishment of convertible promissory notes. The net change in our operating assets and liabilities was primarily the result of a \$55.8 million increase in accounts receivable primarily as a result of Genomics revenue, specifically COVID-19 sample testing, \$29.3 million increase in inventory as a result of supplies for COVID kit tests.

Cash used in operating activities during the year ended December 31, 2021 was \$212.0 million, which resulted from a net loss of \$259.2 million and net change in our operating assets and liabilities of \$14.6 million, offset by non-cash charges of \$32.7 million. Non-cash charges primarily consisted of \$23.9 million of depreciation and amortization and a \$5.2 million change in fair value of contingent consideration. The net change

[Table of Contents](#)

in our operating assets and liabilities was primarily the result of a \$14.6 million decrease in inventory as a result of reducing supplies for COVID-19 kit tests and the expiration of COVID-19 testing kits and oncology lab supplies. The remaining net change in our operating assets and liabilities is a result of a \$9.5 million increase in deferred revenue primarily related to the volume and timing of our data contracts.

Investing Activities

Cash used in investing activities during the year ended December 31, 2020 was \$13.4 million, which resulted entirely from purchases of property and equipment.

Cash used in investing activities during the year ended December 31, 2021 was \$21.7 million, which resulted from investments in non-marketable security of \$6.0 million, the release of escrow related to the AKESOgen purchase of \$4.0 million, and purchases of property and equipment of \$11.8 million.

Financing Activities

Cash provided by financing activities during the year ended December 31, 2020 was \$506.1 million which was primarily due to net proceeds of \$189.9 million from the issuance of convertible preferred stock and net proceeds of \$330.0 million from the issuance of a convertible promissory note.

Cash used in financing activities during the year ended December 31, 2021 was \$2.0 million, which was primarily due to net proceeds of \$8.9 million from the issuance of convertible preferred stock, offset by dividends of \$5.6 million, payment of contingent consideration of \$3.4 million, and payment of deferred offering costs of \$1.1 million.

Contractual Obligations and Commitments

Our contractual commitments will have an impact on our future liquidity. These commitments include future payments on non-cancellable leases, purchase obligations related to data licenses and cloud computing services, and future payments on our convertible promissory note. Where applicable, we calculate our obligation based on termination fees that can be paid to exit the contract. The data license agreements include committed payments for access to certain data and additional payments contingent on the commercialization of such data.

The following table summarizes our contractually committed future obligations as of December 31, 2021 (in thousands):

	<u>Total</u>	<u>Less than 1 year</u>	<u>1-3 years</u>	<u>3-5 years</u>	<u>More than 5 years</u>
Operating lease obligations	60,313	8,444	17,253	14,433	20,183
Purchase obligations	136,812	31,063	60,710	41,210	3,829
Convertible Promissory Note*	261,326	—	—	261,326	—
Total	458,451	39,507	77,963	316,969	24,012

* Includes \$23,090 of interest payable.

Off-Balance Sheet Arrangements

We did not have during the period presented, and we do not currently have, any off-balance sheet financing arrangements or any relationships with unconsolidated entities or financial partnerships, including entities sometimes referred to as structured finance or special purpose entities, that were established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

Critical Accounting Policies and Estimates

We have prepared our consolidated financial statements in accordance with generally accepted accounting principles in the United States, or GAAP. Our preparation of these consolidated financial statements requires us

[Table of Contents](#)

to make estimates, assumptions and judgments that affect the reported amounts of assets, liabilities, expenses and related disclosures at the date of the consolidated financial statements, as well as revenue and expenses recorded during the reporting periods. We evaluate our estimates and judgments on an ongoing basis. We base our estimates on historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results could therefore differ materially from these estimates under different assumptions or conditions.

While our significant accounting policies are described in more detail in Note 2 to our audited consolidated financial statements included elsewhere in this prospectus, we believe the following accounting policies to be critical to the judgments and estimates used in the preparation of our financial statements.

Revenue Recognition

We derive Genomics revenue from selling lab services to physicians, academic research institutions, and other parties. We also derive Data and Other revenue from the commercialization of data generated in the lab through the licensing of de-identified datasets to third parties and from matching patients to clinical trials enrolled in its clinical trial network. The majority of our revenue is generated in North America.

We account for our revenue in accordance with ASC Topic 606, *Revenue From Contracts With Customers*. We commence revenue recognition when control of these products is transferred to customers in an amount that reflects the consideration we expect to be entitled to in exchange for such products. This principle is achieved by applying the following five-step approach: (i) we account for a contract when it has approval and commitment from both parties, (ii) the rights of the parties are identified, (iii) payment terms are identified, (iv) the contract has commercial substance and (v) collectability of consideration is probable. Revenue and any contract assets are not recognized until such time that the required conditions are met.

Genomics

For direct bill orders billed to research institutions, pharmaceutical companies, or other third parties, we determine the transaction prices based on established contractual rates with the customer, net of any applicable discounts. Payment is typically due between 30 and 60 days following the date of invoice.

For clinical orders billed to Medicare, Medicaid, and commercial insurance, we determine the transaction price by reducing the standard charge by the estimated effects of any variable consideration, such as contractual allowance and implicit price concessions. We estimate contractual allowances and implicit price concessions based on historical collections in relation to established rates, as well as known current or anticipated reimbursement trends not reflected in the historical data. We monitor the estimated amount to be collected at each reporting period based on actual cash collections in order to assess whether a revision to the estimate is required. Payment is typically due after the claim has been processed by the payor, generally 30-120 days from date of service. While management believes that the estimates are accurate, actual results could differ, and the potential impact on the financial statements could be significant.

Stock-Based Compensation

We recognize compensation expense for equity awards based on the grant-date fair value on a straight-line basis over the remaining requisite service period for the award. For those awards with a market condition, we utilize a Monte Carlo simulation model to estimate the fair value of the restricted stock units.

We issue restricted stock units to certain of our employees. The general terms of the restricted stock units require both a service and performance condition to be satisfied prior to vesting. The service condition is satisfied upon the participant's completion of a required period of continuous service from the vesting start date. The performance condition will be satisfied upon a liquidity event, which would result in recognition of stock-based compensation expense upon the consummation of this offering. For certain other units, a secondary performance

condition exists to be vested, which will be satisfied upon achievement of a specific market condition, which could result in recognition of stock-based compensation expense upon the consummation of this offering.

Common Stock Valuations

Prior to this offering our common stock was not publicly traded. As such, we were required to estimate the fair value of our common stock. Our board of directors considered numerous objective and subjective factors to determine the fair value of our common stock as awards were approved, including utilizing third-party valuations to assist with the determination of the estimated fair-market value and common stock price. Given the absence of a public trading market for our common stock, the valuations of common stock were determined in accordance with the guidance provided by the American Institute of Certified Public Accountants Practice Aid, Valuation of Privately-Held-Company Equity Securities Issued as Compensation, and our board of directors exercised reasonable judgment and considered numerous and subjective factors to determine the best estimate of fair value of our common stock, including the following factors:

- contemporaneous valuations performed by independent third-party specialists;
- the prices, rights, preferences and privileges of our redeemable convertible preferred stock relative to those of our common stock;
- the prices of common or preferred stock sold to third-party investors by us and in secondary transactions or repurchased by us in arms-length transactions;
- lack of marketability of our common stock;
- our actual operating and financial performance;
- current business conditions and projections;
- our stage of development;
- likelihood of achieving a liquidity event, such as an initial public offering or a merger or acquisition of our company given prevailing market conditions;
- the market performance of comparable publicly traded companies; and
- the U.S. and global capital market conditions.

In valuing our common stock, our board of directors determined the equity value of our business using various valuation methods including combinations of income and market approaches with input from management. The income approach estimates value based on the expectation of future cash flows that a company will generate. These future cash flows were discounted to their present values using a discount rate derived from an analysis of the cost of capital of comparable publicly traded companies in our industry or similar business operations as of each valuation date and adjusted to reflect the risks inherent in our cash flows.

For each valuation, the equity value determined by the income and market approaches was then allocated to the common stock. We performed this allocation using the option pricing method, or OPM, which treats the securities comprising our capital structure as call options with exercise prices based on the liquidation preferences of our various series of preferred stock and the exercise prices of our options and warrants, and a probability-weighted expected return method, or PWERM, which involves the estimation of multiple future potential outcomes for us, and estimates of the probability of each potential outcome. The per share value of our common stock determined using the PWERM approach is ultimately based upon probability-weighted per share values resulting from the various future scenarios, which include an initial public offering, merger or sale or continued operation as a private company.

Application of these approaches involves the use of estimates, judgments and assumptions that are highly complex and subjective, such as those regarding our expected future revenue, expenses, and future cash flows, discount rates, market multiples, the selection of comparable companies, and the probability of possible future events. Changes in any or all of these estimates and assumptions or the relationships between those assumptions affect our valuations as of each valuation date and may have a material impact on the valuation of our common stock.

[Table of Contents](#)

For valuations after the completion of this offering, our board of directors will determine the fair value of each share of underlying common stock based on the closing price of our common stock as reported on the date of grant. Future expense amounts for any particular period could be affected by changes in our assumptions or market conditions.

In connection with this offering, we expect to incur approximately \$ _____ million of stock-based compensation expense related to RSUs and PSUs granted through December 31, 2021, for which the service-based vesting condition was satisfied and for which the performance-based vesting condition will be satisfied in connection with this offering. In addition, based on RSUs and PSUs outstanding as of _____, 2022, we expect to recognize approximately \$ _____ million of additional stock-based compensation expense related to these awards during the next twelve months.

Quantitative and Qualitative Disclosures About Market Risk

We are exposed to market risk in the ordinary course of our business. Market risk represents the risk of loss that may impact our financial position due to adverse changes in financial market prices and rates. Our market risk exposure is primarily the result of fluctuations in interest rates and foreign currency exchange rates.

Interest Rate Risk

We are exposed to market risk for changes in interest rates related primarily to our cash, cash equivalents and restricted cash, and our indebtedness. As of December 31, 2021, we had cash, cash equivalents and restricted cash of \$278.5 million held primarily in cash deposits and money market funds.

Foreign Currency Risk

The majority of our revenue is generated in the United States. Through December 31, 2021, we have generated an insignificant amount of revenues denominated in foreign currencies. As we expand our presence in the international market, our results of operations and cash flows are expected to increasingly be subject to fluctuations due to changes in foreign currency exchange rates and may be adversely affected in the future due to these related changes. As of December 31, 2021, the effect of a hypothetical 10% change in foreign currency exchange rates would not be material to our financial condition or results of operations. To date, we have not entered into any hedging arrangements with respect to foreign currency risk. As our international operations grow, we will continue to reassess our approach to manage our risk relating to fluctuations in currency rates.

Inflation Risk

We are also exposed to inflation risk and inflationary factors, such as increases in raw material and overhead costs, which could impair our operating results. Although we do not believe that inflation has had a material impact on our financial position or results of operations to date, a high rate of inflation in the future may have an adverse effect on our ability to maintain current levels of gross margin and operating expenses as a percentage of revenue.

JOBS Act Accounting Election

We are an “emerging growth company” as defined in the JOBS Act. Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have elected to use this exemption from new or revised accounting standards and, therefore, we will not be subject to the same new or revised accounting standards as other public companies that have not made this election.

Recent Accounting Pronouncements

See the section titled “Summary of Significant Accounting Policies” in Note 2 to our audited consolidated financial statements included elsewhere in this prospectus for more information.

BUSINESS

Business Overview

We endeavor to unlock the true power of precision medicine by creating Intelligent Diagnostics through the practical application of artificial intelligence, or AI, in healthcare. Intelligent Diagnostics use AI to make laboratory tests more accurate, tailored, and personal. Unlike traditional laboratory tests, an Intelligent Diagnostic contextualizes the laboratory test result to a specific patient, by incorporating an individual's longitudinal clinical data into the result. We believe Intelligent Diagnostics represents an emerging industry that we are pioneering. To accomplish this, we built both a technology platform to free healthcare data from silos and an operating system to make this data useful. We refer to the combination of those as the Tempus Platform. Our investment in this technology has allowed us to amass what we consider to be one of the largest libraries of oncology focused clinical and molecular data in the world. Our goal is to embed AI throughout every aspect of diagnostics to enable physicians and researchers to make data-driven decisions that improve patient care. We started in oncology in 2016 and have expanded into neuropsychology, infectious diseases, and cardiology, with aspirations to eventually be in all major disease areas.

We make tests intelligent by connecting laboratory results to a patient's own data, thereby personalizing the results. Our novel insight was realizing that all laboratory test results, genomic or otherwise, could be contextualized for a specific patient based upon that patient's unique characteristics, and technology could therefore guide therapy selection and treatment decisions to allow each patient to progress on their own unique path. The drugs recommended, the clinical trials explored, the care pathways evaluated, the adverse events considered—all have the potential to be refined and enhanced when test results are connected to a patient's personal profile, enabling the right patient to be routed to the right therapy at the right time.

Tempus is a technology company focused on healthcare that straddles two converging worlds. We strive to combine deep healthcare expertise, providing next-generation diagnostics across multiple disease areas, with leading technology capabilities, harnessing the power of data and analytics to help advance personalized medicine. Unlike traditional diagnostic labs, we can incorporate patient information, such as clinical, molecular, and imaging data, with the goal of making our tests more intelligent and our results more insightful. Unlike technology companies, we are deeply rooted in clinical care delivery as one of the largest sequencers of patients in the United States. Straddling both worlds is advantageous as we believe Intelligent Diagnostics represent the future of precision medicine, informing more personalized and data-driven therapeutics. We believe their adoption could empower physicians to deliver better care and researchers to develop more precise therapies, with the potential to save millions of lives.

In order to bring AI to healthcare at scale, we believe the foundation of how data flows throughout the ecosystem needs to be rebuilt. We established data pipes, going to and from providers, to allow for the free exchange of data between physicians, who interpret data, and diagnostic and therapeutic companies, who provide data. Without this capability, we believe that data would continue to accumulate without impacting patient care. Tempus has built this integrated Platform, and we are now deploying it at scale in oncology in the United States. Our Platform connects multiple stakeholders within the larger healthcare ecosystem, often in near real time, to assemble and integrate the data we collect, thereby providing an opportunity for physicians to make data-driven decisions in the clinic and for researchers to discover and develop therapeutics. We endeavor to help doctors find the best therapies for their patients, help life sciences companies make the best drugs possible, and enable patients to access emerging therapies and clinical trials when appropriate.

Our Platform includes proprietary software and dedicated data pipelines that create a network of healthcare institutions through more than 250 unique data connections, many of which supply us with complex multimodal data in near real time, across over 1,500 healthcare institutions that order our products and services. Healthcare institutions supply us with this data in our capacity as a covered entity (for example, when we provide Next Generation Sequencing, or NGS, services on behalf of a patient), or as a business associate (for example, when

[Table of Contents](#)

we provide clinical trial matching services or data de-identification and structuring services). In addition to the data we receive in these capacities, we currently have a limited number of paid license agreements through which we acquire de-identified data directly from healthcare associations or institutions. We integrate this data into a unified software Platform through which we offer numerous analytical and decision support capabilities to our customers. We establish dedicated and integrated data connections with healthcare institutions to enhance the information we provide in our clinical reports, and to increase the effectiveness of our clinical trial matching services. In certain circumstances, we may cover the actual direct costs associated with the technical integrations needed to create a data connection.

We have developed multiple products—each based on our Platform—that have allowed us to invest in structuring and harmonizing multimodal data, which is a necessary precursor for deploying AI at scale. Our products are organized under three product lines, *Genomics*, *Data*, and *Algos*. Each product line is designed to enable and enhance the others, thereby creating network effects in each of the markets in which we operate. Our business model allows pharmaceutical and biotechnology companies to unlock value from the data we collect, and allows us to monetize a de-identified copy of that data, in different ways across our different product lines. We believe these network effects provide a unique advantage to our business as the compounding value of each data record in our database serves to enhance our competitive moat. The more data we collect, the smarter our tests become, the more applications we launch, the more physicians join our network, further growing our database, making our tests more precise for clinicians and our database more valuable for researchers.

The more data we collect, the smarter our tests become, the more applications we launch, the more physicians join our network, further growing our database, **making our tests more precise for clinicians and our database more valuable for researchers.**

Our *Genomics* product line leverages our laboratories to provide NGS diagnostics, PCR profiling, and other anatomic and molecular pathology testing to healthcare providers, life sciences companies, researchers, and other third parties. However, unlike other laboratory diagnostic testing providers, many of our tests are connected to clinical data in some manner, which allows our suite of tests to be self-learning and become more accurate with each new test that we run. Our *Data* product line facilitates drug discovery and development for life sciences companies through two primary products, *Insights* and *Therapies*. Through our *Insights* product, we license de-identified libraries of linked clinical, molecular, and imaging data and provide a suite of analytic and cloud-and-compute tools to pharmaceutical and biotechnology companies. Our second product within our *Data* product line, *Therapies*, leverages our broad network of oncologists to provide clinical trial matching services for pharmaceutical companies that are looking to reach hard-to-find and underserved patient populations. Our newest product line, *Algos*, is focused on developing and providing diagnostics that are algorithmic in nature. We currently offer three *Algos* in oncology and are also developing *Algos* in other disease areas.

Industry Background

The Limitations of Employing Technology, Data, and AI in Healthcare and Precision Medicine

Technology has had a significant impact on almost every sector of our global economy. From the way we shop online, access information on the internet, or use GPS to navigate the world. We benefit from, and depend on, technology, data, and the vast computational and connective ecosystem that surrounds us. Yet healthcare has seemingly lagged other industries in embracing the power of technology and leveraging the ensuing computational revolution.

We believe this is changing. Recent technological advancements have facilitated the deployment of modern computational methods, such as AI and machine learning, to improve healthcare. Breakthroughs in cloud computing, imaging technologies, and low-cost molecular profiling have made it easier and more cost effective to digitize, structure, harmonize, and store healthcare data, and analyze the resulting datasets at an unprecedented rate. These developments are expediting the adoption of AI, which we believe will impact all aspects of healthcare, from clinical diagnostic testing to the discovery and development of therapeutics, to healthcare delivery more broadly.

Despite the accumulation of healthcare data, we believe the healthcare system still lacks the integrated networks and modern analytical tools necessary to facilitate data-driven care at scale. The vast majority of healthcare data created today remains locked in silos and lacks harmonization due to decentralized institutions using non-standardized methods for collecting data, in addition to a large percentage of the data being in unstructured formats like free text (such as physician progress notes) and non-digitized images (such as pathology slides). Clinical outcomes data, to the extent it even exists, often remains disconnected from diagnostic data, and traditional laboratory tests provide results that are often based only on a single data modality that lack patient context. In addition, clinical and research decisions are too often made based on small sample sizes of historic data.

In order to bring AI to healthcare at scale, we began by rebuilding the foundation of how data flows in and out of healthcare institutions, which we refer to as the Tempus Platform. We have established data pipes, going to and from providers, which allow for the free exchange of data between physicians, who interpret data, and diagnostic and therapeutic companies, who provide data. Harnessing the power of this data at scale required a Platform that could break down data silos, collect vast amounts of multimodal data, structure and harmonize it, and deploy AI to make it useful for physicians and researchers to make data-driven decisions in the clinic or at the lab bench, thereby advancing precision medicine. Without this Platform, we believe the data would continue to pile up at an increasing rate without improving patient care. We have built a version of this Platform and are now deploying it at scale in oncology in the United States, with other disease areas following.

Importance of Multimodal Healthcare Data

Technology is enabling the healthcare industry to collect data at an unprecedented scale, yet most datasets continue to be fractured or narrowly focused by disease type or data modality; almost none are comprehensive enough to provide a full picture of the patient and their clinically relevant characteristics. We set out to solve that problem by building a platform that collects broad datasets in near real time and at scale. Our Platform is differentiated in several ways. First, we collect data from multiple diagnostic modalities, including NGS, anatomic pathology slides, radiology images, and other laboratory tests. Second, the data we collect is often connected to EHR data, such as key phenotypic characteristics, therapeutic data, and clinical outcome and response data. Third, our Platform is multi-disease, spanning oncology, neurology, cardiology, and infectious disease. Our Platform is purpose built to deploy AI at scale, using multimodal datasets, across disease areas. We believe these differentiators have the potential to transform healthcare.

A New Industry: Intelligent Diagnostics to Advance Precision Medicine

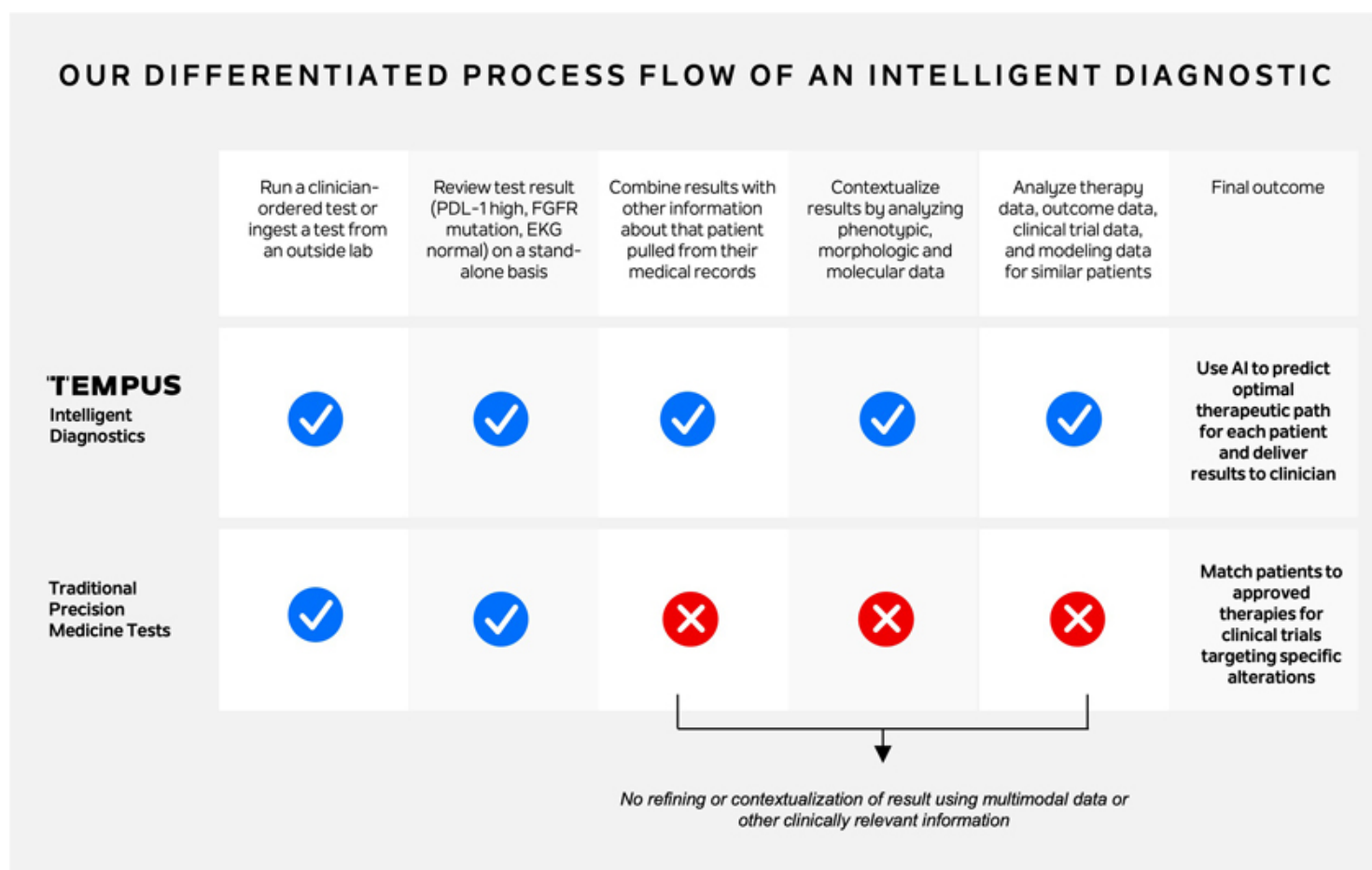
While AI has the potential to broadly impact healthcare, we believe it will transform diagnostics first. Diagnostics, broadly defined, is the process of determining by examination or assessment the nature and

[Table of Contents](#)

circumstance of disease. Physicians use diagnostics all the time; they order blood tests, biopsies, scans, genomic tests, and others. Physicians rely on diagnostic results to make the vast majority of their treatment decisions. Researchers rely on diagnostic tests to better understand disease and make better decisions throughout their discovery processes.

The ability to leverage AI on top of large, harmonized, multimodal datasets provides the opportunity to make diagnostic tests more personalized, and therefore more intelligent. Intelligent Diagnostics incorporate an individual patient’s longitudinal phenotypic, morphologic, and molecular data, including outcome data from the patient’s EHR, to give laboratory test results clinical context. In doing so, Intelligent Diagnostics can leverage AI to make laboratory tests more accurate, tailored, and personal. The test result itself is designed to be specific to each patient and their own unique patient journey. The result is also informed by our large dataset that enables association of clinical outcomes and therapeutic response for patients who are similar to the patient being treated.

The process for making a diagnostic “intelligent” improves upon the process for performing genomic testing, by leveraging technology and data to add clinical context and therapeutic insights. An Intelligent Diagnostic requires the following: (i) perform a laboratory test or ingest results from a laboratory test; (ii) review the test results on a stand-alone basis; (iii) combine the stand-alone results with other forms of relevant clinical data from that patient’s medical records; (iv) contextualize or reconfigure the stand-alone laboratory results to the extent necessary with the insight derived from that patient’s clinical history; (v) include the outcome and response data of patients who are similarly situated to the patient for whom the test was ordered; and (vi) use AI to derive analytical and clinically relevant insights and provide those to the physician and patient. See below for an illustration comparing an Intelligent Diagnostic to a standard genomic test:



We believe the adoption and deployment of Intelligent Diagnostics will have a substantial impact on patient care. In oncology, for example, Intelligent Diagnostics have the potential to eventually incorporate insights using data from molecular and anatomic pathology, bioinformatics, genomic variant analysis, inherited cancer risk, computational biology, drug label data, noted adverse events, clinical trial data, research publications,

[Table of Contents](#)

investigational studies, care pathways, real world evidentiary studies, and phenotypic and morphologic data. We already have the ability to incorporate many of these data elements today.

The consequence of incorporating multimodal data is to make precision medicine “personalized” as opposed to “targeted.” A targeted diagnostic test might find a specific condition or characteristic of a patient that is relevant to a particular therapy. For example, in cancer, a targeted diagnostic test may identify a genomic biomarker that could inform therapy selection, such as identifying a HER2 amplification that would allow a HER2 inhibitor to be prescribed to a breast cancer patient. The standard test to determine whether a HER2 amplification is present (other than at Tempus) is typically not designed to assess factors such as whether the patient is male or female, old or young, or has diabetes or a heart condition. Nor does the standard test consider the medication the patient has taken or is currently taking, or the adverse events the patient has experienced.

An Intelligent Diagnostic test, by contrast, might recommend specific therapies based not just on a singular characteristic, but on the comprehensive profile of the patient who will receive the proposed therapy. For example, an Intelligent Diagnostic might highlight that the breast cancer patient should consider immunotherapy before taking the HER2 inhibitor, or might highlight a series of adverse events the physician should be aware of based on other phenotypic characteristics for that patient, such as if the patient had a heart condition and therefore an elevated risk of a cardiac adverse event from taking the HER2 inhibitor. By linking multimodal data regarding both the disease, such as cancer or diabetes, and the host, our tests can provide a more comprehensive and holistic view of the patient and reconfigure results based in part on the clinical data we collect and the aggregate information in our database.

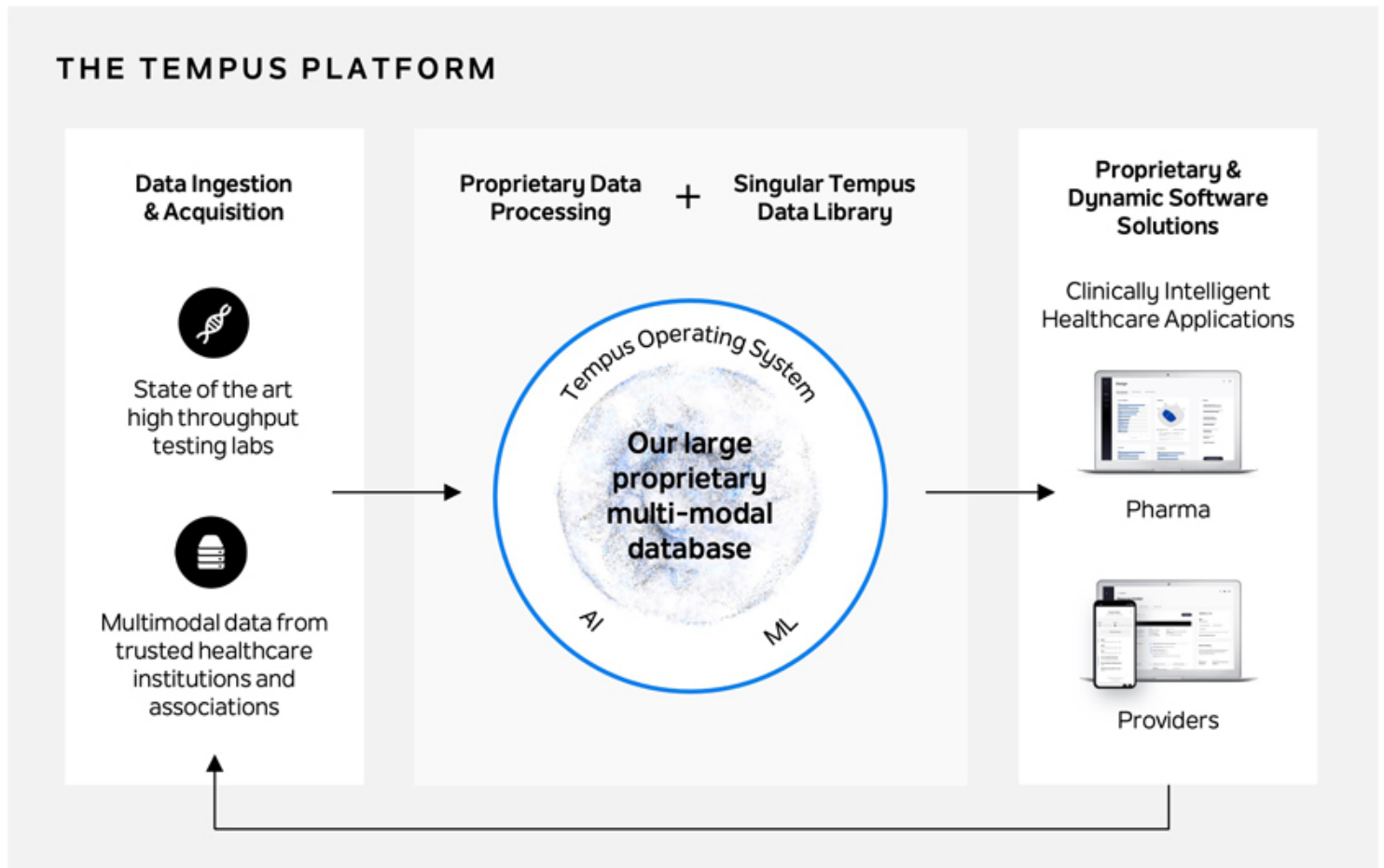
Intelligent Diagnostics also have the potential to disrupt the clinical trial process. Today new therapies are typically approved based on randomized clinical trials that apply to broad populations and demonstrate incremental improvements over the existing standard of care. The current process suffers from several inherent flaws. First, clinical trials are generally expensive and slow to complete. Second, if and when therapeutics are approved, they can have less of an impact on the larger population than the trial population, given an inherent bias on who has access to academic medical centers and emerging studies. Third, many new therapies are only effective on a subset of patients that enter clinical trials.

We believe Intelligent Diagnostics and technology can help solve these problems. We believe our ability to contextualize test results to individual patients, to incorporate real world evidence at scale, to identify patterns across similarly situated patients, will help physicians make better, data-driven decisions—which drug to prescribe, which trial to consider, and so on.

The Tempus Platform

Tempus set out to build proprietary technology to implement Intelligent Diagnostics and to facilitate access to, and use of, the resulting datasets. The Tempus Platform connects multiple stakeholders within the larger healthcare ecosystem and provides both the technical infrastructure for what we consider to be one of the world’s largest libraries of matched clinical and molecular data, and an operating system to make that information useful. Our Platform is end-to-end and vertically integrated. It allows us to ingest data from providers, perform

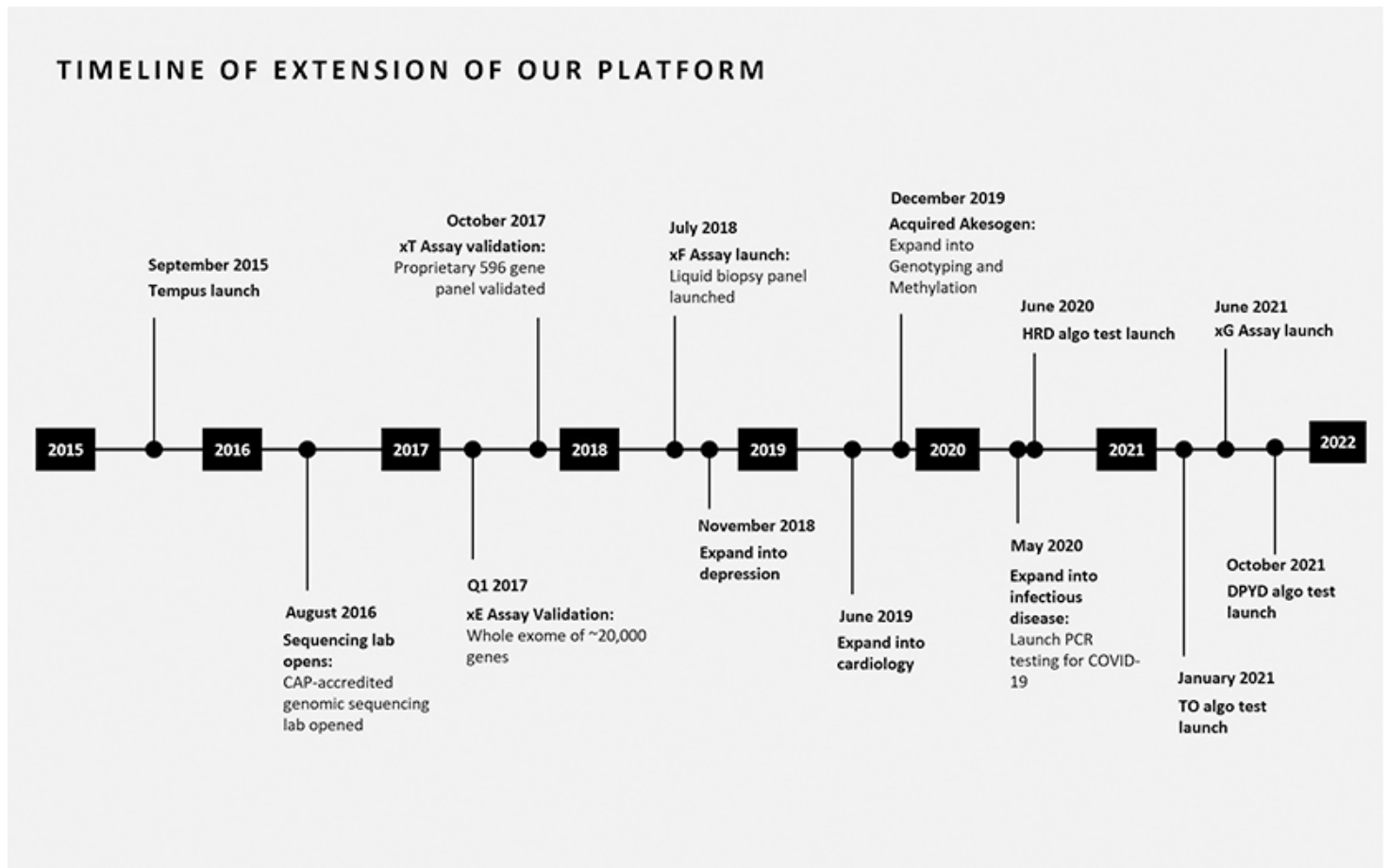
diagnostic testing upon request, generate results leveraging our multimodal database, and provide clinical context for a specific patient. Below is a graphic illustrating our Platform's core functionality.



We believe our AI-enabled Platform can provide unique value whenever two conditions exist: a heterogeneous diseased population and a variety of therapeutics or therapeutic pathways, which are often prescribed based on trial and error. For example, in oncology, there is a diverse population diagnosed with cancer, and each subtype has different characteristics. The combination of unique patient characteristics and different cancer subtypes results in a variety of phenotypic attributes (old, young, male, female, black, white, etc.). In addition, there are hundreds of possible therapeutic paths to consider in cancer (surgery, radiotherapy, chemotherapy, targeted therapy, immunotherapy, etc.). These conditions create an ideal backdrop for the benefits of big data and AI.

The same is true in neuropsychology. A heterogeneous population suffers from numerous neurological disorder subtypes, such as depression, anxiety, bipolar disorder, and other psychiatric conditions. Like oncology, there is a diverse patient population and a number of prescribed antidepressants, often based on trial and error. Further, the complexity of oncology, neuropsychology, and many other major causes of morbidity necessitate a multimodal data approach, as any single modality (e.g., DNA-only) is unlikely to provide enough information to differentiate meaningful patient subgroups. We believe technology and AI should facilitate data associations and substantially reduce the guesswork associated with which drug to prescribe, in what amount, and in which order.

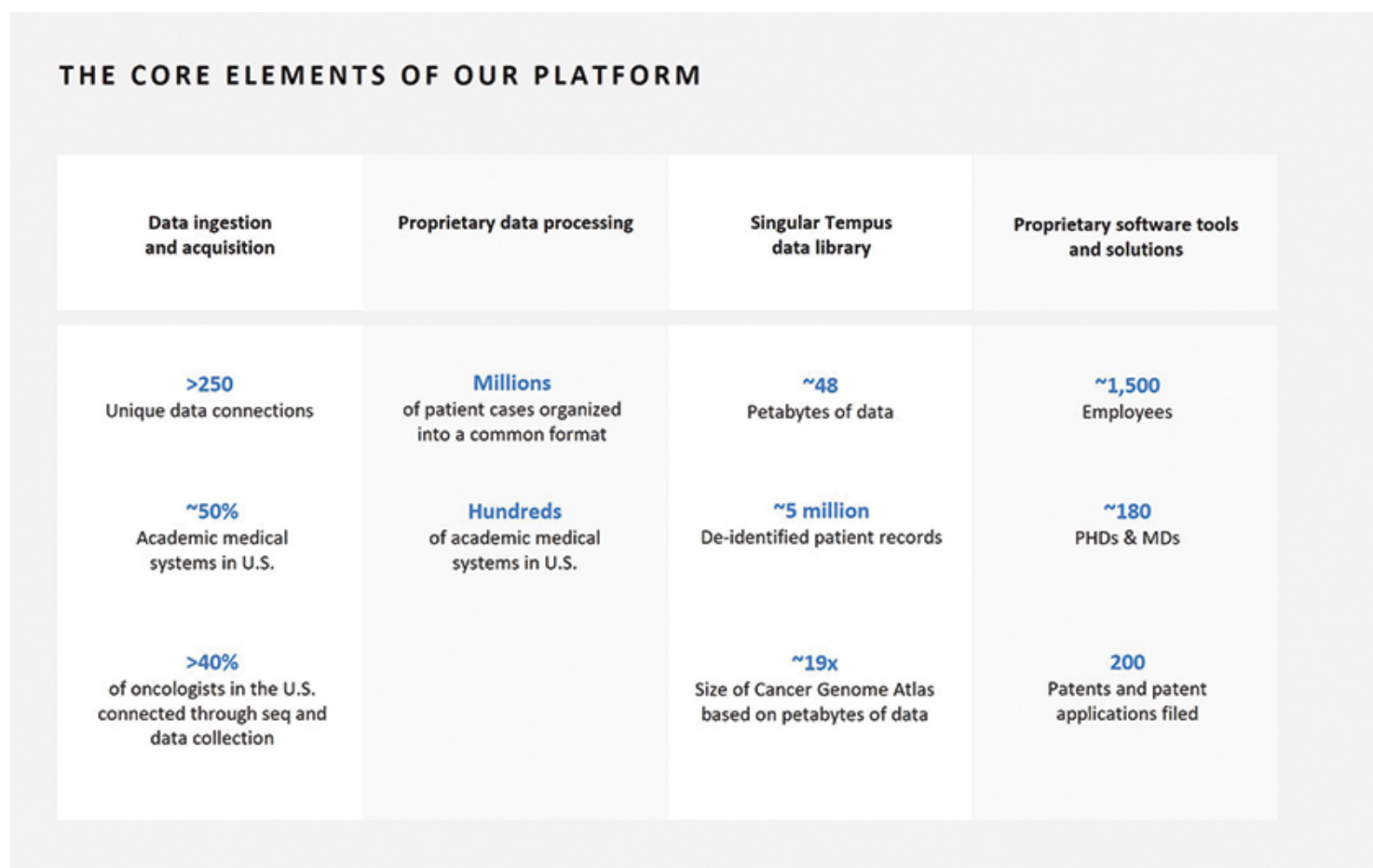
Facilitated by our relationships with many leading hospitals across the healthcare system in the United States, we believe we are well positioned to introduce precision medicine at scale across multiple disease categories and drive adoption of our Platform and novel AI solutions. We are leveraging our ability to collect, structure and harmonize data, and deploy AI on large datasets to facilitate precision medicine broadly. We initially deployed our Platform in oncology, expanded substantially within oncology, and recently extended into neuropsychology, infectious disease, and cardiology. Below is a timeline of our Platform’s evolution, both within oncology and into different disease categories:



Core Elements of our Platform

Our Platform comprises multiple elements that work together to grow our database, generate Intelligent Diagnostics, and integrate the data we collect into clinical practice so that physicians and researchers can make data-driven decisions. Our technology stack allows us to ingest large amounts of multimodal healthcare data, which we then structure and harmonize into a common database that powers a variety of healthcare applications. Our scaled, interconnected provider network covers approximately 40% of U.S. oncologists and provides us with broad data rights, including the rights to longitudinally updated data from time to time. The combination of our Platform and vast provider network yields a powerful flywheel that continues to become more accurate and precise as more patients are added, thereby compounding the network effects of our offering. We believe each of

these elements is difficult for competitors to replicate, and together provide us a significant advantage. The following diagram represents the different elements of our Platform.



Ingestion and Generation of Data

We ingest and generate healthcare data at scale through multiple methods into our Platform, including molecular, clinical, and imaging data. Between our sequencing and data collection efforts, we are connected in some way to approximately 40% of all oncologists practicing in the United States, along with a growing number of patients in neuropsychology, cardiology, and infectious disease. Our methods for collecting and creating data include the following:

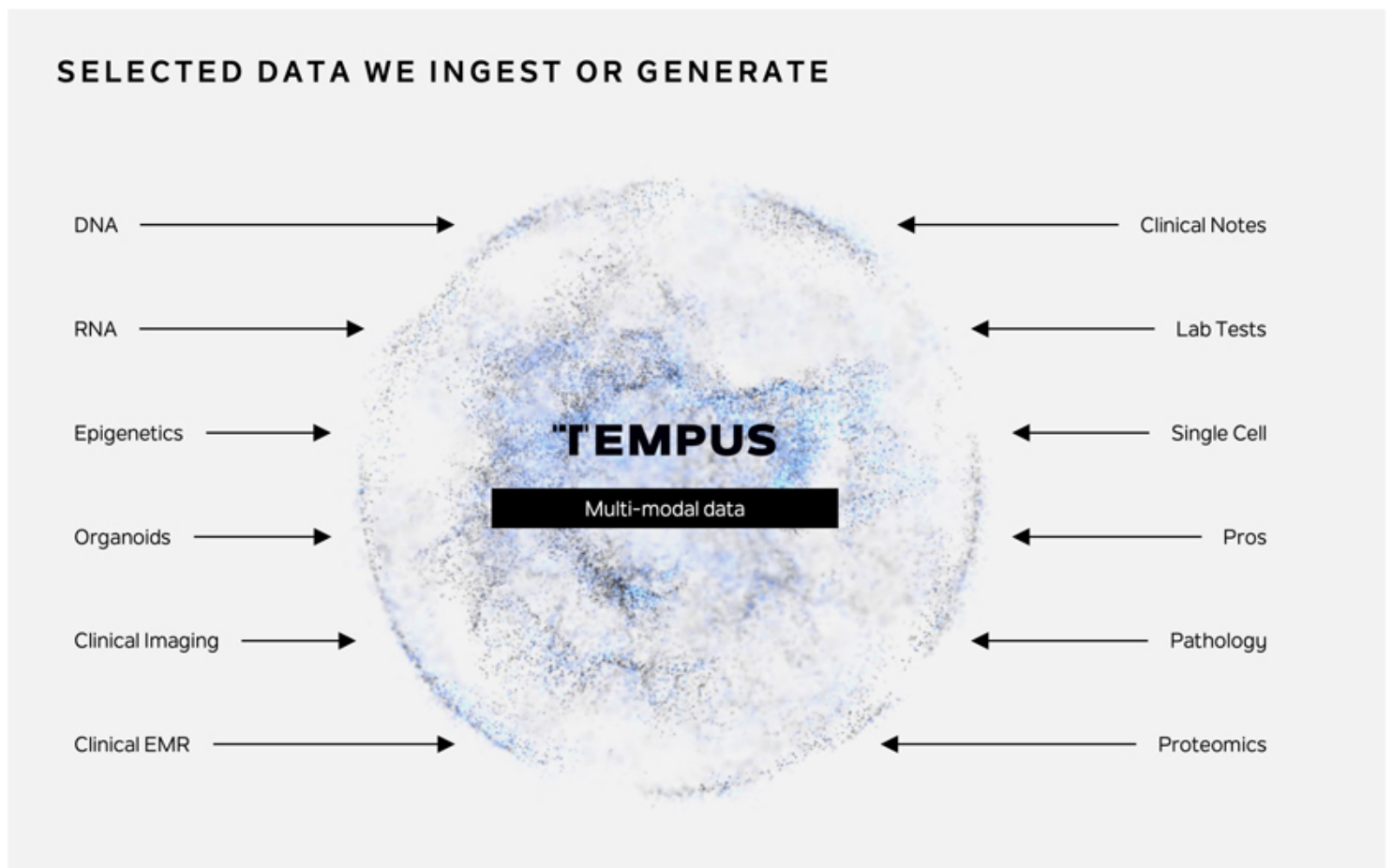
Ingesting data through our relationships and partnerships with healthcare providers. We have developed proprietary tools to establish more than 250 direct data connections, many of which are bi-directional. We have established relationships with hundreds of provider networks, including approximately half of all academic medical centers in the United States. To obtain data from these sources, we use a variety of near real-time connections (e.g., HL7, FHIR) and batch data exchanges. Healthcare institutions supply us with this data in our capacity as a covered entity (for example, when we provide NGS services on behalf of a patient), or as a business associate (for example, when we provide clinical trial matching services or data de-identification and structuring services). We ingest and structure data using optical character recognition, or OCR, natural language processing, or NLP, and proprietary workflow tools along with manual data curation. Our proprietary tools connect to a provider’s EHR system, data warehouse, or their third-party data provider to pull out relevant structured and unstructured data that the provider has agreed to contribute to Tempus, including longitudinal follow-up data to the extent the provider has made such data available. To facilitate these data-sharing relationships, we have developed software products and services that align to our customers’ interests by helping providers use our software tools to improve patient care. In certain circumstances, we cover the actual direct costs associated with the technical integrations needed to create a data connection. We cover these costs to help facilitate providers’ contribution of data and their corresponding use of our products, which then makes our tests more intelligent and helps them to facilitate the delivery of better care. We generally retain the rights we acquire in de-identified data even if our contractual obligations expire or are terminated.

[Table of Contents](#)

Relationships with industry associations. In addition to healthcare providers, we work with numerous industry associations in the United States, such as ASCO. Under our collaboration with ASCO, we structure and distribute the oncology data ASCO collects as part of CancerLinq, which is their oncology data effort. We work with other large associations such as Quality Cancer Care Alliance, or QCCA, and National Cancer Care Alliance, or NCCA, and have agreements in place with large integrated community practices. While our relationships in oncology are widespread, we are making inroads in other disease areas. For example, we hold a perpetual, royalty-bearing license from Geisinger to build algorithmic models and commercialize a de-identified dataset of approximately 3.2 million ECGs, across approximately 600,000 patients, with decades of longitudinal clinical data, including outcome and response data. We also have agreements with numerous other institutions through both our sequencing and data efforts to collect and structure multimodal infectious disease data, and have entered into a variety of partnerships and collaborations across neuropsychology, diabetes, and cardiology giving us access to additional clinical data.

Laboratory diagnostics. In addition to our dedicated data pipelines, we generate data for our Platform from our two high-throughput diagnostic testing labs in Chicago and Atlanta. We intend to expand these capabilities with a new genomics lab in Raleigh, North Carolina, which we are currently operationalizing and from which we expect to begin offering commercial laboratory tests in 2022. Our labs offer a range of anatomical and molecular NGS tests, including a broad portfolio of solid tumor and liquid biopsy cancer tests. Our laboratory offerings enable us to populate our database with connected and comprehensive molecular, clinical, and morphologic data that has been de-identified. We also make available an unrestricted copy of the raw files containing the rich data we generate in the laboratory, along with any clinical data we curate, to the providers who order our tests, to further enable their own research efforts.

We ingest and generate a variety of different types of data from different sources. The following represents selected data modalities that we collect and aggregate into our database.

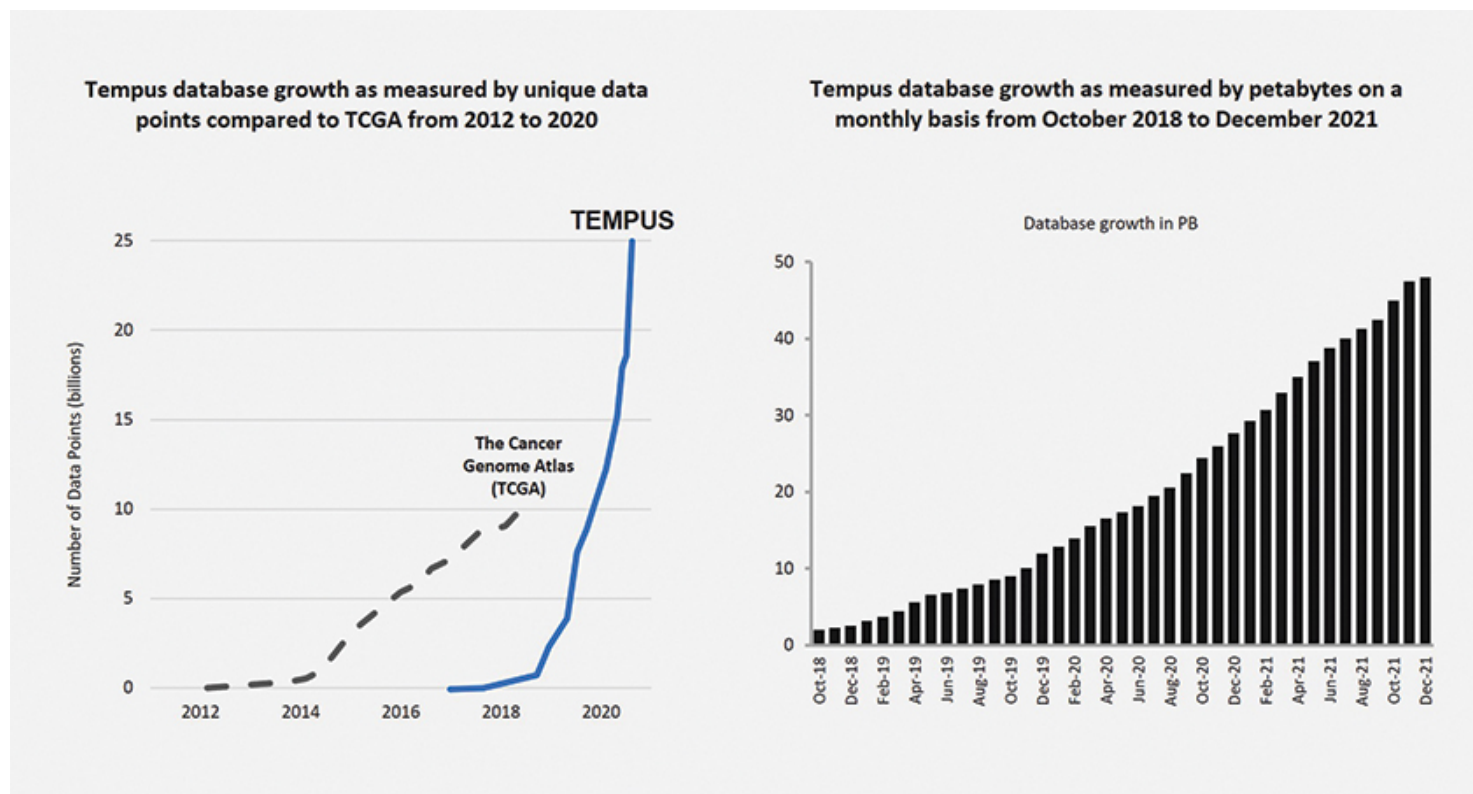


Proprietary Data Processing

Once data is ingested, we apply AI and other technologies to organize millions of records into a common format that spans a variety of data types. For example, we organize clinical data from unstructured documents and structured EHR fields, and typically digitize whole-slide pathology images as part of our clinical workflow. We then combine this data with the molecular data that we generate in our labs or process from third parties, giving us a more comprehensive profile of patients. Unstructured data housed in physician notes and other documents is processed using OCR and NLP, mapped to Tempus' Medical Ontology, and routed to data abstractors for further curation and quality control. Typically we receive identified data, either in our capacity as a covered entity under the Health Insurance Portability and Accountability Act, or HIPAA, or to the extent we have a business associate agreement with the provider. Following abstraction and structuring, we de-identify data and only retain the resulting de-identified dataset, other than through our obligations to retain selected identified data as a covered entity provided laboratory tests to clinicians. Many clinicians who order Tempus tests clinically are also involved in research related activities. By making this organized and structured data available to the clinicians (along with raw files associated with the testing we perform) we serve, those clinicians can use the data to further their own research efforts to help patients.

Proprietary Multimodal Database

We believe most healthcare databases lack real-time functionality, depth among data types, and the scale of matched clinical and molecular records needed to meaningfully improve therapeutic research and development. Tempus is attempting to solve this problem by democratizing the use of molecular, clinical, and imaging data at scale. As our testing volume has grown, and as our dedicated data pipelines have expanded, the size of our database has increased exponentially. Since we launched our Platform in 2016, Tempus has amassed an oncology database that is approximately 19 times the size of The Cancer Genome Atlas, which we believe to be the largest public genomic dataset in oncology, based on the number of data points collected (and approximately 14 times the size based on petabytes of data). This represents what we consider to be one of the largest matched molecular libraries of cancer patients in the world. Our Platform, across all diseases, has ingested almost 500 million documents and contains more than 5.0 million de-identified patient records, including more than 950,000 with imaging data, more than 500,000 with matched clinical records linked with genomic information, and approximately 80,000 with full transcriptomic profiles. The breadth of our database, the quality and diversity of its data, as well as its regularly updating nature, allow us to offer a variety of AI-enabled solutions to the market. We also retain the rights to broadly commercialize the de-identified data we collect. As our database continues to grow from its current size of approximately 48 petabytes, we believe new AI applications and opportunities will emerge that are only possible with scale, driving innovations in patient treatment that were previously unattainable. The following diagram represents the growth of our database over time.



Another valuable attribute of our dataset is the number of different data modalities represented. We believe multimodal data is a necessary predicate to successfully build and deploy AI-based applications given the complexity of disease and the various attributes across different forms of data (e.g., text, images, molecules, etc.). As of December 31, 2021, our database included the following types of data, among others:

SUMMARY OF THE CONTENTS OF THE TEMPUS DATABASE

Clinical Data >5,000,000	Imaging Data >950,000	Clinical + Molecular Data >500,000	Tempus Samples Sequenced >390,000
<p>Clinical data profiles collected from our provider partners' EMRs + relationships with associations</p> <p>Onco database includes approx.: ~4.0 million de-identified patient records 1.1 million outcomes 133 million procedures 743 million medications 497 million documents 5.7 million noted biomarkers</p> <p>Cardio database includes approx.: 650,000 patients 3.1 million ECGs 200 million clinical notes 330 million diagnoses 176 million encounters 435 million lab measurements 168 million medical events</p>	<p>Imaging files collected through our data pipelines, our anatomic pathology lab tests, and our Geisinger partnership</p> <p>~650,000 patients with cardiac imaging data (ECGs) >1 million radiomic files</p>	<p>Our matched clinical and molecular dataset profiles consist of both the tumor's molecular profile and various phenotypic data elements (therapy data, time on treatment, and clinical outcome) and treatment response data, when and to the extent available</p> <p>We compiled this matched dataset by sequencing patients for our provider partners (who supply clinical data) and ingesting data through our relationships with provider partners</p>	<p>This dataset includes both clinical and molecular data from the patients Tempus has sequenced (e.g. somatic, germline, DNA, and RNA data)</p> <p>~80,000 patient samples from full transcriptomic analysis</p>

[Table of Contents](#)

Footnote: Our clinical data typically includes the following information to the extent provided and abstracted by Tempus: unique identifier; age; sex; race/ethnicity; histology; stage of disease; sample type (primary vs. metastatic); anatomical site of sample and method of procurement; cancer treatment history, including therapies administered; timing of relapse and timing of treatments, including cancer-related treatments and surgery; genomic profiling results (e.g., internal, external providers); tumor response; progression free survival; RECIST or equivalent; ECOG/Karnofsky scores, or equivalent; and adverse events.

Proprietary Software Tools and Solutions

We have developed numerous software tools and applications to help make our services accessible to multiple constituencies within the healthcare ecosystem and support our various product lines. We believe this system architecture, which employs AI techniques such as neural networks, deep learning, and other statistical techniques, along with proprietary software tools and applications, represents a key competitive advantage that will be difficult for others to replicate. We describe below some of the core software applications that form part of our Platform.

External Facing Applications

We have two primary software applications that serve as interfaces for different markets and allow our customers to interact with our Platform. Hub is our clinical application for physicians and other healthcare providers and is used primarily in our Genomics product line as an end-to-end application for healthcare providers who use our NGS tests. Lens is our application for life sciences customers, launched in May 2021. Lens is aligned with Insights, one of our products within Data, and allows users to identify, license, and ultimately analyze cohorts of data for research purposes. We typically enable our customers to access our software applications free of charge. However, in some cases we may charge for access to Lens when a customer is interested in some form of customization or Lens' enhanced features.

Hub

Hub can be accessed on the web or through our mobile applications. Hub enables physicians and other providers to interact with our Platform, place orders for our laboratory tests, track them through the sequencing process, view results, and develop treatment plans using the other information Tempus makes available. Hub streamlines and automates what previously required a significant investment of both time and resources for those ordering and delivering genomic reports.

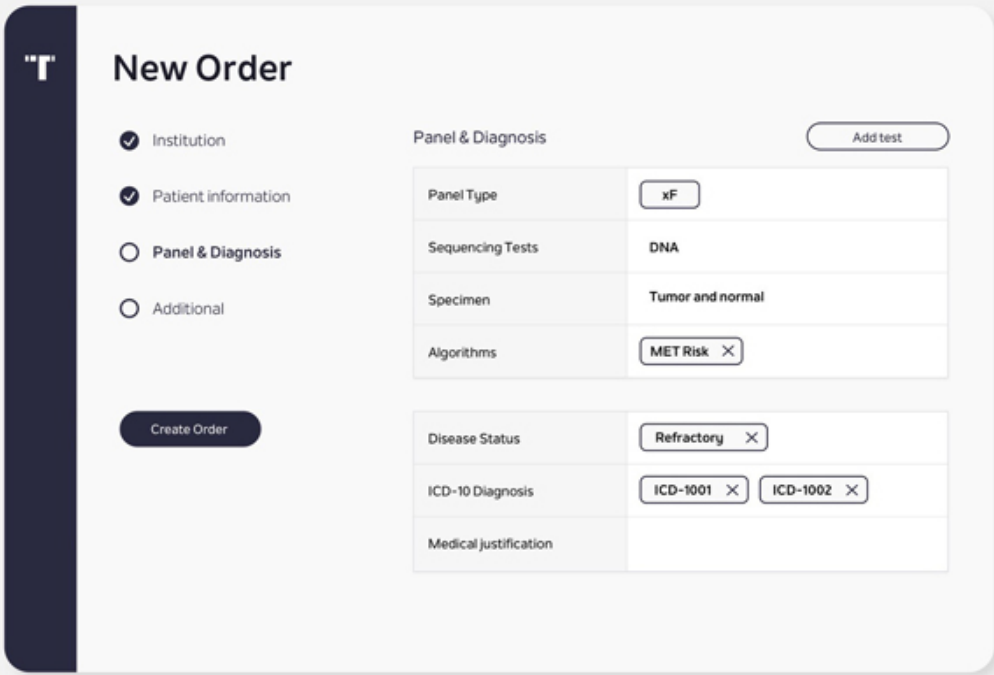
A physician's experience, through Hub, typically begins with our online ordering feature, which presents providers with Tempus' various test options and guides users through the ordering process. Once Tempus has processed an order and sequenced a specimen, Hub synthesizes information across our various tests, orders, and patients, and presents the information in a consumer-friendly interface. For example, Order Summary synthesizes information from various clinical orders, test results, and other information relevant to a patient's course of treatment. A typical patient might have multiple sequencing events over time. Hub visually presents all of a patient's results side-by-side, so a treating physician can comprehensively view how a patient's disease has changed over time, including in response to therapy. Hub also provides care teams a robust set of search and filtering tools so they can navigate our Platform. Physicians can use Hub to identify similarly situated patients or patient sub-groups, including by specific molecular alteration. Physicians can also export and download the resulting dataset for further analysis.

Hub offers additional functionality that goes beyond ordering and presenting clinical results. Our clinical trial system, for example, handles the complexities of matching patients to clinical trials, by synthesizing clinical and molecular data matched against inclusion and exclusion criteria for the trial. It even allows physicians to activate their point of care as a clinical trial site, if approved by the trial sponsor, in order to easily enroll patients who would otherwise not have access to experimental therapies. The proprietary features within Hub put powerful analytics in the hands of physicians, allowing them to pursue research opportunities using accessible molecular data, and explore immune insights such as HLA type, TCR and BCR profiles, immune infiltrates and neoantigens. Finally,

[Table of Contents](#)

Time on Therapy provides physicians a view into the Tempus Precision Medicine Library, which includes the treatment paths of thousands of patients who display similar molecular or phenotypic profiles to their own patients. These tools enable new patients to potentially benefit from the experience of those that came before.

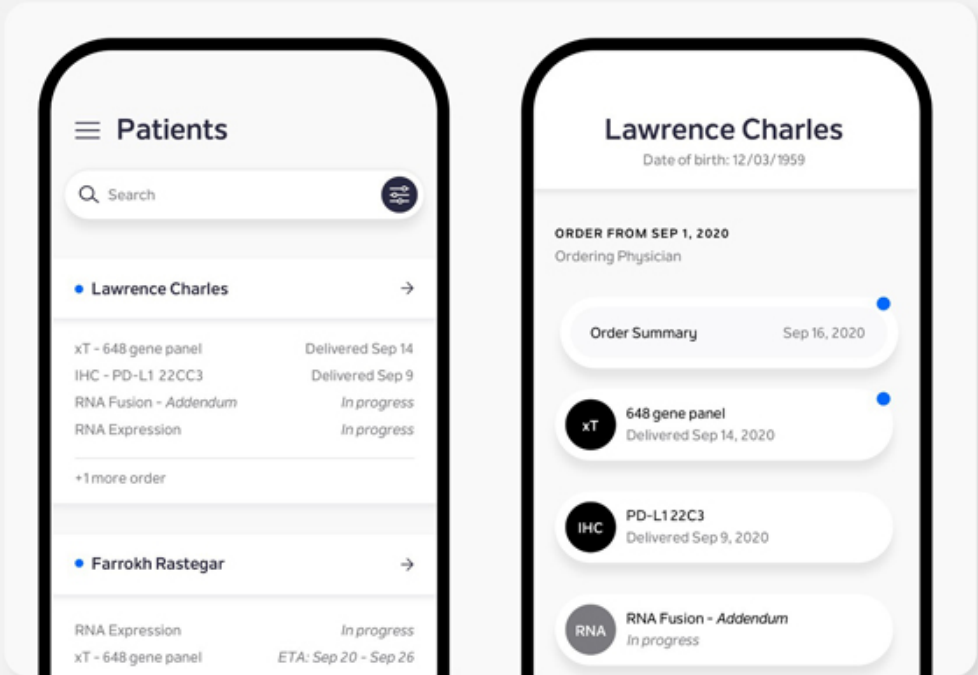
We include below some illustrations depicting some of Hub's capabilities:



The 'New Order' interface features a sidebar with navigation options: Institution (checked), Patient information (checked), Panel & Diagnosis (selected), and Additional. A 'Create Order' button is located below the sidebar. The main form, titled 'Panel & Diagnosis', includes an 'Add test' button and several input fields: Panel Type (xF), Sequencing Tests (DNA), Specimen (Tumor and normal), Algorithms (MET Risk), Disease Status (Refractory), ICD-10 Diagnosis (ICD-1001, ICD-1002), and Medical justification.

ONLINE ORDERING

Online ordering guides users through the ordering process allowing them to discover new test options relevant to their patient.



The mobile application displays a 'Patients' list with a search bar and a filter icon. The list includes Lawrence Charles and Farrokh Rastegar. Lawrence Charles's profile shows an 'ORDER FROM SEP 1, 2020' by the Ordering Physician, with an 'Order Summary' dated Sep 16, 2020. The summary lists three items: a 648 gene panel (Delivered Sep 14, 2020), PD-L1 22C3 (Delivered Sep 9, 2020), and RNA Fusion - Addendum (In progress).

MOBILE APPLICATION

The Tempus mobile application gives users access to the full Tempus experience, even when they are away from their computers. Reports are rendered in interactive views optimized for mobile devices. Physicians can help their patients enroll in trials using their phone.

T

Patient Summary

Farrokh Rastegar

Recent results

PDL1 - 223C
Delivered May 24, 2020 View results →

xT - 648 gene panel
ETA June 2 - June 8 Track order →

All reports

PDL1 - 223C - IHC	May 24, 2020	May 20, 2020
xT - 648 gene panel	In progress	May 20, 2020
PDL1 - 223C - IHC	May 24, 2020	May 20, 2020

Clinical Information

46 years old
Female
Stage IV

Invasive ductal carcinoma, breast

Clinical History

<p>Diagnosis Diagnosed on 01/30/2015</p> <p>Radiation Radiotherapy</p>	<p>Procedures Breast, partial mastectomy 08/2018</p> <p>Therapies -</p>
--	--

PATIENT SUMMARY

The patient summary interface surfaces all data about a patient in one place. Physicians can see detailed info about orders, such as the estimated delivery date. They can place orders on hold or convert them from solid tumor sequencing to a liquid biopsy. Completed results are summarized in a longitudinal view across orders.

T

Patient Tracker

Needs review (3) Monitoring (4) Add patient Download

Roy Brewer DOB: 05/17/1949	Calithera KEAPSAKE	KEAP1 p.H274L missense variant	Tempus - EMR integration	Imminent match
Sarah Henry DOB: 02/12/1964	Elevation - CRESTONE Cohort 1	TPTEP1 - NRG1	Tempus - NGS	Pending site review
Emelia Lee DOB: 05/03/1975	EMD Serono - INSIGHT 2	EGFR p.L858R	Site	Imminent match
Mary Lahoti DOB: 09/10/1971	Calithera KEAPSAKE	KEAP1 p.H274L missense variant	Tempus - NGS	Pending Tempus review
Dwayne Carter DOB: 11/21/1951	EMD Serono - INSIGHT 2	EGFR p.L858R	Tempus - EMR integration	Pending site review

CLINICAL TRIALS

Tempus handles the complexities of clinical trial matching via Hub. A user can help their patient enroll in a clinical trial with minimal keystrokes.

T

Order Summary

John Spence

Potentially Actionable Variants

CDH1
p.Q23* Stop gain - LOF

PIK3CA
p.E542K Missense variant (exon 9) - GOF

MSH2 GERMLINE PATHOGENIC
p.S87C chr2:4763558

Immune Biomarkers

- **Tumor Mutational Burden**
0.5 m/MB, 3rd percentile
- **Microsatellite Instability Status**
Stable
- **PD-L1 22C3**
Tumor proportion score (TPS) <1%, Combined positive score (CPS) 3

RNA Fusions

RNA sequencing analysis complete and no fusions found.

Additional Information

- **DPYD**
Positive, homozygous. Patient is a poor metabolizer.

Biologically Relevant
TP53

Pertinent Negatives
ERBB2 (HER2), ESR1

xG - 52 gene germline test
Results are not included on the order summary.

Treatment Implications

Fulvestrant + Alpelisib PIK3CA / Gain-of-function

✓ FDA approved, other indications

3 clinical trials available PIK3CA MSH2 TP53

ORDER SUMMARY

Order summary brings the important findings from a patient's order into a single, easily referenced document. It also allows Tempus to deliver insights from the broader Precision Medicine Library that are specifically matched to the patient case under review.

T

Time on treatment

Patients who took Gemcitabine, Paclitaxel protein-bound

Cancer Type	Last Updated	Approximate Treatment Duration (Months)
Pancreatic adenocarcinoma	3 months	~24
Pancreatic adenocarcinoma	4 months	~18
Pancreatic adenocarcinoma	6 months	~30
Invasive ductal carcinoma	11 months	~8
Gastrinoma	3 months	~24

TIME ON THERAPY

Time on Therapy allows physicians to compare their patient with thousands of similar patients in the Tempus Precision Medicine Library, enabling a deeper understanding of the effectiveness of particular therapeutic regimens.

Lens

Lens is our software application for life sciences research. We designed Lens to expose our multimodal, de-identified dataset to two main constituencies: (i) clinicians interested in exploring data related both to their own patients and to similarly situated patients from the broader Tempus dataset, and (ii) pharmaceutical and biotechnology clients that are focused on drug discovery and development and want to explore our dataset and/or supplement their own analytics with our tools and data.

With respect to the first constituency, Lens helps users filter our multimodal database to identify groups of patients that meet their research requirements. It allows browsing, segmenting, selecting, and analyzing cohorts

[Table of Contents](#)

of patients using a variety of clinical, molecular, and demographic characteristics. We generally make these aspects of Lens available to our customers without charge because such access helps our customers identify data cohorts of interest and facilitates data licensing opportunities.

In addition to this basic functionality, Lens allows advanced computational users to perform robust analytics using our cloud-and-compute infrastructure and modeling tool set. We launched certain of these advanced features in May 2021, one of which is called Notebooks, a proprietary tool that allows users to run their own AI models within our cloud-and-compute environment, taking advantage of fast and streamlined access to our data and computational infrastructure, and saving researchers time and money. Over time, we intend to enter into separate subscription agreements, and charge separately, for expanded access to Lens and the increased functionality we intend to provide to our users.

We believe that as Lens evolves, it has the potential to redefine life sciences research as investigators can both use our tools for their computational needs and instantly download the data they need for their analysis. We are not aware of any other application in oncology, or any other major disease area, that allows researchers to build large multimodal cohorts, utilize advanced analytics capabilities to explore the data, and download data for deeper analysis in near real time.

We include below some illustrations depicting some of Lens' current capabilities, which we expect to continue to expand and enhance over time:

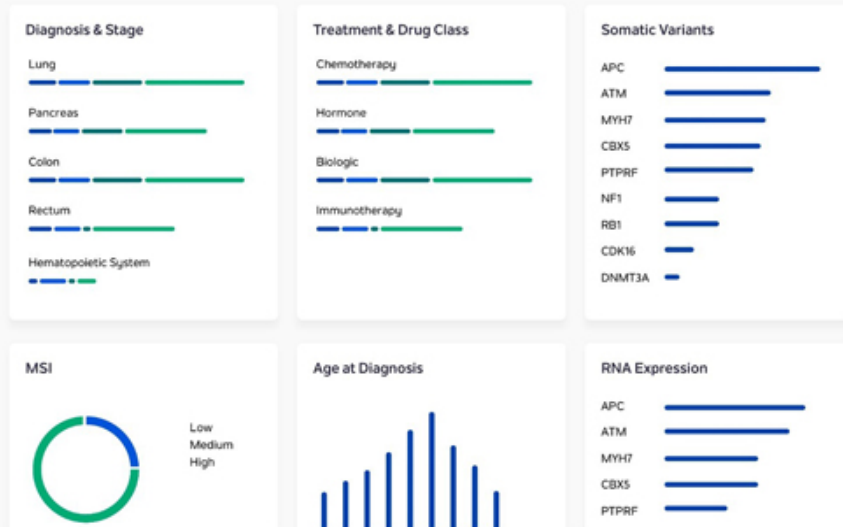
Advanced Filters

ADVANCED FILTERS

Advanced filters empower users to define and refine a subset of the full dataset based on precise clinical and molecular characteristics, and/or the availability of specific data (e.g. DNA results, RNA, or imaging).

T

Data Summary

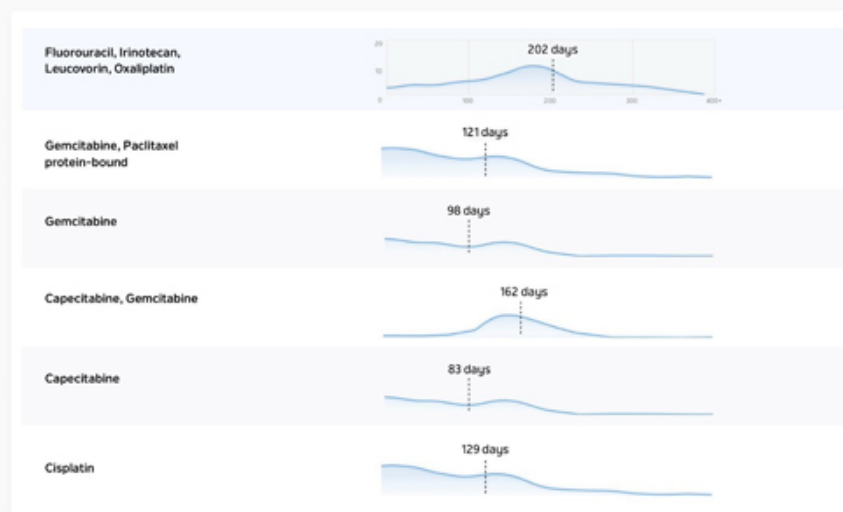


COHORT DESIGN

Researchers are able to quickly build cohorts of interest and explore the unique data elements of the cohort they have designed. This allows researchers to ascertain if their cohort is sufficient for the questions they are trying to answer and the studies they are trying to conduct.

T

Time on treatment



EXPLORATORY TOOLS

Physicians and researchers can use Lens to conduct complex analytics, including the exploration of why certain patients are having a positive, or negative response to therapy via purpose-built tools such as Time on Treatment.

The image shows a Jupyter Notebook interface with a dark sidebar on the left containing a large white letter 'T'. The main area is titled 'Notebook' and contains a section 'Progression-free survival'. It features three code cells with R code using packages like dplyr, survival, and ggplot2. Below the code are two plots. The first plot is a Kaplan-Meier survival curve titled 'Propensity Adjusted Survival Curves (Progression): Carboplatin'. The second plot is a density plot titled 'Patients with high FGFR2 and FGFR3 RNA expression were more likely to respond to Carboplatin', showing two overlapping distributions, one blue and one grey.

NOTEBOOKS

More advanced users can utilize Notebooks, which is a proprietary tool that allows the development of self-generated models within Tempus' cloud and compute environment, taking advantage of streamlined access to our data and computational infrastructure, and saving researchers time and money.

Other Software Applications

Our software applications extend beyond the oncology space. In the neuropsychiatry space, for example, we have built a series of proprietary and customized applications that are oriented around depression and other related psychiatric conditions. In addition, we licensed a customized software tool, which we call TempusPRO, that helps track patient reported outcomes, which we integrate into Hub. Patients use the mobile application to complete regular and systematic check-ins, while providers use the tool to view clinical reports and review the patient reported information. We have developed this application to empower providers to make data-driven, personalized treatment decisions, as well as collect outcome measurements on a regular, longitudinal basis in an effort to build one of the largest real-world multimodal datasets in psychiatry.

We also have developed a mobile application in the infectious disease space that we use to deliver COVID-19 test results directly to patients. The application allows patients to connect to Tempus and contribute their data in an effort to combine clinical and molecular data for COVID-19 patients. To date, we have more than 22,000 users who have agreed to contribute data to Tempus to advance research and other valuable use cases.

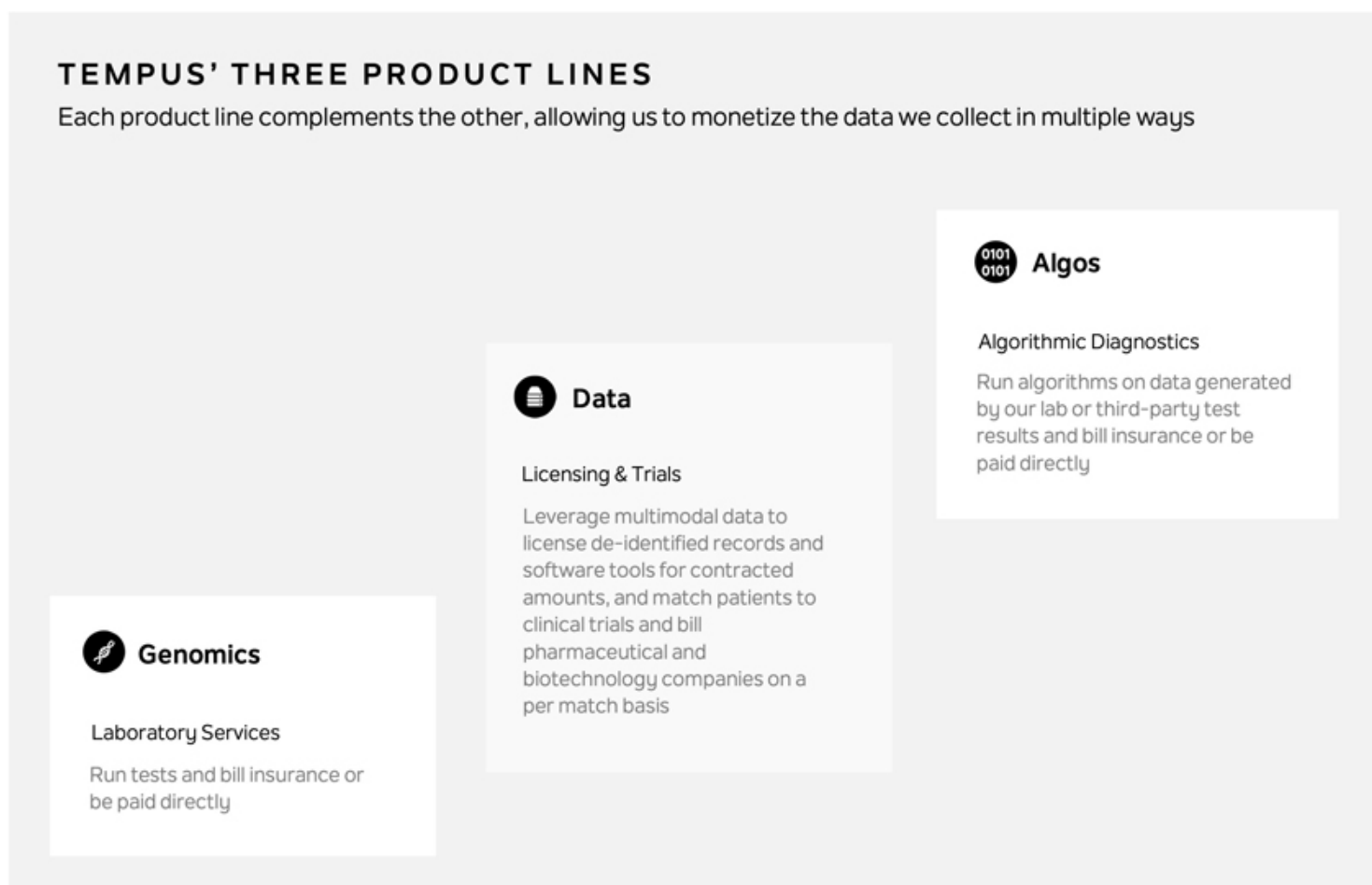
Our Google Cloud Agreement

In June 2020, we signed an agreement with Google to migrate most of our cloud-based infrastructure to the Google Cloud Platform, or GCP. The Agreement with Google has two components: (1) a Master Agreement through which Google provides us with cloud services, as well as other products and services, for a multi-year period during which we committed to make escalating minimum payments with certain termination rights, along with contractual penalties for early termination and (2) a Convertible Note, the balance of which is reduced based on the amount we spend on Google cloud services. We believe our strategic arrangement with Google offers Tempus a distinct competitive advantage because we believe it provides us with attractive cloud and computing rates, along with resources and teams at Google that are aligned to advancing elements of our product roadmap.

Our Three Product Lines

Our products are organized under three product lines, with each product line designed to enable and enhance the others, thereby creating network effects in the markets in which we operate. Our Genomics product line

provides a broad arrange of diagnostic testing services to healthcare providers. Our Data product line monetizes de-identified data that we collect and facilitates enrollment in clinical trials. Our Algos product line leverages our database to provide diagnostics entirely driven by data. Our three product lines and their corresponding product offerings are illustrated in the diagram below:



We believe the interrelated nature of our three product lines is unique. Our business model allows our clients to unlock value from our data, and allows us to monetize that data (in de-identified format), in different ways across our different product lines. We believe these network effects and the compounding impact on the value of each data record in our database enhance our competitive advantages.

Genomics

We launched our Genomics product line to provide a comprehensive suite of Intelligent Diagnostics to healthcare providers, and to generate a steady stream of molecular data to help fuel growth in our Data and Algos product lines. As we run more tests through our laboratories, and as those tests are linked to patient records and clinical outcomes, we grow our data assets and leverage them across our other product lines. We operate two laboratories that provide NGS diagnostics, PCR profiling, and other anatomic and molecular pathology tests, and we expect to operationalize a third laboratory in 2022. We have broad capabilities across genomic, transcriptomic, proteomic, microbiomic, epigenetic, and methylation-based assays, and our laboratory infrastructure allows us to operate as a high-quality, low-cost sequencing provider broadly serving the market. However, unlike traditional laboratory diagnostic tests, our tests can be connected to clinical data, in some manner, which allows our suite of diagnostic tests to be self-learning, becoming more accurate and precise with each test that we run. Furthermore, rather than providing a result based on a single data modality, such as a DNA mutation, our Platform leverages data from other modalities and other patients in an effort to be more comprehensive.

We are generally paid for our Genomics services by billing insurance companies, or patients directly, who reimburse us for the tests we run, or by billing providers or pharmaceutical companies directly. The following diagram represents a summary of our test offerings:

SUMMARY OF TEMPUS' GENOMICS TEST OFFERINGS

Oncology	Neuropsychiatry	Infectious Disease
<p>Tempus xT (2017) 648 gene solid tumor cancer assay</p>	<p>Tempus nP (2019) Pharmacogenomics profiling in neuropsychology</p>	<p>Tempus iC (2020) PCR test for Covid-19</p>
<p>Tempus xF (2018) 105 gene liquid biopsy cancer assay (validating a larger approximately 520 gene version now)</p>		<p>Tempus iD (2020) Pan viral assay for infectious disease (Covid, Influenza, RSV, and others)</p>
<p>Tempus xE (2018) Whole exome cancer assay</p>		
<p>Tempus xG (2021) 52 gene inherited cancer risk germline assay</p>		
<p>Tempus xM (in development) low pass whole genome + methylation for minimal residual disease in cancer (currently in development)</p>		

[Table of Contents](#)

Our Oncology Tests

Our Platform's first application was in oncology, where we have built a versatile portfolio of cancer tests spanning across solid tumors and hematologic malignancies, germline and somatic variants, and tissue and liquid biopsies. Since our inception, our approach to precision oncology has been to provide comprehensive genomic profiling through NGS that enables us to both generate clinically relevant insights that may not be possible with narrower testing approaches, and contribute high-quality molecular information back to providers and to our database. We offer large-panel solid tumor and hematologic testing through multiple assays, with our core clinical assay (xT) offering large panel DNA, RNA full transcriptome, and incidental germline findings through normal blood or saliva analyses. Our current offerings also include liquid biopsy (xF), whole exome (xE), and hereditary cancer risk (xG). We are also currently validating a minimal residual disease assay which, if validated, we expect to launch commercially by the end of 2022. Our oncology tests are differentiated not only because of their breadth, but also because in many cases they are connected to clinical data, which allows us to account for the drugs the patient took historically, how they responded, and for which clinical trials they are actually eligible. We endeavor to not recommend drugs for which a patient has been previously prescribed in a prior line of therapy and failed, and not recommend clinical trials they are not eligible to participate in, based on the inclusion or exclusion criteria of the trial. The following table lists our current oncology test offerings:

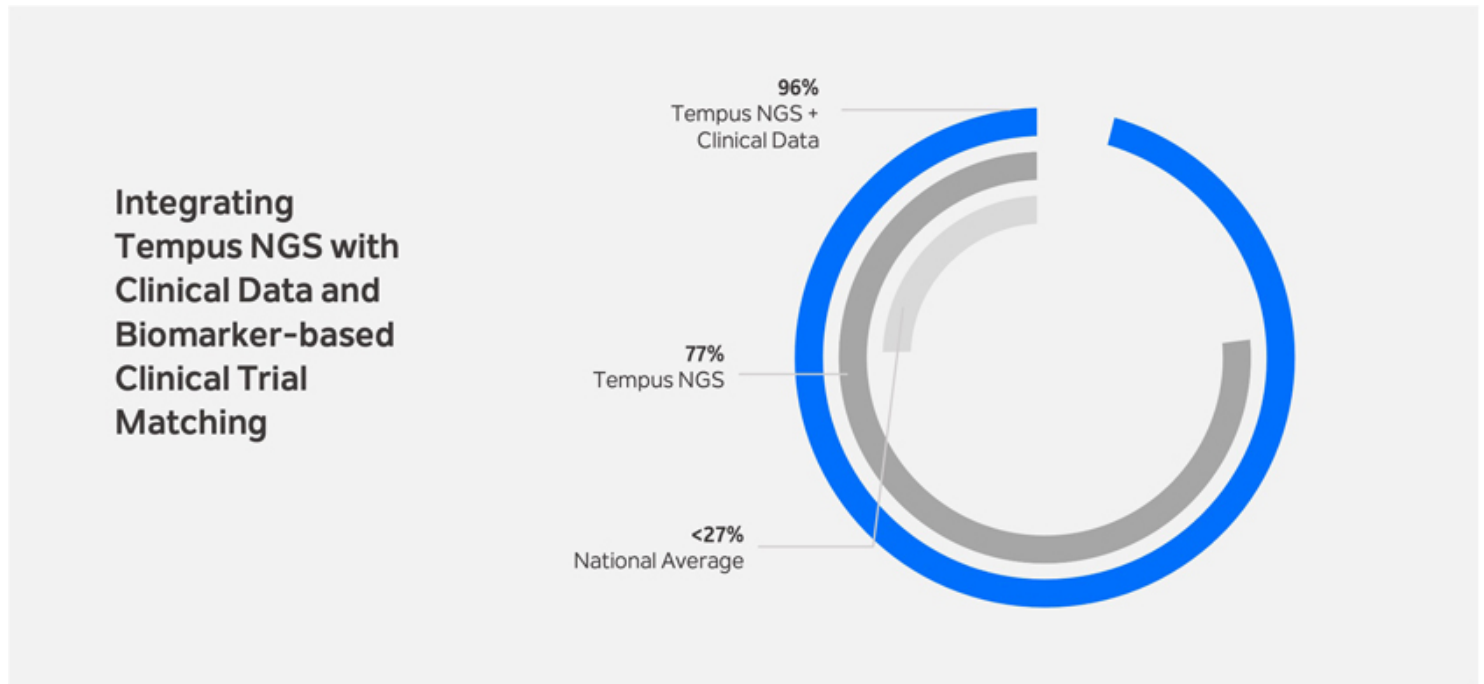
<u>Lab Tests</u>	<u>Launch Year</u>	<u>Description</u>
Oncology tests		
Tempus xT	2017	<ul style="list-style-type: none">• Designed to detect actionable oncologic targets by sequencing tumor tissue samples• Typically associated with incidental germline testing for matched normal saliva or blood samples, when available• Fourth generation test that covers 648 genes at 500x coverage spanning approximately 3.6 Mb of genomic space• Includes full TCR, BCR, and HLA typing for immuno-oncology, or IO, signatures• Offered with full transcriptomic profiling at 50 million paired end reads• Detects TMB, MSI, and fusions• The test has a 10-day quoted turnaround time.• In our analytical validation, we demonstrated sensitivities >98% for SNVs, >92% for rearrangements / fusions, >92% for CNVs and indels, and 99.9% for MSI.• Submitted pre-market approval, or PMA, to the FDA in March 2021 for a variation (xT-Onco) based in substantial part on a recent version of the xT assay
Tempus xE	2018	<ul style="list-style-type: none">• A whole exome cancer assay designed to identify actionable oncologic variants as well as neoantigens across the exome from tissue samples, thus enabling IO applications

[Table of Contents](#)

<u>Lab Tests</u>	<u>Launch Year</u>	<u>Description</u>
		<ul style="list-style-type: none">• Run at 500x coverage for approximately 650 of the most significant oncogenic mutations and 250x depth of coverage for more than 19,000 genes on the panel• Offered with full transcriptomic profiling at 50 million paired end reads. Includes full TCR, BCR, and HLA typing for immuno-oncology, or IO, signatures• Detects TMB, MSI, and fusions
Tempus xF	2018	<ul style="list-style-type: none">• Next-generation liquid biopsy assay covering 105 genes at approximately 20,000x coverage from peripheral blood samples for solid tumors• Typically used for oncogenic and resistance mutations that can be detected in cell free DNA, or cfDNA, from a peripheral blood draw• Currently validating an updated version of assay which covers 523 genes, including bTMB, MSI, additional fusions and CNVs• In our analytical validation, for 0.5% VAF and 30ng of DNA, we demonstrated >99.9% sensitivity for SNVs, 98.8% for indels, >99.9% for CNVs, and 97.4% for rearrangements and fusions. xF also demonstrated 100% sensitivity concordance with Roche AVENIO ctDNA Expanded Kit for indels, CNVs, and rearrangements. We also demonstrated >99.9% specificity for SNVs, indels, and fusions, and 96.2% specificity for CNVs
Tempus xG	2021	<ul style="list-style-type: none">• 52 gene inherited cancer germline panel run off whole exome platform at 75x depth of coverage• Tests hereditary predisposition across common and well-described cancer syndromes such as breast, ovarian, prostate cancer (<i>BRCA1</i>, <i>BRCA2</i>), pancreatic cancer (<i>CDKN2A</i>, <i>PALB2</i>), colorectal cancer (<i>APC</i>, <i>BMPRIA</i>), and Lynch Syndrome (<i>MLH1</i>, <i>MSH2</i>, <i>MSH6</i>, <i>PMS2</i>, <i>EPCAM</i>)• Typically used in patients with a personal and / or family history suggestive of hereditary predisposition to cancer and can guide future diagnostic decisions• The xG+ version is an 88 gene panel covering genes associated with both common and rare hereditary cancers

We are also currently developing xM, a low pass whole genome + methylation for monitoring for cancer recurrence and minimal residual disease.

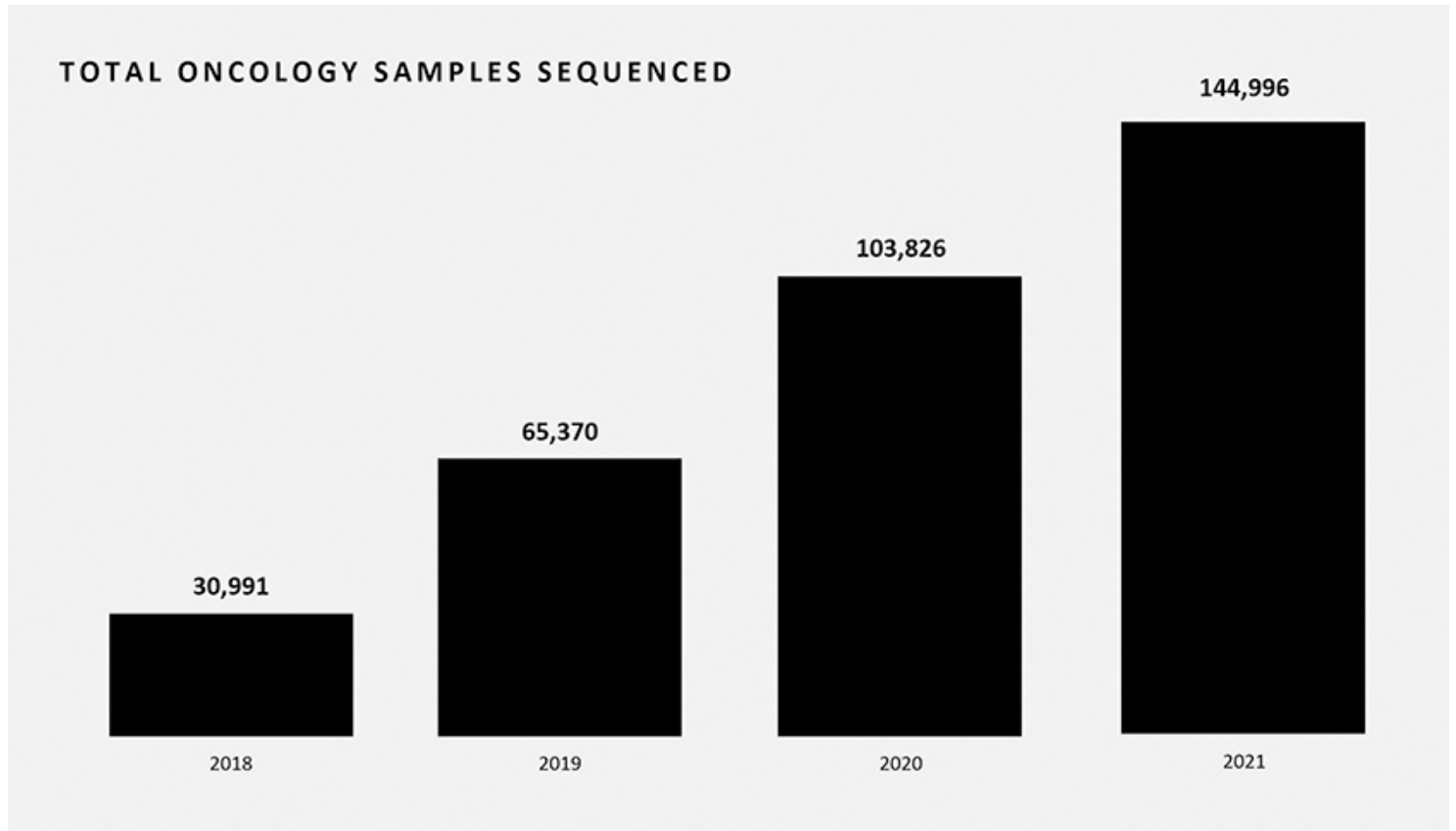
We believe incorporating clinical data in our diagnostic tests has widespread benefits. For example, combining clinical and molecular data resulted in improved therapy matching for patients in a study that we conducted, the results of which were published in Nature Bio in September 2019. In that study, using our sequencing results and matched clinical data from 500 patient samples across a range of tumor types, we observed that 96% of patients could be matched to at least one clinical trial. Approximately 77% of patients were matched to at least one clinical trial based on a gene variant. Of the patients who were not matched to a biomarker-based clinical trial, 19.4% were matched to at least one disease-based clinical trial from clinical data alone.



The results of the Nature Bio study indicated that paired tumor-normal DNA-seq and RNA profiling of patient cancer biopsies yielded high match rates to targeted therapies and clinical trials, and also underscored the value of integrating and contextualizing clinical and molecular data to provide physicians with distilled information regarding their patients' disease and potentially actionable characteristics. In sum, our Platform demonstrated an ability to help maximize personalized therapeutic options for a broader proportion of patients with cancer, which typically cannot be attained through smaller tumor-only DNA-seq panels.

In addition, in a paper we published in Nature Precision Oncology in July 2021, we highlighted the benefits of performing both solid tumor and liquid biopsy profiling. We observed that the concordance of the results of tissue sequencing and liquid testing, even when concurrently profiled, was approximately 70% at most, with both liquid testing and tissue sequencing missing a selected number of potentially actionable mutations. Yet when both are performed, as Tempus often does, the coverage of potentially actionable mutations increases.

We believe the market is recognizing the value of our products and their benefits, as they relate to sequencing both somatic and germline variants, running both solid tumor and liquid biopsies, broadly sequencing RNA in addition to DNA, making available raw files and structured clinical data, and matching the results to clinical data for the patient sequenced. As a result, our clinical volume in oncology rose from approximately 31,000 samples sequenced in 2018 to approximately 145,000 in 2021.



Our Neuropsychology Tests

We entered neuropsychology in 2019. We currently offer our proprietary nP assay for pharmacogenomic testing for patients with psychiatric conditions, such as depression, general anxiety disorder, bipolar disorder, and other relevant diagnoses. Despite the growing prevalence of depression and anxiety, their treatment remains largely the same as it has been for decades. Today, there are dozens of antidepressants that are often prescribed based on trial and error, where psychiatrists alter the dose and class of medications when one fails to work. The difficulties in prescribing medications leads many patients to take the wrong medications, in the wrong dose. Emerging evidence demonstrates that there are molecular mechanisms that suggest one drug, or class of drugs,

[Table of Contents](#)

may work better than another based on the genetic profile of the patient, and our assay is designed to elucidate these differences. The following table describes our nP assay.

Neuropsychology Test

Tempus nP	2019	<ul style="list-style-type: none">• Pharmacogenomic profiling for patients with psychiatric conditions; primarily used for depression• Covers 13 validated genes and approximately 90 variants (e.g., CYP2D6)• Run off whole exome platform at 50x depth of coverage, with an average depth of coverage of approximately 1050x for clinically reported variants*• Uses matrix-assisted laser desorption ionization-time of flight (MALDI-TOF) mass spectrometry to analyze approximately 90 pharmacogenetic variants and cover the exonic regions of approximately 20,000 genes at an average coverage of 50X, with an average depth of coverage of approximately 1050x for clinically reported variants
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In an effort to bring AI to this field, we are not only performing pharmacogenomic profiling, we also regularly collect two additional data modalities: (i) time on therapy data from the patient's EHR (or directly from the ordering physician), and (ii) patient reported outcome, or PRO, data through our TempusPRO mobile application.

TempusPRO is our patient-facing mobile application that collects PRO measurements on a longitudinal basis. We are also capturing passive lifestyle measurements through mobile sensory devices, such as daily steps and minutes spent exercising. These measurements serve as a quantitative, unbiased backbone to the more qualitative and subjective measures that are commonplace in psychiatry. As we continue to advance the field of psychiatric medicine, we believe our Platform is well suited to extend to additional neurological conditions beyond depression, anxiety, and bipolar disorder, including Alzheimer's disease/dementia, epilepsy, ALS, multiple sclerosis, and others.

Our Infectious Disease Tests

We expanded into infectious diseases in 2020 due to the growing focus from healthcare providers and pharmaceutical companies on better understanding, diagnosing, and treating infectious diseases. Our strategy in infectious diseases is to offer a suite of tests that enable a better understanding of infectious disease, to use the data we collect while running tests to contribute to our Platform, and ultimately to make infectious disease tests intelligent over time.

COVID-19 heightened our collective awareness of how we might use our Platform to combat viruses and other pathogens. We believe there is a need in infectious disease for a more data-driven approach to diagnosis, therapy recommendation, and drug development. For example, there is a limited understanding of why some patients have minimal reactions to viruses and others become ill, why certain patients respond to pathogens and corresponding therapeutics differently, and why some patients have severe adverse reactions to certain drugs while others do not. Collecting sufficient data that provides a more complete picture of the pathogen could result in a better understanding of the disease and improve clinical decisions and therapeutic development. Furthermore, the growing problem of antimicrobial resistance might be addressable with data that helps facilitate a better understanding of pathogens and effective therapies.

* Tempus is currently evaluating whether to transition the nP assay from a whole exome platform to a low-pass whole genome (LPWG) platform.

[Table of Contents](#)

We capitalized on the demand for COVID-19 testing to build our database by launching PCR and NGS tests for COVID-19. Our laboratory testing infrastructure and our relationships with a broad customer base enabled us to rapidly scale operations and deliver approximately 2.3 million COVID-19 clinical tests through December 31, 2021. We entered into clinical testing agreements with various clients, including pharmacies, urgent care centers, state departments of health, primary care providers, universities and schools, and corporate clients. In addition, as part of our multimodal data collection efforts, we launched a patient facing mobile application to return results to users and create a portal through which they could elect to contribute their clinical data to Tempus for research purposes.

As COVID-19 testing has materially decreased in the United States in light of the broadly distributed vaccines and changes in CDC guidance as to whom should be tested, we have shifted resources away from COVID-19 testing and do not expect levels of COVID-19 testing to be material to our business going forward. As such, we are focusing our efforts on other infectious diseases areas and on broader respiratory pathogen testing.

Data

Our Data product line facilitates drug discovery and development for pharmaceutical and biotechnology companies through two primary products: Insights and Therapies. We also maintain a growing tumor-derived biological modeling (or organoid) laboratory, which allows us to provide modeling and screening services to our pharmaceutical and biotech clients.

Insights

Historically, the primary means for pharmaceutical and biotechnology companies to build a dataset for drug discovery and development was to run a preclinical study or clinical trial, and to leverage limited datasets such as medical claims data. We believe Tempus is changing the existing paradigm. We launched our Insights product to allow researchers to access large amounts of multimodal healthcare data that historically did not exist at scale in a single consolidated database. We have amassed a large connected dataset, which we organize in near real time across multiple modalities and multiple disease areas, allowing us to work with pharmaceutical and biotechnology companies broadly, from early-stage research and development through commercialization.

For our Insights offering, we license libraries of linked, de-identified clinical, molecular, and imaging data, and provide a suite of analytic and cloud-and-compute tools for discovery, research, development, and other commercial purposes. Our primary customers are pharmaceutical and biotechnology companies. These customers either pay us on a per file basis or through multi-year data licensing agreements to use our de-identified patient database. In 2020, we worked with 16 of the 20 largest public pharmaceutical companies based on 2020 revenue and, as of December 31, 2021, we have signed contracts with a remaining total contract value, or Remaining TCV, of \$428 million. We expect to deliver a majority of this contract value over the next several years.

As of December 31, 2021, Remaining TCV is equal to the total potential value of signed contracts and assumes the exercise of all contract options, all discretionary opt-ins, and no early termination. Remaining TCV includes the total potential value of the company's agreement with AstraZeneca (described in "Description of Capital Stock—Warrant"), which, although listed under the Data product line, could be satisfied by AstraZeneca's purchase of any of the company's products and services. Remaining TCV excludes any revenue recognized to date on these contracts or any future adjustments made to the contractual value as a result of amendments or terminations. Many of our agreements contain termination clauses, including the ability of our counterparty to terminate for convenience, and there can be no guarantee that contracts will not be terminated, that contractual options and discretionary opt-ins will be exercised, or that we will achieve the full amount of potential revenue represented by these contracts. Remaining TCV is not a calculation of revenue and should be viewed independently of revenue and deferred revenue, as Remaining TCV is not intended to be combined with or replace these items. Similarly, Remaining TCV is not a forecast of future revenue, which can be impacted by, among other things, contract start and end dates and the exercise of contractual options. Moreover, Remaining TCV may differ from similarly titled metrics presented by other companies and may not be comparable to such other metrics.

[Table of Contents](#)

We believe we offer a unique value proposition to the industry as a cost-effective source of high-quality and comprehensive data on targeted patient populations. Our data is useful across the oncology drug development value chain, and our biotechnology and pharmaceutical customers are using the data to inform decisions in a variety of discovery and development applications, selected below:

SELECTED DATA APPLICATIONS		
Biomarker Discovery	Clinical Development	Commercialization
Select indications based on biomarker expression Discover novel biomarkers with RNA pathway enrichment scores	Identify combination therapies by correlating response to biomarker status Assess trial feasibility by analyzing impact of inclusion/exclusion criteria	Identify patient populations via assessment of the mutational landscape Identify prognostic indicators with treatment & outcomes data

To illustrate an example of how our data can be applied, in December 2020, we published a peer-reviewed study in ScienceDirect in which we analyzed longitudinal real-world data, or RWD, from a large cohort of patients with breast cancer (n = 4,000) to test whether results were consistent with previous clinical studies and to demonstrate the real-world evidence validity of our database. We also evaluated whole-transcriptome sequencing as a complementary diagnostic tool (n = 400). The conclusions of the study demonstrated that our database mirrored the overall population of patients with breast cancer in the United States, and that near real-time, RWD analyses are feasible in a large, highly heterogeneous database. Furthermore, the study demonstrated that molecular data may aid deficiencies and discrepancies observed from breast cancer clinical RWD.

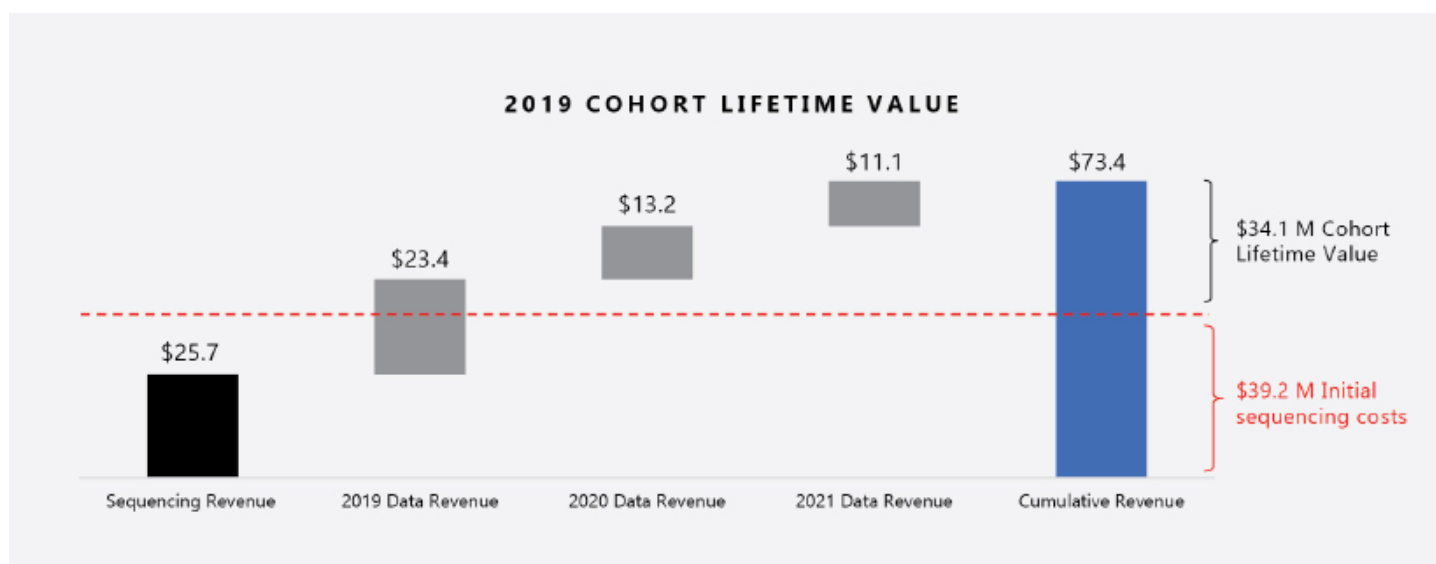
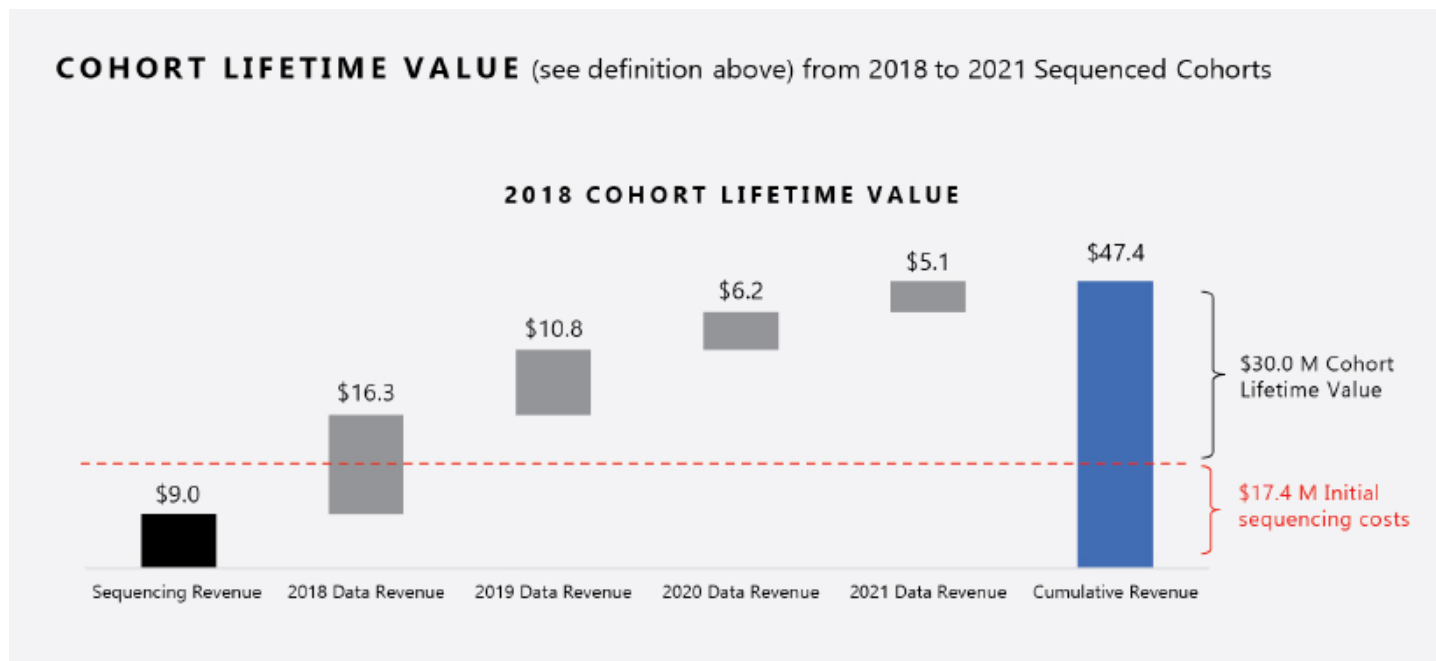
Because many of our data profiles regularly update with clinical outcome and response data over time, the utility of a single de-identified record increases over time. As such, the files we generate by sequencing a patient, when connected to clinical data, are valuable to pharmaceutical and biotechnology companies, as they not only allow users to gain molecular insight into what is happening among cohorts of patients, but they also allow users to track those cohorts over time. As a result, our files behave as if they have a “lifetime value” that increases over time, in a manner similar to a content company where you pay to create content and then monetize the content over time as people subscribe to access the content.

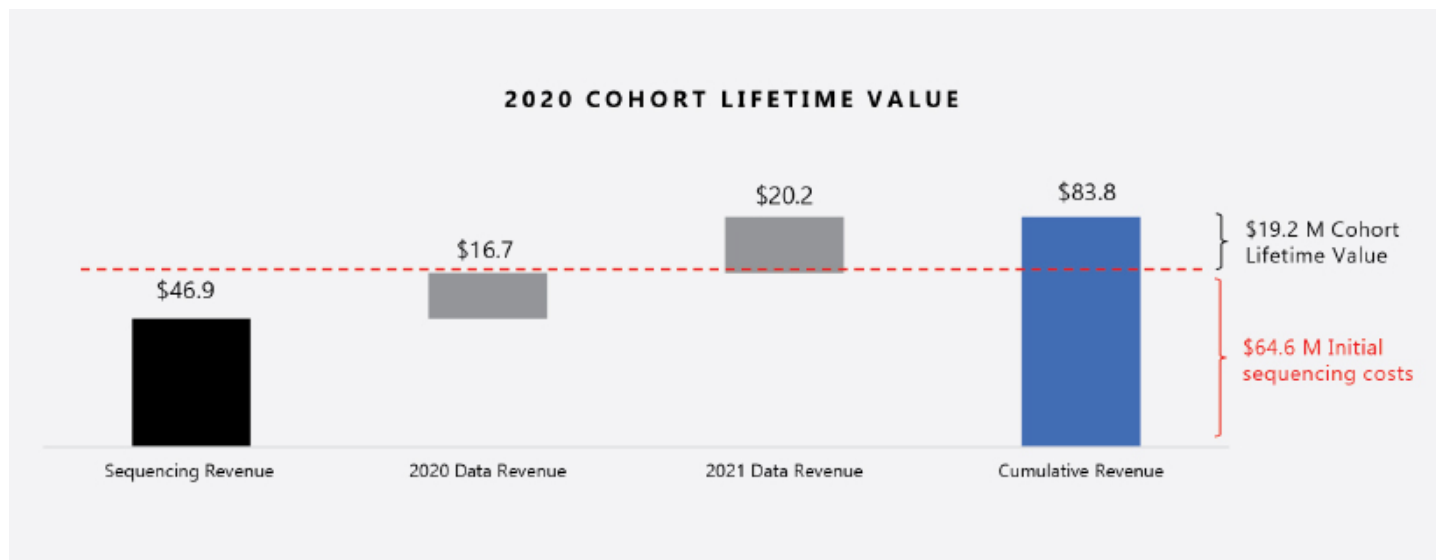
To evaluate the revenue stream in our Data product line, we rely on “Cohort Lifetime Value.” We define “Cohort Lifetime Value” as the cumulative revenue attributable to a specific cohort of de-identified records, including revenue derived both from the initial sequencing (Genomics) and licensing (Data and other), less the initial sequencing costs incurred to generate the data ultimately licensed. Sequencing revenue is a component of genomics revenue in our Consolidated Statement of Operations and differs from total genomics revenue due to other components, including COVID-19 PCR testing and other lab services unrelated to our data business. Data revenue is a component of data and other revenue and represents the revenues recognized in each period attributable to each cohort. Initial sequencing costs are a component of cost of revenue, genomics in our Consolidated Statement of Operations and include laboratory personnel compensation and benefits, as well as the cost of laboratory supplies and consumables, depreciation of laboratory equipment, shipping costs, and certain allocated overhead expenses. Total initial sequencing costs differ from total cost of revenues, genomics due to other components, including costs associated with COVID-19 PCR testing and other lab services unrelated to our data business. Notably, “Cohort Lifetime Value” also does not include costs reported as cost of revenues, data

and other in the Consolidated Statement of Operations. Cost of revenues, data and other were \$7.1 million and \$11.9 million for the years ended December 31, 2020 and 2021, respectively. These costs represent 19.6% and 19.2% of data and other revenue for the years ended December 31, 2020 and 2021, respectively.

In 2018, the first full year that we operated a laboratory, we sequenced samples from approximately 7,500 patients. From that 2018 cohort of sequenced patients, through December 31, 2021, we generated \$47.4 million of combined revenue from sequencing, data licensing of de-identified data derived from those records, and clinical trials matching, which is approximately 5.3 times the revenue we received from sequencing at the onset. The total cost to sequence the 2018 cohort was \$17.4 million, of which \$9.0 million was covered by reimbursement for the corresponding sequencing tests. We then generated \$16.3 million of data revenue from that cohort in 2018, finishing the year with a “Cohort Lifetime Value” of \$7.9 million. As more customers licensed de-identified records from the 2018 cohort in subsequent years, we generated additional revenue in 2019, 2020 and 2021 from the 2018 cohort, and as of December 31, 2021, the 2018 “Cohort Lifetime Value” for this cohort was \$30.0 million. We maintained similar trends for the 2019, 2020 and 2021 cohorts. As of December 31, 2021, the 2019 “Cohort Lifetime Value” was \$34.2 million, the 2020 “Cohort Lifetime Value” was \$19.2 million and the 2021 “Cohort Lifetime Value” was \$17.1 million.

“Cohort Lifetime Value” for the 2018, 2019, 2020 and 2021 data cohorts is illustrated in the graphs below.





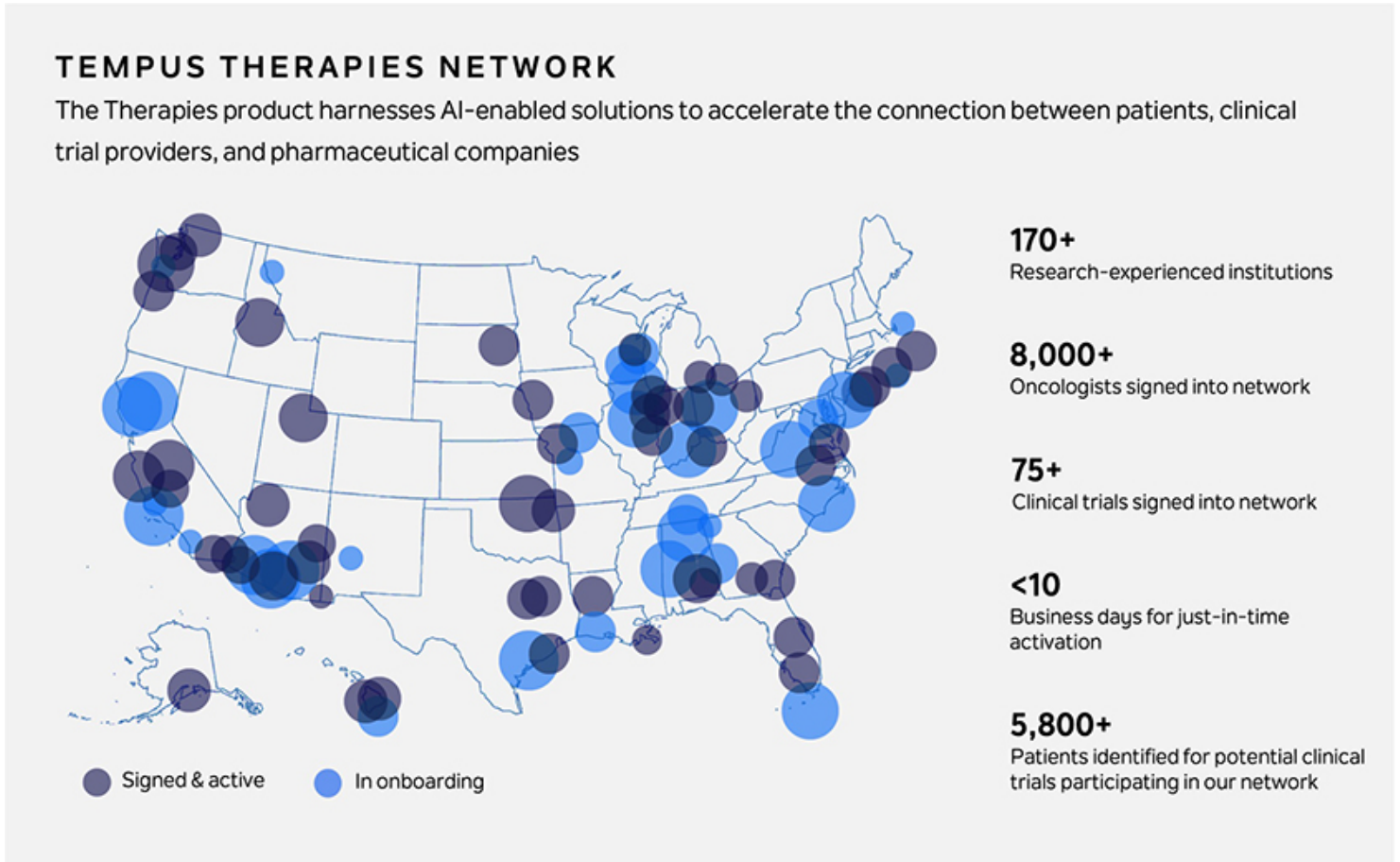
Therapies

Therapies is our second offering within our Data product line and leverages our broad network of oncologists to provide clinical trial matching services for pharmaceutical companies trying to reach hard-to-find and underserved patient populations. Our clinical trial matching product is built on top of our near real-time data feeds and harnesses AI to accelerate the connection between patients, clinical trial providers, and clinical trial sponsors. We empower both oncologists to help patients find clinical trials and pharmaceutical companies to populate their trials. We generate revenue from both matching a patient to the trial (through notices we send to physicians alerting them of potential trials that are a fit for their patients), and from the patient actually enrolling in the trial.

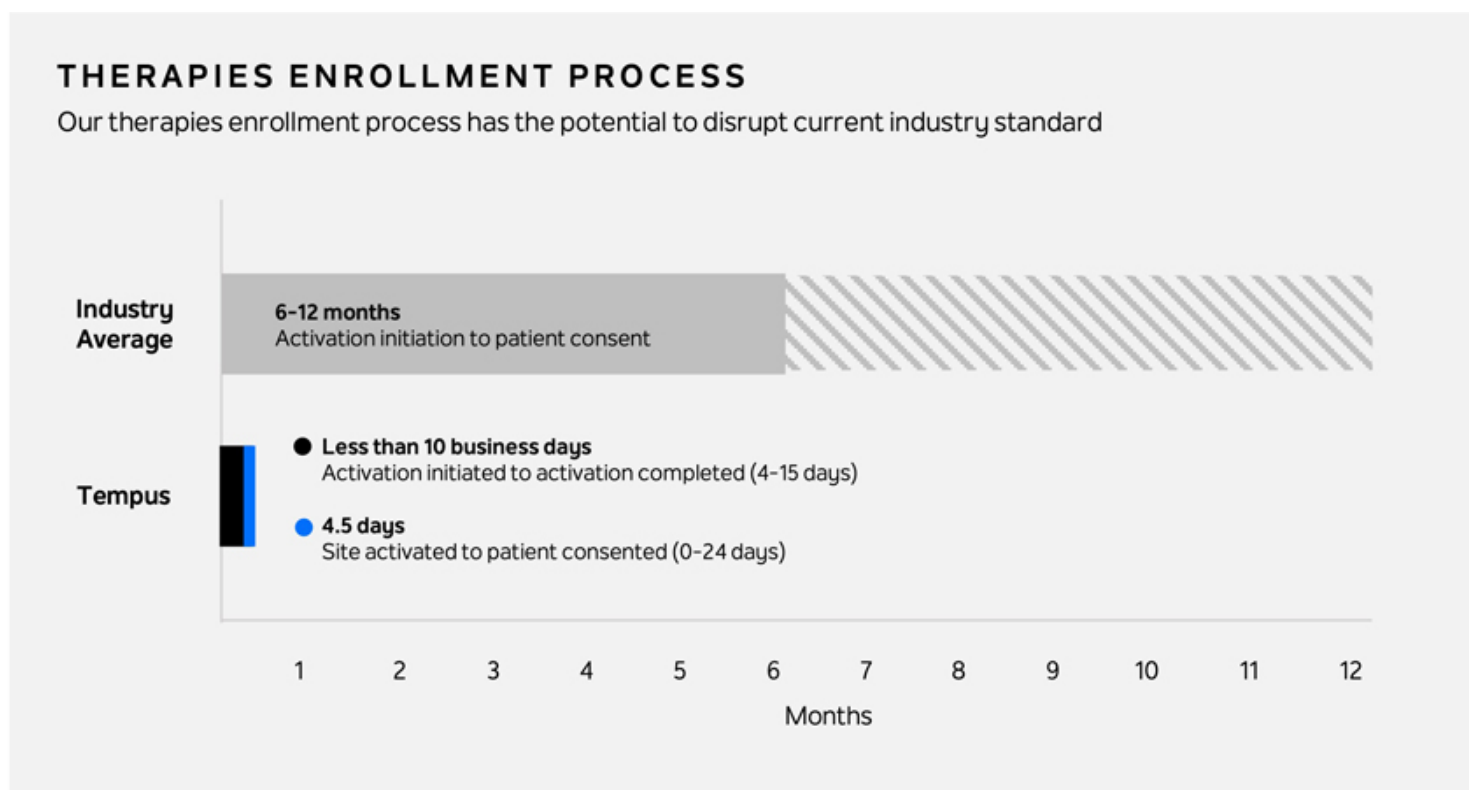
Our Therapies product is a bold initiative that we do not believe has been implemented at scale in the United States by any other organization. We are endeavoring to create a just-in-time network across a wide variety of academic medical centers and community providers, that can support hundreds or even thousands of trials, in which the administrative and logistical foundation is uniform across the entire network. This network allows us to identify a patient that is a match for a targeted trial and get that patient enrolled within days, even if the trial was not previously open at the hospital (assuming consent of the trial sponsor), anywhere in the United States. Prior to Tempus, we believe it would have been virtually impossible to even attempt to build this type of just-in-time program across oncology, as the required ingredients for success are unique to our Platform, namely: (i) a large genomic sequencing business that is widely adopted and allows for the identification of patients that are molecular matches to trials; (ii) the ability to structure clinical data for those patients in near real time to filter for inclusion and exclusion criteria; (iii) direct pipelines allowing data to be transferred to and from the

laboratory and provider; and (iv) an analytic engine able to stratify patients and follow each unique patient journey ensuring that patients actually enroll in the studies.

Our clinical trial matching product is called the TIME Trial® program, which we launched in June of 2019. Since its introduction, this program has gained significant traction and as of December 31, 2021, more than 180 provider networks and research institutions, representing more than 8,100 oncologists, have signed up to join the program. As of December 31, 2021, more than 1,500 oncologists were fully enrolled, more than 75 clinical trials were onboarded and active, and more than 5,800 patients were identified for potential enrollment into clinical trials in our network.

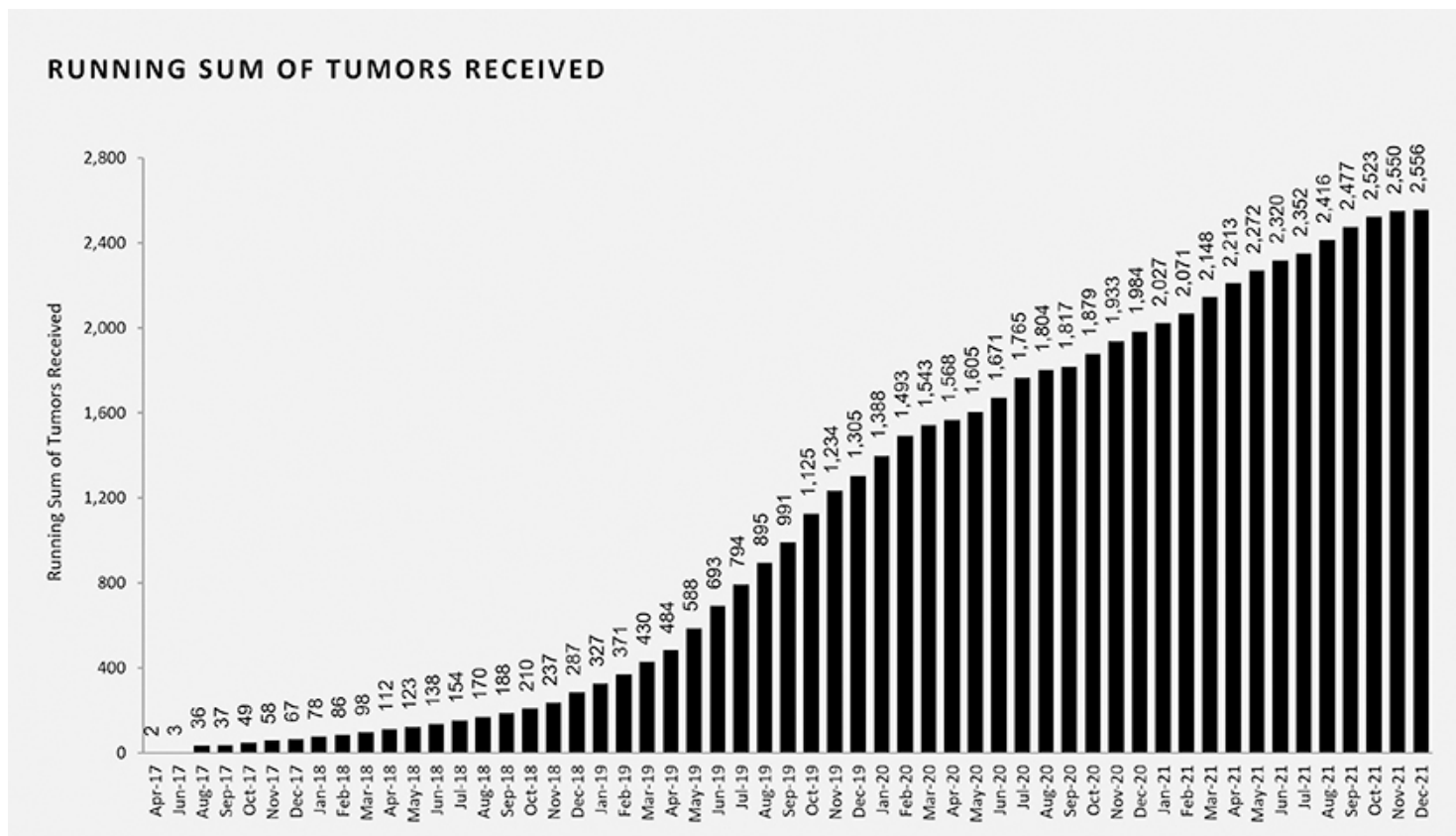


One of the primary benefits of our Therapies product is our ability to facilitate the initiation of a clinical trial in a new location in a short amount of time. Third-party research suggests that it takes 6-12 months, on average, to initiate a new trial site for an ongoing clinical trial in the United States. We have been able to substantially streamline this process by leveraging technology and introducing a standard methodology, with activation of new sites through our Therapies product taking 9 days on average between April 2020 and December 2021. A comparison of our average time from site initiation to patient consent with the industry average is below:



Tumor Derived Biological Modeling—Organoids

In addition to our efforts to collect vast amounts of phenotypic, morphologic, and molecular data, we have built a large, biological modeling lab that allows us to test various theories in vitro through our large repository of tumor-derived organoids, or Organoids, and to perform drug screening for our various life sciences clients. Many of our Organoids are fully characterized and sequenced using our NGS panels, providing genomic and transcriptomic data for our models, allowing us to explore various hypotheses that enhance our data. Examples of hypotheses we are able to test in our Organoid lab include: (i) which therapeutics are most effective; (ii) differential levels of drug response by tumor type, genomic profile, or other targeted attributes; (iii) discovery of RNA signatures; (iv) attributes of responders and non-responders; and (v) response rates in therapy-resistant models. We work with numerous collaborators including biotechnology companies, pharmaceutical companies, academic institutions, and government labs. Since 2017, we have scaled our sample collection efforts materially, as shown in the graphic below.



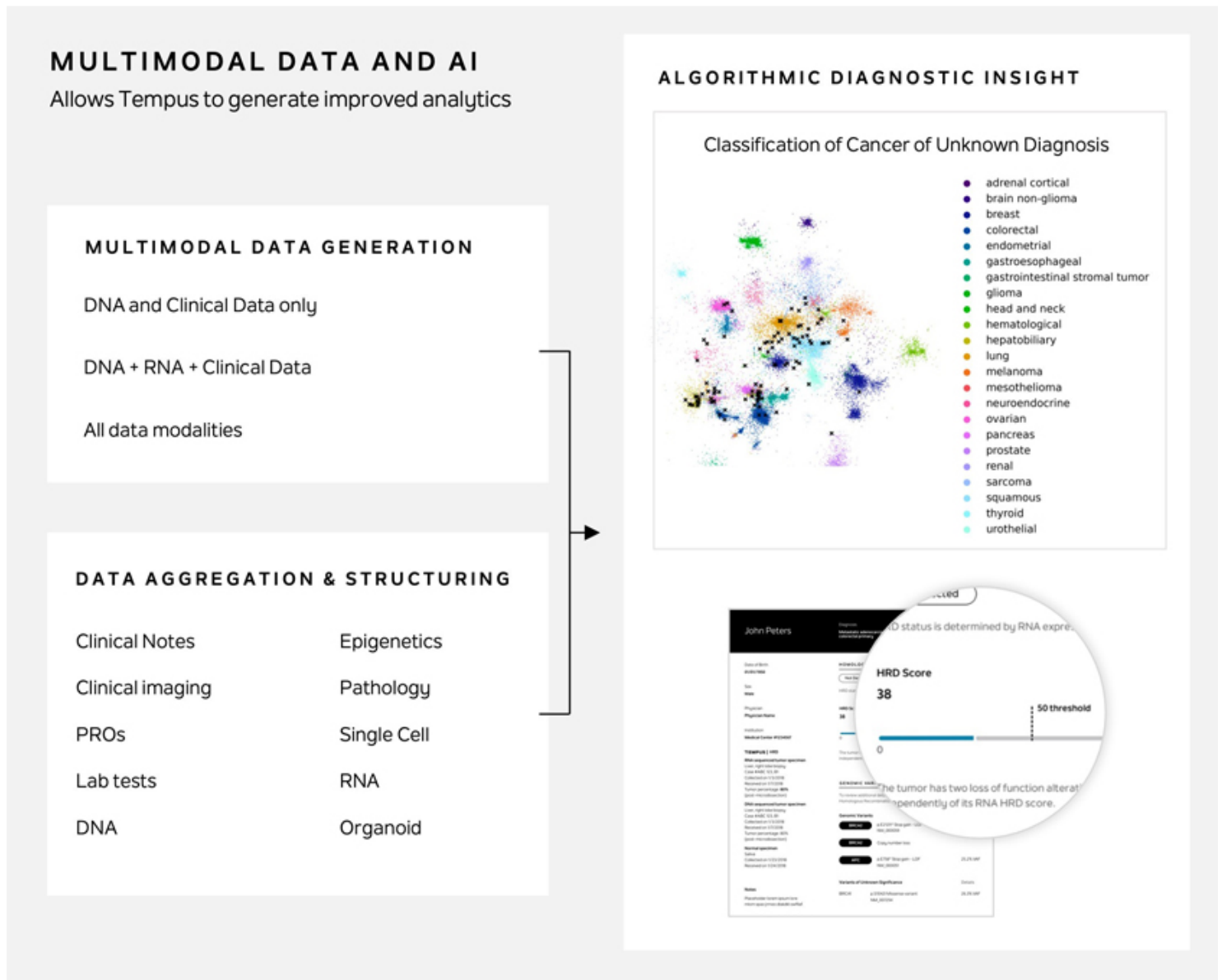
These samples cover a wide range of cancer subtypes, allowing us to work on comprehensive drug screening applications across multiple epithelial based tumor types, such as breast, lung, colorectal, and pancreatic. One of the goals of this screening is to predict a series of therapeutic responses in our Organoids and then test whether or not patients are experiencing similar responses in the clinical setting.

We view biological models as another form of data. Our efforts to grow Organoids are part of our overall strategy to leverage the best of systems biology along with the best of AI to collect the requisite data needed to produce answers broadly throughout healthcare.

Algos

The vastness of our dataset creates an opportunity to use data to algorithmically diagnose and treat patients. Our newest product line, Algos, is focused on developing diagnostics that are algorithmic in nature. We use data the same way legacy diagnostic companies use chemistry in the battle against disease, seeking to improve patient care by learning from all the patients who have come before, and tailoring test results based on each patient’s unique profile. Our Algos can be run without the need for additional chemistry or biology; they are simply 0’s and 1’s running on digitized data derived from a laboratory test. Algos leverage AI-driven insights to produce clinically validated and actionable information for physicians. For example, algorithmic diagnostics that integrate multimodal data can be used to create a more accurate risk profile for patients, leading to improved outcomes and reduced cost. Our repository of multimodal data allows us to find associations and patterns that are largely invisible through a single data modality, but readily apparent when combined. In addition, we find the strength of our analytic models, and our ability to deploy them clinically, improves as we add additional datasets.

The example diagram below represents how algorithm-based diagnostics work and the value of multimodal data as it relates to improved analytics:



Algorithm-based diagnostics are already being used in healthcare, but are not widespread. For example, algorithms exist today that leverage EHR data and lab results to predict early onset of hospital-borne infections, but these tools are still in the very early stages of adoption and validation. While Algos today represent only a small proportion of the diagnostics market, we expect their adoption to grow substantially in the future. We believe Algos represent a significant long-term opportunity that may be substantially larger than our other existing product lines. We believe our ability to launch Algos at scale is a key differentiator of our Platform.

[Table of Contents](#)

Our Algos Portfolio

We believe our robust, multimodal dataset creates an opportunity for Algos that otherwise would not be possible and allows us to build AI models at scale, clinically validate them, and deploy the resulting Algos into clinical practice. As of December 31, 2021, we have three commercialized Algos, and we have approximately 24 more in various stages of development. Some Algos will likely yield little to no reimbursement until their clinical utility is established, and some may obtain reimbursement at prevailing rates for comparable tests. Through December 31, 2021 our Algos have been ordered more than 13,600 times and have generated approximately \$100 per test on average. Eventually, we would like to launch hundreds, if not thousands, of Algos. The following table represents our current Algos products, as well as our nearer term Algos in the pipeline:

<u>Algo</u>	<u>Launch Year</u>	<u>Description</u>
Oncology		
Tumor Origin (“TO”) Test	2021	<ul style="list-style-type: none">• Predicts the site of origin for cancer patients whose primary tumor site is unknown using tumor RNA expression results.• Intended use of the TO test is for cancers of unknown primary, or CUPs, and may help clinicians make more informed decisions where other clinical information like imaging and immunohistochemistry results do not provide a definitive diagnosis.• Uses information from analysis of nucleic acids by NGS performed as part of a separately ordered genomic or transcriptomic test.• Built using a large internal database of more than 20,000 annotated tumors with transcriptomic molecular data. By comparing the molecular profile (transcriptome) of the patient’s cancer with profiles of other cancers in our database, we can help pinpoint the origin of the patient’s cancer, potentially helping to inform the course of therapy.• For the year ended December 31, 2021 ordered on approximately 7% of our solid tumor profiles.
Homologous Recombination Deficiency (“HRD”) Test	2020	<ul style="list-style-type: none">• A DNA-based algorithmic test that helps identify if a patient has HRD, providing a comprehensive view into a patient’s ability to repair double-stranded DNA breaks.• HRD status can be used to identify patients who may be sensitive to PARP inhibitors and/or platinum-based chemotherapy.• Takes into account results from our solid tumor profiling, giving a full view into commonly mutated genes in the HR-pathway, along with a genome wide LOH score, giving a clinician a complete view of HRD status.• Can be ordered across all major cancer subtypes and does not require additional tissue from the patient.• Currently incorporating RNA into a second version of the algorithm, which is intended to improve prediction

[Table of Contents](#)

<u>Algo</u>	<u>Launch Year</u>	<u>Description</u>
		accuracy and increase the percentage of tumors that the algorithm can be run on.
		<ul style="list-style-type: none">For the year ended December 31, 2021, ordered on approximately 18% of all solid tumor orders.
Dihydropyrimidine Dehydrogenase Deficiency (“DPYD”) Test	2021	<ul style="list-style-type: none">Identifies certain alterations in the <i>DPYD</i> gene, which may be associated with a patient’s potential toxicity to 5-FU/Capecitabine chemotherapy based on the associated drug labeling and guidelines from the Clinical Pharmacogenomics Implementation Consortium (CPIC).Provides insight into the potential likelihood of a patient developing severe or even fatal toxicity of 5-FU/Capecitabine chemotherapy by covering five SNVs in <i>DPYD</i> genes, providing a more complete patient profile. According to CPIC, 5-7% of patients test positive for DPD deficiency and should be considered for monitoring or dose reduction.This algorithm uses sequencing data generated as a part of a separately-ordered Tempus xT Solid Tumor + Normal test.Tempus DPYD is available pan-cancer although it is most relevant in colorectal, breast, pancreatic and GI cancer patients who are being considered for treatment with 5-FU/Capecitabine chemotherapy.

<u>Algo</u>	<u>Launch Year</u>	<u>Description</u>
Cardiology		
Atrial Fibrillation Test	2022 expected launch	<ul style="list-style-type: none">We have developed an algorithm designed to predict AFib from a normal ECG for certain populations.About 3.5% of patients who receive ECGs appear not to have AFib but will develop AFib, acute coronary syndrome, or similar condition within one year. This Algo is designed to predict major cardiac trauma and stroke risk from these normal ECG results.The Tempus AFib test received FDA breakthrough designation in March 2021 for patients 40 years of age and older, without pre-existing or concurrent AFib or atrial flutter, and who are at elevated risk of stroke based on a commonly used clinical stroke risk assessment tool (i.e., CHA₂DS₂-VASc score of ≥ 4).We are also advancing Algos that are designed to predict aortic stenosis, and we are working on other disease areas within cardiology, such as low ejection fraction and familial hypercholesterolemia.

Our Algos Collaboration with Geisinger

Heart disease is the leading cause of death in the United States. About 630,000 Americans die from heart disease annually, with 11.7% of American adults diagnosed with heart disease and millions of patients suffering

[Table of Contents](#)

from undiagnosed, life-threatening, yet highly treatable conditions such as AFib, cardiomyopathy, and valvular heart disease, to name a few. Tempus is working on solutions to find, diagnose, and help treat these patients earlier in order to improve patient outcomes, using routinely generated clinical data, such as data from a 12-lead ECG, a widely used and easily acquired medical test that measures the electrical activity of the heart, to screen patients who might be at high risk and help navigate them to the appropriate interventional therapy.

Our first cardiology products in development are a suite of algorithms that assess an individual's risk of undiagnosed disease from an ECG. The FDA recently granted Tempus breakthrough status for our first ECG software device, which is designed to identify patients at high risk of developing AFib in certain populations (patients 40 years of age and older, without pre-existing or concurrent AFib or atrial flutter, and who are at elevated risk of stroke based on a commonly used clinical stroke risk assessment tool (i.e., CHA₂DS₂-VASc score of ≥ 4)).

Our work in cardiology has been accelerated by a strategic collaboration with a multidisciplinary cardiovascular research team at Geisinger that leverages 25 years of valuable EHR data. We hold a perpetual, royalty-bearing license from Geisinger to build algorithmic models and commercialize a de-identified dataset of approximately 3.2 million ECGs, across approximately 600,000 patients, with decades of longitudinal clinical data, including outcome and response data.

In parallel, we are working to build out a network of healthcare systems and clinical providers to deploy these clinical algorithms at scale. We believe we are well positioned to build such a network by leveraging the existing technical integrations in place through our current product lines in oncology and neurology.

Customer Case Studies: Aligning the Interests of Key Stakeholders

We designed our Platform to help unlock data from existing silos and facilitate data exchanges across healthcare providers. We believe our technological advancements, deep relationships with providers, and rapid commercial adoption demonstrate the value our Platform creates for the healthcare ecosystem. We benefit from a flywheel effect; the more data we collect, the smarter our tests become, the more applications we launch, the more physicians join our network, further growing our database, making our tests smarter for clinicians and our database more valuable for researchers.

We describe below select case studies that demonstrate the value we deliver to the healthcare ecosystem, with the ultimate goal of helping patients and improving clinical outcomes.

Healthcare Provider and Patient Case Study

Our Platform is designed to help raise the standard of care in precision medicine by enabling physicians to make data-driven decisions. Physicians use our Intelligent Diagnostics, software solutions, and analytic support tools to bring clinically actionable insights to genetic analysis. We see the power of our Platform both in its widespread adoption and, most importantly, the impact it has on patients.

A 50-year old female patient was diagnosed with metastatic gastric cancer. The average life expectancy for someone with stage IV gastric cancer is less than one year, with approximately 5% of patients surviving for five years. The patient's tumor harbored a mutation in a gene indicating that Epstein-Barr virus, or EBV, was involved in the pathogenesis. The tumor mutational burden was not high, but the tumor EBV made the patient a candidate for immunotherapy. Tempus' NGS tests were used to evaluate the patient's suitability for a cancer vaccine clinical trial, and two distinct aspects of Tempus' tests led the treating physician to pursue new treatment recommendations. First, Tempus sequencing used paired tumor and normal specimens to make more accurate somatic mutation calls. Thus, Tempus' test identified neoantigens that could be targeted by the immune system, while excluding germline variants of unknown significance that the immune system would not recognize as foreign. Second, Tempus used whole transcriptome RNA sequencing data to evaluate whether the neoantigens

detected from the patient's DNA were expressed in the cell. Ultimately, after evaluation for the vaccine trial, the treating physician recommended checkpoint inhibitor immunotherapy. While the patient responded well to immunotherapy, eventually side effects caused her to seek other treatment modalities. Additional testing identified a mutation downstream, which was used to match the patient into a clinical trial for an ERK inhibitor. Two other mutations indicating possible response to off-label therapies were also found, and the treating physician would be able to evaluate those therapies in the event of treatment failure.

Pharmaceutical and Biotechnology Customers: Insights Case Study

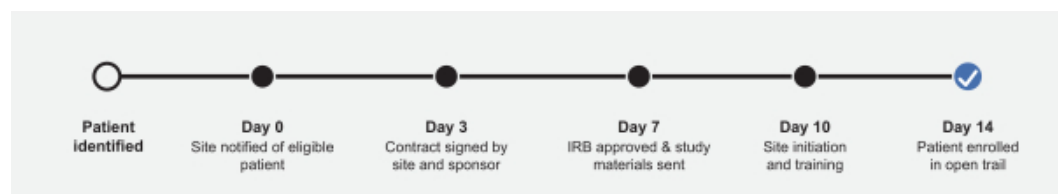
We work with pharmaceutical and biotechnology companies in a number of ways, including (i) licensing de-identified data libraries on a one-time or limited duration basis; (ii) licensing de-identified data as part of a multi-year subscription; (iii) performing sequencing services for clinical trials on a bespoke basis or as part of a companion diagnostic, or CDx, claim; (iv) growing patient derived biological models (Organoids) to allow for high-throughput drug screening; and (v) helping companies identify and enroll patients for their clinical trials. Some companies may leverage one of our products, while our relationships with others are more comprehensive.

Genmab is an example of a pharmaceutical company that has used many of our products and services. We signed a strategic collaboration with Genmab to help identify novel molecular and immune targets in cancer indications of interest. One aspect of the collaboration is a shared interest in developing new treatments for patients with pancreatic cancer. Tempus and Genmab data scientists collaborated to explore multiple indications in an effort to validate biomarkers and accelerate research and development using Tempus' multimodal datasets. We analyzed de-identified data derived from over 2,000 pancreatic cancer patients with comprehensive DNA sequencing, full transcriptomic sequencing, longitudinal EHR data, and digital pathology slides to fuel their discovery efforts. We believe comparable multimodal datasets of this depth and breadth have not previously been assembled for pancreatic cancer. Fueled with a unique and larger dataset, computational biologists and data scientists from both organizations identified for further assessment select subtype-specific surfaceome gene targets that were highly expressed in pancreatic cancer samples but lowly expressed in normal tissue. Ultimately, several hundred potential drug discovery targets were identified and are currently being assessed by Genmab using antibody databases, cell-type analyses, immune infiltration, and biological mechanism pathway analyses. The Genmab collaboration demonstrates how Tempus can work as a partner in the target identification and validation process and highlights the valuable insights that can be garnered using Tempus' data. With the shared goal to bring novel drugs to patients in need, Tempus is entitled to receive milestone and royalty payments for programs that advance through clinical development under this collaboration.

Pharmaceutical and Biotechnology Customers: Therapies Case Study

We have created a dynamic marketplace for biopharmaceutical companies to leverage our data to identify eligible patients and activate appropriate sites to increase access to molecularly targeted clinical trials. We believe our offering is well suited for identifying patients for targeted trials. To detect specific mutations that may be the subject of a clinical trial, we offer solid tumor and liquid biopsy NGS panels that are able to detect specific molecular markers; however, we can also match patients tested through other sequencing companies via our direct EHR or clinical database integrations.

When we identify a patient who meets the criteria of a participating clinical trial at one of our TIME Trial® program sites, we inform the patient's treating physician of the trial and if the trial sponsor consents, we can rapidly activate the trial locally on-site. We have been able to substantially streamline the site activation process by leveraging technology and introducing a standard methodology, with Just-in-TIME activations taking nine days on average between April 2020 and December 2021.



The TIME Trial® program has national coverage, including numerous underserved community oncology clinics, allowing us to reach cancer patients who previously did not have access to investigational therapies.

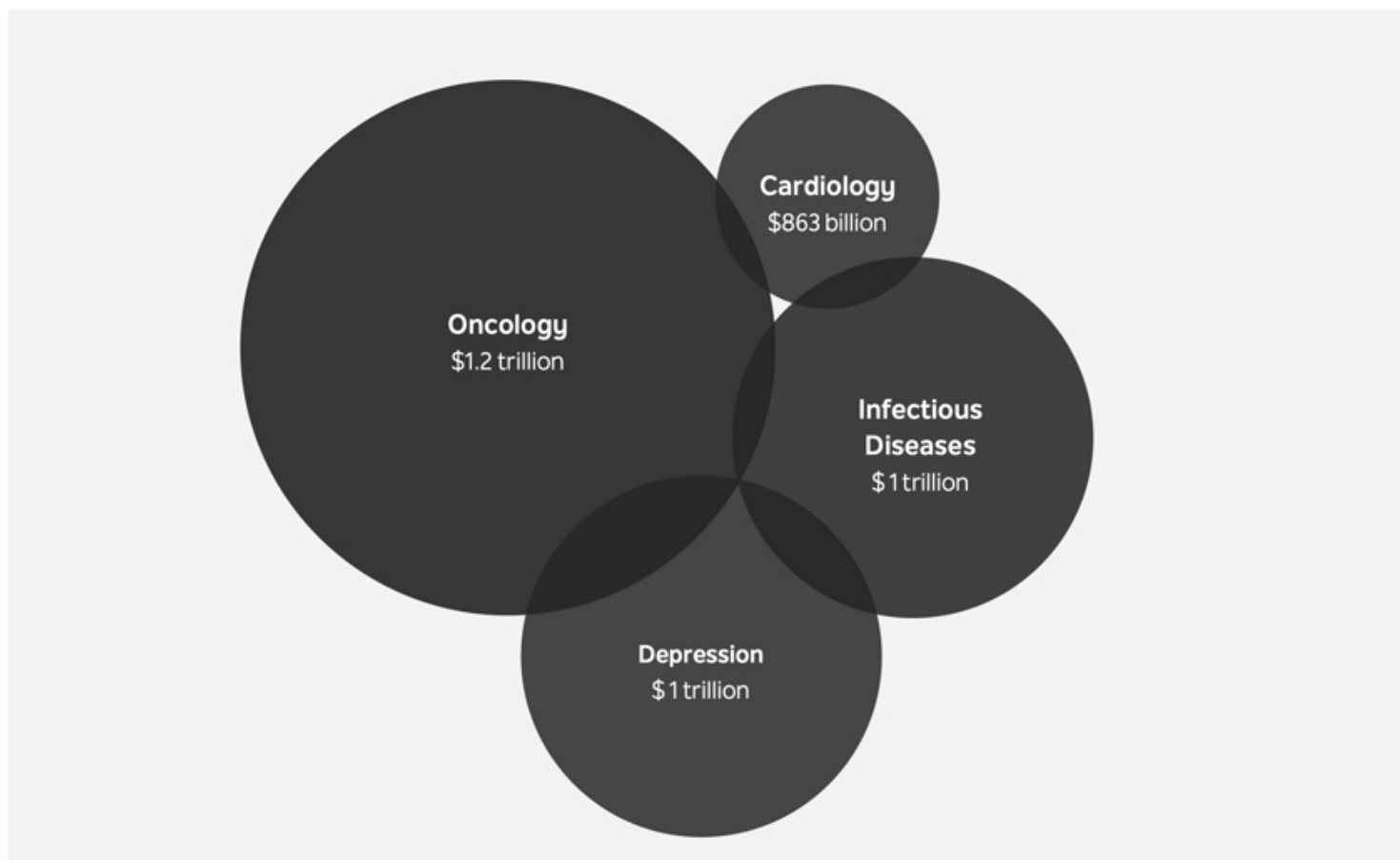
Sermonix is a powerful example of the potential for our Therapies product to expand access to clinical trials and identify hard-to-reach patients. Sermonix, a pharmaceutical company focused on women’s oncology, opened a biomarker-driven trial and partnered with Tempus to identify ESR1-positive breast cancer patients. According to the Tempus database of de-identified patient data, ESR1 mutations develop in approximately 14% of all breast cancers. Before engaging Tempus, Sermonix targeted enrolling 24 patients in 18 months and estimated study completion in October 2022.

After Sermonix enrolled in the Tempus TIME Trial® program, we were able to screen and enroll the first patient in September 2020, within weeks of the trial opening. Within the first month, we activated five TIME Trial® sites before the contract research organization, or CRO, with whom Sermonix was working was able to activate its first site. Ultimately, Tempus helped Sermonix activate ten new trial sites through the TIME Trial® program in an average of ten business days for each site. By comparison, it took on average 230 days for the CRO to open each new site. Tempus enrolled 14 of the ultimately 29 patients in the study, and helped shorten the full enrollment time down to ten months.

Our Market Opportunity

We believe our Platform’s impact on healthcare could be profound, and that quantifying our potential market opportunity is challenging, especially for opportunities like Algos that are in their infancy. Our Platform is particularly well suited when there exists both heterogeneous conditions that make up a diseased population and a variety of prescribed therapeutics or therapeutic pathways, often based on trial and error. When these conditions exist, we believe technology and AI have the potential to facilitate precision medicine through data associations that substantially reduce the guesswork associated with which drug to prescribe, in what amount, and in which order. We are currently focused on oncology, neuropsychology and specifically depression, cardiology and infectious diseases, in which there is over \$4 trillion of economic burden according to publicly available sources.

Within these markets, our Platform addresses both the clinical diagnostic testing market as well as the market for therapeutic research and development. Our Genomics product line targets an addressable market opportunity for diagnostic testing services that we estimate at over \$70 billion across oncology and neuropsychology. Our Data product line operates within a market in which life sciences companies spent an estimated \$219 billion in 2020 on research and development according to Evaluate Pharma, and addresses needs within the \$38 billion clinical trial services market, the \$46 billion market for biomarker discovery, and the \$29 billion market for “real world evidence”, according to Mordor Intelligence and our internal estimates. We believe that the potential market opportunity for our Algos product line could be substantially larger than our other product lines combined.



Genomics Product Line Market Opportunity

Our automated lab infrastructure is capable of a variety of testing modalities and applications, spanning both anatomic and molecular diagnostics. We believe this infrastructure will enable us to address a wide range of emerging testing applications. We are currently focused on both liquid and tissue molecular testing in oncology, as well as tests for neuropsychology and infectious disease. In oncology alone, the market for NGS sequencing is expected to grow substantially over the next several decades.

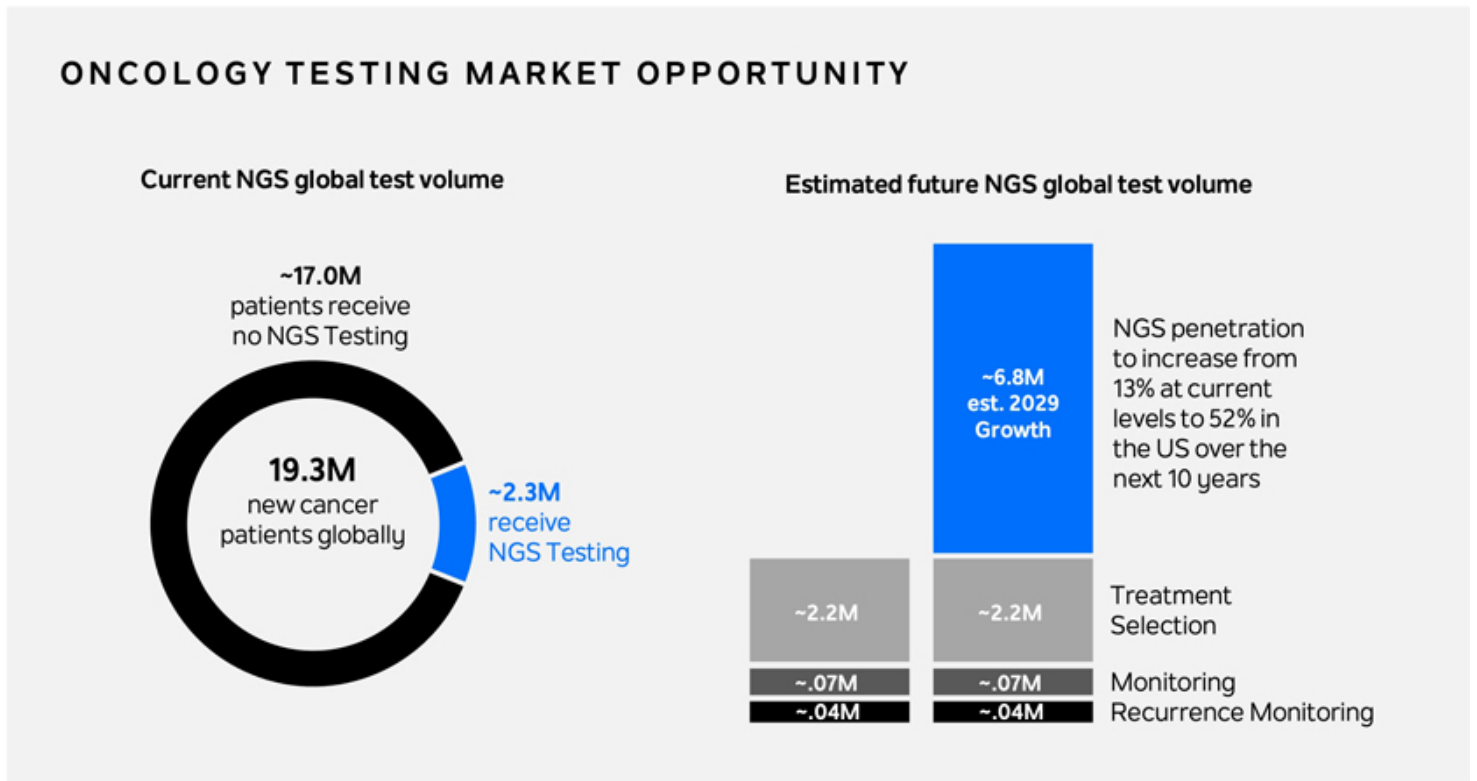
Oncology Testing Market Opportunity

At present, we offer three main assays in cancer, including solid tumor profiling, liquid biopsy, and inherited cancer risk screening, and expect to commercialize our fourth assay for cancer recurrence monitoring and measuring minimal residual disease in 2022. We believe our assays provide a comprehensive and holistic range of options for physicians and patients. Over time, we anticipate being able to address other emerging NGS oncology markets, such as early disease screening, as our most recent cancer recurrence and MRD assay (xM) is based on low pass whole genome plus methylation technology, an approach that other companies have used in early detection and disease monitoring.

We believe the oncology testing market is underpenetrated and represents an estimated \$60 billion annual global market opportunity across the following testing applications on which we are focused.

Therapy selection: We address the market for therapy selection with our current tissue and liquid biopsy assay offerings and immunohistochemistry staining. We believe that NGS is increasingly becoming the standard of care to help physicians choose a therapy for their cancer patients across multiple cancer types. There were approximately 19.3 million patients estimated to be newly diagnosed with cancer globally in 2020 according to GLOBOCAN, and NGS was performed on only 2.3 million of these patients according to our estimates. Genomic markers are connected to FDA approved therapeutics for cancers including breast, cervical, cholangiocarcinoma, colorectal, skin, esophageal, stomach, head and neck, leukemia, certain other blood cancers,

ovarian, prostate, sarcoma, melanoma, thyroid and urothelial. Moreover, there are additional FDA approved therapeutics that are pan-cancer in nature, for which the therapeutic agent may provide treatment options for patients with the identified targeted biomarker, no matter what type of cancer. In addition to newly diagnosed cancer patients, there is also the opportunity for NGS testing to profile patients participating in clinical trials. According to ClinicalTrials.gov, there are 107 immuno-oncology and 3,005 targeted oncology therapy programs ongoing with a total of 539,520 patients enrolled. Combined, we estimate that therapy selection accounted for 20 million tests globally in 2020 and believe that this will grow substantially as patients may be tested multiple times in the future to inform therapy. According to the National Cancer Institute, an estimated 1.8 million patients were diagnosed with new cancer in the United States in 2020.



Monitoring: We anticipate launching our liquid biopsy test for cancer recurrence monitoring and minimal residual disease in 2022. While this market opportunity is currently emerging, we anticipate that newly diagnosed cancer patients would benefit from a test that could monitor for cancer recurrence following surgical resection or first line therapy as well as monitor for minimal residual disease (MRD) while on therapy. For those estimated 19.3 million newly diagnosed cancer patients globally in 2020 according to GLOBOCAN, we believe that multiple tests within the first year following treatment to monitor for recurrence and minimal residual disease could improve clinical outcomes and become the standard of care for many subtypes in the future. In addition, we believe that a test to monitor for recurrence over a longer time period would also benefit a subset of cancer survivors that are at high risk of recurrence. According to our estimates, a substantial number of cancer patients across all cancers will recur within their lifetime and we estimate a higher percentage are at high risk of recurrence. There were approximately 43.8 million cancer survivors in 2018 globally that were diagnosed within the five years previous to 2018 and there are approximately 17 million cancer survivors in the United States in 2018. We anticipate that a majority of these patients would benefit from a periodic test over time to test for cancer recurrence and believe it may become standard to test these patients regularly as a means of monitoring their disease progression. Based on certain of our estimates and assumptions, we believe that in newly diagnosed patients alone our recurrence monitoring and minimal residual disease test had a more than 50 million test annual global opportunity in 2020.

Neuropsychology Market Opportunity

We estimate the market opportunity for our nP pharmacogenetic test to inform therapy for patients with depression, anxiety, and bipolar disorder was approximately \$10 billion in 2020. In 2017, an estimated 12.5 million patients received treatment for major depressive disorder, or MDD, according to data provided by the National Institute of Mental Health. We believe the opportunity to bring AI to neuropsychology is significant and we are at the early stage of the market evolution. It is estimated that 40 million Americans alone suffer from anxiety, and over 16 million Americans have had an episode of depression in the last year alone according to the Anxiety & Depression Association of America. Despite its growing prevalence, treating depression and anxiety remains difficult. Today, there are dozens of antidepressants that are typically prescribed in a trial and error format, where psychiatrists alter the dose and class of medications when one fails to work. The difficulties in prescribing medications leads to many patients taking the wrong medications in the wrong dose. Emerging evidence suggests that there are molecular mechanisms that suggest one drug, or class of drugs, may work better than another based on the genetic profile of the patient. This field, pharmacogenomics, has only recently emerged and has the potential to be as transformative in neuropsychology as it has been in oncology.

Data Product Line Market Opportunity

Our Data product line provides pharmaceutical and biotechnology companies an alternative to acquire data that they would otherwise need to generate through other more expensive means, like running studies, to inform decisions across the drug development lifecycle. It also helps facilitate patient identification and recruitment for clinical trials. According to Evaluate Pharma, in 2020, an estimated \$219 billion was spent on clinical development in the United States. Within this market, our Data product line addresses the following spending categories for biotechnology and pharmaceutical researchers:

- Clinical trials market: \$38 billion spend in 2020 according to Mordor Intelligence.
- Biomarker discovery: \$46 billion spend in 2021 according to Mordor Intelligence.
- Real world evidence: \$29 billion spend in 2020 according to our estimates based on third-party research.

Algos Product Line Market Opportunity

Over the longer term, we estimate that the potential market opportunity for our *Algos* product line could be orders of magnitude larger than the current total combined market opportunity of our Genomics and Data product lines. Although such tests currently represent a small portion of laboratory testing volume today, we believe in the long-term, they could represent a significant percentage of the market, as more and more algorithms are developed that produce diagnostic insights. Within the United States, there are more than seven billion clinical diagnostic tests run annually according to the American Clinical Laboratory Association. We believe our integrated diagnostic Platform provides us with a differentiated foundation for the development and deployment of algorithmic diagnostics, uniquely positioning us to capitalize on this new and emerging market opportunity.

Our Competitive Advantages

We believe the combined power of technology, data, and AI will have a profound impact on the broader healthcare industry, transforming diagnostics, and enabling physicians and researchers to make data-driven decisions that improve clinical outcomes for patients. The industry today largely relies on diagnostics that are often based on a single source of data and do not employ datasets that are appropriate for many researchers and are frequently unable to provide adequate clinical context to inform personalized therapeutics. Tempus, on the other hand, has created an integrated Platform through which we can deploy AI, and has assembled what we consider to be one of the world's largest libraries of clinical and molecular data, and an operating system to make our information useful for physicians and researchers. We believe our competitive advantages, which we describe below, will enable us to drive widespread commercial adoption of our Platform.

We are both a technology company and a healthcare company, allowing us to harness the advantages of both to advance precision medicine.

We believe the challenge of bringing technology, data, and AI to healthcare requires deep industry expertise across both healthcare and technology. We believe Tempus is well positioned as both a technology company, harnessing the power of data and analytics to help usher in a new era of personalized medicine and a healthcare company, providing AI-driven diagnostics across multiple disease areas. We bring technological capabilities across data and AI, which are rarely found among diagnostic companies and yet are necessary for precision medicine. We believe we are differentiated from potential technology competitors in that we have built our Platform to successfully operate in the highly regulated healthcare environment, perform diagnostic testing services as a covered entity, and ingest, collect, structure, and deploy patient data benefiting key stakeholders in the healthcare ecosystem. The team we have assembled has broad experience across technology and healthcare commensurate with the challenge we are undertaking. Our leadership has successfully founded, grown and held leadership positions at technology companies, healthcare providers, life sciences companies, and regulatory bodies such as the FDA. We have approximately 1,500 employees, including hundreds with diverse expertise in genetics, molecular and computational biology, bioinformatics, regulatory affairs, medical, product and engineering, and data science. Roughly one-third of our team is technical, with over 180 PhDs and MDs on staff. In addition, as a testament to our balanced workforce, we have roughly as many lab technicians as we have software engineers.

We have built a Platform that is connected to hundreds of provider networks, allowing us to amass a large repository of multimodal data that we believe is essential for bringing AI to healthcare.

We believe we are the first to build an Intelligent Diagnostic platform at scale that is connected to vast amounts of multimodal data and an operating system to make that information useful for both physicians and researchers, with the ultimate goal of serving patients. Our Platform consists of integrated elements working together to grow our database, generate Intelligent Diagnostics, and help physicians make data-driven decisions in real time in the clinical setting. We have established dedicated data pipelines to ingest large amounts of complex multimodal data from healthcare institutions through more than 250 direct data connections, many of which supply us with data in near real time, across over 1,500 healthcare institutions that order our products and services. We also built a laboratory infrastructure that is capable of providing a robust suite of testing services, including tissue and liquid biopsy sequencing for our customers. Although our company was founded in late 2015, we have already demonstrated the ability to bring AI to healthcare and provide Intelligent Diagnostics to enable precision medicine at scale. We have amassed an oncology database that is over 48 Petabytes in size and is approximately 19 times the size of The Cancer Genome Atlas, the largest public genomic dataset that we know of in oncology. We also recently extended our Platform into neuropsychology, infectious disease, and cardiology. We believe each of the elements of our Platform is difficult for others to replicate.

Our Intelligent Diagnostics provide significant value to our customers, which has fostered broad adoption of many of our products.

Our Platform was designed to align the interests of, and benefit, key stakeholders across the healthcare ecosystem, with the ultimate goal of helping patients. For physicians and other healthcare providers, we offer a suite of products and services that enable them to accelerate their precision medicine efforts, regardless of whether they work in the community setting or within a large healthcare institution. We offer a comprehensive molecular testing portfolio that includes tissue and liquid biopsy NGS tests, which are intelligent, able to provide clinical context for patients, and may help inform therapeutic decisions as a result. In addition to Intelligent Diagnostics, we offer physicians and researchers numerous analytical and software tools to help them manage patients, perform analytics, and derive insights from being a part of our network. We make available to those providers and researchers the raw files that result from our sequencing together with structured clinical data we abstract related to that testing. Through our Therapies product offering, we also help oncologists identify patients eligible for clinical trials. Over time, we believe our Algos product line will offer physicians and patients unique

and clinically actionable insights that are only possible by virtue of the data we have assembled. For pharmaceutical and biotechnology companies, we offer paid access to our de-identified database, with unique breadth, quality, and diversity of data, to inform drug discovery and development. We believe our dataset is the largest and most comprehensive to date in oncology (with other disease areas following), spanning multiple data modalities including: phenotypes, pathology slides, radiology scales, DNA, RNA, TCR/BCR, cfDNA, HLA types, immunohistochemistry, lab results, therapy outcome and response data, single cell sequencing, methylation, microbiomics, and epigenomes.

Our business model has inherent network effects that help drive adoption and improve our data advantage with each new order placed.

Each of our three product lines is designed to collectively leverage our database, strengthen the other product lines, and create network effects and competitive advantages within our markets. Our Genomics product line, including our core diagnostics offering, serves as a foundation for our Data product line, which in turn drives our Algos product line. As we collect more data, our tests become more accurate, we launch more applications, and more physicians join our network, thereby growing our database even further to make our tests more precise for clinicians and our database more valuable for researchers. There are multiple network effects we believe will provide a significant competitive advantage and drive adoption of our Platform over time. First, as our Platform becomes more accurate and precise, we believe it inherently drives commercial adoption with physicians and other providers. The breadth and diversity of our multimodal database enables us to deploy AI to improve upon our current tests by making them more accurate and more precise. This helps drive new physicians onto our Platform which further increases the size of our database. As our database grows, it increases our ability to develop entirely new tests, such as Algos, which can further drive adoption among physicians. Second, the growth of our database inherently drives commercial adoption with pharmaceutical and biotechnology companies. An increasing number of physicians and other providers using our tests helps grow our database, which increases its value to researchers, as well as results in a larger customer network through which we can facilitate therapy selection and clinical trial recruitment. Unlike traditional laboratory diagnostics, we have the ability to monetize de-identified data in multiple ways, which provides an opportunity to drive revenue beyond just the revenue we receive for running a laboratory test. We believe this creates a competitive advantage as our business model allows us to offer genomic solutions and build proprietary datasets in ways other lab testing providers cannot, as many of them are focused on maximizing reimbursement and do not have ancillary revenue streams as we do. Moreover, the longitudinal nature of the data we collect further enhances our revenue opportunity as the records we collect have value over time, given that outcomes and response evolve as patients progress through treatment.

Our Platform was built to collect, structure, harmonize and analyze large amounts of multimodal data.

We designed our Platform to be data agnostic. Our Platform can ingest and harmonize data from a wide variety of different healthcare data modalities. Unlike many other laboratory testing providers that focus on a specific modality of data, such as genomics, we currently ingest longitudinal clinical data from EHR including imaging data, generate DNA and RNA profiles along with other forms of molecular data, and perform anatomic pathology analysis. We are able to leverage multimodal data to deploy AI and provide Intelligent Diagnostics that generate insights that may be more powerful than insights provided by a single modality of data alone. We believe the healthcare industry is continuing to move towards using orthogonal and varied datasets to inform decision-making, and we are well positioned to be a partner of choice to facilitate this transformation.

Our Platform is disease agnostic and facilitates rapid expansion into different disease categories.

While we started in oncology, our capabilities to collect, structure, and harmonize data, and deploy AI solutions, are applicable to other disease areas. We believe having a multi-disease focus enables us to engage with providers and pharmaceutical companies in a more comprehensive manner than if we were focused on a single disease. As institutions are often looking for ways to deploy precision medicine broadly across diseases, we believe we are well positioned to be their partner, particularly given our established traction within precision

oncology and our emerging strength in other disease areas. We have successfully leveraged the core capabilities of our Platform to expand our offering beyond oncology as we entered into neuropsychology in 2020 (MDD, bipolar disease, anxiety), infectious disease (COVID-19 testing) in 2020, and hope to enter cardiology in the near future (ECG-based algorithms starting with Afib and Aortic Stenosis).

The size of our database and the breadth of our multimodal data capabilities position us well to be able to launch Algos at scale.

We believe our Algos product line represents an emerging category of diagnostics and has the potential to be highly disruptive across a broad set of disease areas. Our Algos use data the same way laboratory diagnostic companies use chemistry in the battle against disease, improving patient care by learning from the patients who have come before, and tailoring test results based on each patient's unique profile. We believe that as our database grows, we will be able to expand our Algos offering, with the goal of launching hundreds or thousands of Algos at some point in the future, representing a significant long-term opportunity that may be substantially larger than our other existing product lines. We believe our ability to launch Algos at scale is a key differentiator of our Platform. We currently offer three algorithmic tests in oncology, our TO test, our HRD test, and our DPYD test, and have ongoing development efforts in other disease areas, such as cardiology with our recent Afib algorithm that was awarded breakthrough designation by the FDA.

Many of our products and services are already widely used throughout the healthcare ecosystem.

We have established a network that we believe would be difficult for potential competitors to replicate. We have relationships with providers, life sciences companies, and leading industry associations that help provide key competitive advantages around our Platform. We work with hundreds of provider networks, including more than half of all academic medical centers in the United States. We have more than 250 direct unique data connections, many of which supply us with complex multimodal data in near real time, across over 1,500 healthcare institutions that order our products and services. In addition, we work with numerous industry associations, such as ASCO to structure and distribute the oncology data they collect as part of CancerLinq, which is their oncology data effort. To align interests with the healthcare providers who share data with us, we have developed software products and services that help our partners leverage data and benefit from being part of our network to improve patient care and research. These products have gained significant traction over the past five years, as our offerings are used by more than 5,000 oncologists in some way. The value of our products is further evidenced by our volume of repeat ordering from oncologists. Through December 2021, the 12-month retention rate for oncologists ordering more than 5 tests was 92%. We define the 12-month retention rate as having placed an order within the previous 360 days. Between our sequencing and data collection efforts, we are connected in some way to approximately 40% of all oncologists practicing in the United States.

Our Growth Strategy

Our goal is to make the promise of precision medicine a reality, and dramatically improve outcomes for those most in need through the broad adoption of AI-enabled diagnostics. Our growth strategy is to:

Grow our database and the number of providers connected to our Platform.

Our database is core to our business model and our ability to deploy AI at scale to enable precision medicine and generate value for ourselves and our customers. We believe we have developed a unique leadership position in the industry, in the United States, given the data we have been able to amass and aim to continue to fuel this growth. We intend to do so by driving commercial adoption of our Platform with healthcare providers, expanding our data sharing relationships, and growing the number of our unique data connections and the hospitals with whom we share data. We also intend to expand our relationships and establish new relationships with industry bodies and associations to help them structure and harmonize their own data to facilitate improvements in patient care. We expect to invest in our laboratory capabilities to leverage the latest technologies and to expand into

additional diagnostic modalities as they become adopted by our customers and relevant for helping patients find optimal therapeutics. We are agnostic as to where data originates so long as it enhances precision medicine. Over time, we may also use our Platform to help catalyze the value of data produced by other sources, including other labs. As such, we may evaluate business development opportunities to help grow and consolidate data, whether produced by us or others, both in the United States and abroad.

Drive increased adoption of our Genomics product across healthcare providers.

We serve clinical and research customers broadly through our Genomics product line. We are focused on driving market adoption with physicians by providing a complete portfolio of Intelligent Diagnostics and a suite of software applications that enable them to enhance their precision medicine efforts. We leverage customer feedback to inform product development, including making our tests more precise, and develop new tests and applications that help physicians deliver better clinical outcomes. In oncology, while we currently provide information to help physicians select the right therapy and make sure their patients have access to the most appropriate clinical trials, we are also expanding into other applications, such as disease monitoring and recurrence detection through our new minimal residual disease test, which is currently being validated. We also help clinicians practice precision medicine and provide genetic testing in other disease areas, including neuropsychology and infectious disease. We employ a direct sales force in the United States focused on driving adoption with the clinical community and raising awareness of the benefits of our Platform. For research, we aim to drive adoption of our Genomics product line with life sciences companies by supporting their testing needs for clinical trials and through the development of companion diagnostics. At present, we have approximately 159 sales representatives focused on our Genomics offering, and intend to significantly add resources to the team over time.

Drive increased adoption of our data licensing and clinical trial matching products with pharmaceutical and biotechnology companies.

As of December 31, 2021, we had 40 pharmaceutical and biotechnology customers licensing data through our Insights product, including 16 of the 20 largest public pharmaceutical companies based on 2020 revenue. Our goal is to provide our pharmaceutical and biotechnology customers with a Platform that helps them address challenges throughout their entire product lifecycle. Access to our database, provider network, and laboratory testing capabilities allow our customers to advance their research and clinical initiatives from biomarker discovery through commercialization. The value of multimodal data for informing drug discovery and development is becoming increasingly well understood by life sciences companies. We plan to take advantage of this trend and work to grow the number of companies purchasing de-identified data from us through our Insights product, both those that license data on a per-de-identified record basis as well as those that subscribe to our broader database. We also plan to continue to develop and commercialize software and analytic tools that make the products and services built on our Platform easier to use, including our Lens application that enhances cloud and compute analytical capabilities for researchers. For our Therapies product, we aim to grow the number of oncologists and the number of clinical trials participating in our network, and to increase the number of patients we identify to enroll into clinical trials. We are leveraging our direct sales force focused on providers to facilitate the onboarding of oncologists and have an enterprise sales team that focuses on pharmaceutical and biotechnology companies to increase the number of clinical trials in the network.

Validate and deploy Algos at scale.

We currently have three Algos that we have commercially launched in oncology, our TO test, our HRD test, and our DPYD test. We seek to launch additional Algos in oncology and other disease categories, such as cardiology where we have multiple Algos in development. For example, we received breakthrough designation from the FDA for our AFib algorithm based largely on ECG data, and we have a number of other cardiology Algos in development that use ECG data as a primary predictor of potential indications and outcomes. We are commercializing our current Algos to physicians through our direct sales force focused on the clinical market. As

[Table of Contents](#)

more Algos are clinically validated, we expect to leverage this channel to sell additional Algo tests. Over time, we may open our database to third parties to allow them to develop their own Algos using our database, or add our Algos to their existing laboratory tests. We believe the size, breadth, and diversity of our data will ultimately facilitate development of Algos across multiple disease categories.

Expand our capabilities and commercial traction outside of oncology, including in neuropsychology, infectious disease, cardiology, and other disease categories.

We built our Platform to be disease agnostic, and we aim to grow adoption in disease categories in which connecting multimodal data and AI can improve decisions and analytics for physicians and researchers. We believe our AI-enabled Platform is uniquely positioned to generate insights when there exist both heterogeneous conditions among a diseased population and a variety of potential therapeutics or therapeutic pathways, often prescribed based on trial and error. In these disease categories, technology and AI have the potential to facilitate data associations and substantially reduce the guesswork as to which drug to prescribe, in what amount, and in which order. We believe these conditions exist in oncology, neuropsychology, infectious diseases, and cardiology, as well as numerous other life-threatening and chronic diseases. Through our existing relationships with providers and life science companies, we believe we have a high level of visibility into where key healthcare stakeholders desire to advance precision medicine. We believe our Platform is applicable across multiple disease categories, and we plan to extend our offering into additional disease areas. Over time, we believe AI enabled diagnostics will impact all disease categories, and our disease agnostic Platform, broad technology capabilities, and vast customer network, position us well.

Expand internationally.

We believe the opportunity to deploy data and AI in healthcare is global. In many geographies, we believe the healthcare infrastructure is ripe for AI, and in some cases, the ecosystem is even more developed than in the United States. Over time, we intend to expand our capabilities internationally. We are evaluating multiple expansion opportunities, both organic and inorganic. We may acquire or partner with an established entity to facilitate market entry, or we may choose an alternative path focused on organic expansion.

Commercialization

Our commercial efforts are generally focused on driving increased adoption of our various products and services, both by increasing the utilization of existing customers and securing new customers. We employ targeted sales and business development organizations, whose team members are engaged in direct sales and marketing efforts. Our commercial teams typically target healthcare providers and life sciences companies, which are the main purchasers of our products and services. We describe below our overall commercial strategy for each of our three products.

Genomics

Our Genomics product line, largely made up of molecular testing, has two primary customers: physicians and bio-pharma companies. When we sell our tests to physicians we are typically providing them as part of routine clinical care and we are often billing insurance and seeking reimbursement on behalf of the patients for whom the test was ordered. When we sell our test to bio-pharma, we are typically being paid as a contract sequencing provider, either for the trials they are running or as a companion diagnostic to their drug. On the physician side, we commercialize our Genomics products in the United States to clinicians and healthcare providers largely through our dedicated clinical sales organization, that calls on individual doctors or medical practices. As of December 31, 2021, our clinical sales organization in the United States included approximately 150 sales representatives who are primarily contacting oncologists, psychiatrists, and other healthcare providers. Our sales representatives typically have backgrounds either in a particular disease area (such as oncology or neuropsychiatry) or in laboratory testing and therapeutics more generally. We supplement our commercial team

[Table of Contents](#)

with clinical specialists with extensive medical affairs experience who provide molecular support in the field. As of December 31, 2021, we had approximately 140 sales executives in the field focused on oncology and neurology, and we also have a team of 12 sales reps, who largely call on customers virtually throughout our outbound call center, focused predominantly on infectious disease.

In oncology, which currently is our largest market, we are focused on driving adoption by targeting individual treating physicians, academic medical centers, community oncology practices, leading physician networks, and industry associations. We also are exploring relationships with third-party payers and governmental institutions. We have a land and expand strategy, by account, whereby we attempt to sign new accounts and increase adoption of our platform within these accounts over time. As such, we often begin a relationship that is transactional in nature, but seek over time, to work on a more comprehensive basis with healthcare providers, serving an ever increasing percentage of our molecular diagnostic needs over time. We find that once an oncologist starts using Tempus, if they order more than 5 NGS tests from us, their 12-month retention rate is 92%. We define the 12-month retention rate as having placed at least one order in the previous 360 days.

In addition, we believe that interactions among treating physicians help drive adoption of our products. We are focused on key opinion leaders in the industry through direct outreach and indirect marketing efforts. As of December 31, 2021, we have either published or been acknowledged in the following:

- 59 total (40 Tempus-authored) peer-reviewed articles published or accepted for publication in major journals, including publications such as *Nature Biotechnology*, *Clinical Breast Cancer*, *Nature Medicine*, and *Cell*.
- 83 total (66 Tempus-authored) poster presentations based on clinical and research data that have been accepted and presented at major scientific conferences.
- 16 oral presentations at scientific meetings such as the ASCO, ASCO Gastrointestinal and Genitourinary Cancer Symposiums, San Antonio Breast Cancer Symposium, and the American Heart Association Scientific Sessions.

We have a similar strategy in neuropsychology, in which we aim to increase the commercial adoption of our nP test for depression as part of the rapidly growing market for pharmacogenomic testing, with a goal to better understand, diagnose and treat neuropsychiatric disorders. As it relates to infectious disease, we started offering COVID-19 testing through our iC test, and are in the midst of validating a respiratory pathogen test, iD, which is expected to cover a wider range of viruses such as Influenza, Respiratory Syncytial Virus, COVID-19, etc.

Our commercial strategy for other disease areas is expected to follow our strategy in oncology, which is to focus on offering a broad range of molecular diagnostics to the market, that are connected to clinical data, so we can track how molecular results correlate with outcomes and responses, thereby making our tests smarter and more personalized overtime.

Research Testing

A small component of our genomic testing involves testing performed in a research capacity. This type of testing is typically done under an agreed upon contracted arrangement for specific tests at specific prices and volumes. Typical customers in these arrangements are pharmaceutical companies engaged in testing for clinical trials, researchers who need genomic testing to further research activities, or a company marketing products or services of their own who elects to use us as a reference laboratory. In this type of research testing, the agreed upon rate for testing may vary significantly, and in some cases may even be offered as an in-kind service in exchange for other rights we obtain in the contracted relationship.

As it relates to selling our Genomic Products to bio-pharma, we have a dedicated team of sales executives focused on calling on biotech and pharmaceutical companies who use genomic sequencing services

predominantly for the research they are conducting, the clinical trials they are running, or as a companion diagnostic to the extent their therapeutic relies on a bio-marker. To this group, we are typically selling retrospective and prospective sample testing services, as well as companion diagnostic development to support the approval and commercialization of therapeutics.

Data

In addition to our field sales force, our Data products rely on a dedicated business development team focused on enterprise sales to pharmaceutical and biotechnology companies in the United States and abroad. Our strategy with each customer is to demonstrate the value proposition of our Platform and de-identified datasets, and to expand the utilization of our Data products across the organization from early-stage research through clinical development to commercialization. Given the broad and differentiated utility of our Platform, we believe we can support our pharmaceutical and biopharmaceutical customers across many applications, including:

- early stage research and development;
- discovery of new targets and mechanisms of acquired resistance;
- clinical trial patient identification and enrollment; and
- Analytic services, including cloud and compute.

We also expect to be able to capture other commercial opportunities from our genomic data, which can be used in combination with clinical outcomes or claims data for multiple applications, including novel target identification, label expansion, and other commercial applications.

As of December 31, 2021, we had approximately 33 sales executives in our Data product line development organization. We divide these individuals by both geography and strategic account to ensure consistency and coordination across our sales efforts.

Algos

We develop Algos in three ways: (i) we may develop them internally based on our robust de-identified dataset; (ii) we may collaborate with a third party to develop Algos together; and (iii) we may license an existing Algo from a third party. Once we clinically validate an Algo, we typically bring it to market through our existing provider network by leveraging our Genomics sales force. For example, our HRD and TO Algos in oncology have been added to our standard requisition forms, online portal, and EHR integrations. Treating clinicians can order these Algos at the same time they place their standard clinical testing orders for our other Genomics products. We believe clinicians find significant value in being able to receive multiple answers from Tempus while only needing to provide one set of biospecimens, thereby reducing the burden on their patients and their staff. At present, we expect our Algos in other disease areas to go to market through our network of EHR integrations and clinical collaborations.

In most instances, we bill Algos to third-party payers just like our other clinical tests. We expect reimbursement will be limited for most Algos at launch and may grow over time as we build additional evidence to support the clinical utility and benefit of each Algo. In addition, we work with pharmaceutical companies from time to time to deploy algorithms that they have developed or are interested in developing with us, typically collecting some amount of fees upfront and on a per test basis every time the algorithm is run.

Competition

The increasing value of using data to inform clinical care and drug development decisions is leading more companies to attempt to develop offerings that are marketed in a manner that makes them appear comparable to ours. As a result, each of our products faces increasing competition from a number of other companies.

[Table of Contents](#)

Our Genomics products line primarily faces competition from diagnostic companies that profile genes in cancers and other disease areas, based on either single-marker or comprehensive genomic profile testing, using NGS to evaluate either blood or tissue. Our primary competitors for our currently marketed precision oncology tests include Foundation Medicine, Inc., which was acquired by Roche Holdings, Inc., Caris Life Sciences, Guardant Health, Inc., Neogenomics, and ResolutionBio, which was acquired by Agilent, and others. As we expand into other applications such as recurrence monitoring or minimal residual disease, as well as potentially testing for early detection in the future, we anticipate facing competition from a broader universe of companies. Legacy diagnostic laboratories, such as Quest and LabCorp may also pose competitive threats within the market. Competitors for our pharmacogenetic test in neuropsychology include Myriad Genetics, Inc. and Genomind, Inc.

Our Data products primarily face competition from companies that help pharmaceutical and biotechnology companies acquire data to inform drug discovery and development. Our main competitors in this area are Flatiron Health, Inc., IQVIA Holdings Inc., ConcertAI, and others. Our Data products also face competition from CROs, such as Covance, ICON, Syneos, PPD, and others, who provide data and clinical trial matching services to pharmaceutical and biotechnology companies.

Our Algos products face competition from providers that are focused on providing laboratory testing or algorithm-based diagnostics for the disease and application areas in which our Algos are focused. Our TO test competes with liquid or tissue-based diagnostic tests from Roche Holdings, Inc., Caris Life Sciences, Guardant Health, Inc. Illumina, Inc. and others. Our HRD test competes with tests from Myriad Genetics, Inc., Caris Life Sciences, and others. We may also compete with companies developing or commercializing algorithm-based diagnostics using a variety of different data modalities, including digital pathology companies such as PathAI, Inc. and PaigeAI. In cardiology we may compete with companies such as HeartFlow Inc. and Eko Devices, Inc. We expect other competitors to enter this market, including academic medical centers who develop their own Algos and are looking for new ways to commercialize them. We believe we are positioned well against this competition given our broad provider network and our ability to deploy AI solutions at scale through our Platform.

Many of our competitors may have substantially greater financial and other resources than us, including larger research and development staff, or more established marketing and sales forces. Other competitors are in the process of developing novel technologies for the diagnostics and healthcare data markets that may lead to products that rival or replace our products. While we cannot be certain as to how the market will evolve, today we believe we are substantially differentiated from our competitors for many reasons, including the network effects of our products, proprietary technologies, rigorous product development processes and scalable infrastructure, customer experience, and multidisciplinary teams.

For further discussion of the risks we face relating to competition, see the section titled “Risk factors—Risks Related to Our Business and Strategy.”

Payer coverage and reimbursement

Clinical Testing

A majority of the genomic testing we perform is clinical in nature. We typically receive reimbursement for these tests from commercial payers and from government health benefits programs, such as Medicare and Medicaid. In almost all of our arrangements for clinical testing, we take on the obligation (and risk) to bill the patient’s insurance for the testing being provided, subject to other laws that may require us to directly bill the healthcare provider in limited circumstances. We also have a small number of “direct pay” arrangements where the provider may agree to pay us a specific amount and take on the billing obligation (and associated risk of payment) for the testing performed for that customer’s patients, or where a third-party advocacy group or government agency has arranged for and agreed to pay for testing.

Laboratory tests such as our genomic tests, as with most other healthcare services, are classified for reimbursement purposes under a coding system maintained by the American Medical Association known as

[Table of Contents](#)

current procedure terminology, or CPT, which we use to bill and receive reimbursement for our tests. CPT codes are associated with the particular test that we have provided to the patient, but do not always precisely describe the testing offered.

Once the American Medical Association establishes a CPT code, the Centers for Medicare & Medicaid Services, or CMS, establish payment levels and coverage rules under Medicare (sometimes through national coverage determinations, or NCDs), although it delegates some of that authority to local Medicare administrative contractors, or MACs, who may have local coverage determinations, or LCDs, in place. Private payers establish their rates and coverage rules independently.

We received payment on approximately 45% of our clinical oncology NGS tests performed from January 1, 2020 through June 30, 2021. For the years ended December 31, 2020 and 2021, our average reimbursement for NGS tests billed to insurance in oncology was approximately \$1,100. Our strategy to improve reimbursement is as follows:

- Continue to work with NGS, our local MAC in Chicago, to improve coverage, and the amount they currently pay, for tests, through a reconsideration request for our main assays (xT, xF) and through various appeals when coverage is denied.
- Work with our new MAC, Palmetto, who will cover our tests when performed out of our newest lab in Raleigh, North Carolina, to get the technical assessment of our assays approved and coverage policy in place for reimbursement.
- Work toward FDA approval of our main solid tumor assay, xT, for which we filed a PMA in early 2021, and once approved, work with CMS to apply a national coverage determination that covers our assay.
- Work with commercial payers to both get in network and get our assay approved and reimbursement at a higher rate than it currently is.

At present, we have a team that is dedicated to the above, and if we are successful we would expect our reimbursement per assay to be more in line with other NGS providers who have adopted similar strategies, such as FMI and Guardant.

Algos

Because we expect the Algos we bring to market to provide value to a wide variety of stakeholders in the healthcare ecosystem, we anticipate that the payment we may be able to obtain will vary substantially. Value obtained is likely to depend on the nature of the underlying product or service developed, as well as the disease area and manner in which the product or service is made available. For example, while the current HRD and TO offerings are point-of-care ordered, we do not expect to be limited only to payment and reimbursement through the typical fee-for-service reimbursement model based solely on point-of-care clinical testing. We may also develop Algo's in combination with life sciences companies in which we are paid directly or through alternative payment structures.

In sum, we expect that reimbursement for our Genomics products and Algos may provide value to, and potentially be paid for by, pharmaceutical companies, health maintenance organizations, managed care organizations, pharmacy benefit managers, large employers, and integrated delivery network health systems, in addition to being reimbursed by government healthcare programs, private insurers and other third-party payers. Those arrangements may take many forms. Pharmaceutical companies have expressed interest in using some of our Algos to better identify, screen, stratify, and enroll patients in clinical trials, payers have expressed interest in Algos that could assist them in value-based care initiatives that reduce spending waste in the healthcare system, and large health systems have expressed interest in certain population health screening Algos that could assist them in providing higher quality care, better outcomes for patients, and/or in reducing costs.

Operations

We currently perform our laboratory tests, including our NGS and anatomic pathology tests in our clinical laboratories in Chicago and Atlanta. We intend to expand these capabilities with a new genomics lab in Raleigh, North Carolina, which we are currently operationalizing and from which we expect to begin offering commercial laboratory tests in 2022. Our Chicago and Atlanta laboratories are CAP-accredited and CLIA-certified, and licensed in other states including New York, California, Maryland, Pennsylvania, and Rhode Island.

The scale our laboratories have been able to achieve in the approximately 4 1/2 year period since we ran our first clinical test is a direct result of the quality and experience of our laboratory staff, our investment in technologies in the laboratory that assist with automation and workflow improvements, and the ability of our engineering staff to build fit for purpose applications in a rapid development environment to support the laboratory's evolving needs. Our leadership staff in laboratory operations has decades of experience in running high-quality, high-throughput assays and have been instrumental in putting in place the necessary standard operating procedures to perform the volume of testing we do in a repeatable, reliable manner while constantly looking for opportunities to improve and refine our processes. The workflows in our laboratory are designed for high-throughput testing and numerous steps in the process are fully automated or semi-automated using robotics and other advanced workflow technologies. For our xT and xF tests, our laboratory workflows enable us to successfully deliver results over 95% of the time, assuming tissue is received that meets the minimum requirements we have outlined for our assays.

Our investments have allowed us to continuously drive turnaround time downward, to provide results to doctors and their patients in a timeframe that we believe now meets or exceeds many of our competitors who have been operating in the NGS space for longer. As of December 31, 2021, our average turnaround time for our xT assays was 10 days, and our average turnaround time for xF was seven days.

We believe that the strong foundational infrastructure in our laboratory operations, along with the technology used in our lab and the engineering expertise we have on hand is further differentiated when coupled with the connections we can rapidly deploy with our customers, and the experienced research scientists and doctors we employ, who are able to design and refine our highest volume assays in-house. We believe this unique combination will continue to allow us to rapidly respond to the changing needs of our customers and evolving market conditions. As an example of this, Tempus was able to stand up our COVID testing assays in both Atlanta and Chicago, obtain EUA approvals, make necessary modifications to our laboratory information systems and provide connectivity integrations to our largest customers (who were each running thousands of tests per day for a period of time) efficiently delivering results to them with turn around times and error rates that met or exceeded industry standards, during the peak of the pandemic in 2020 and early 2021.

Our Strategic Collaboration with AstraZeneca

In November 2021, we entered into a Master Services Agreement, or the MSA, with, and issued a warrant to, AstraZeneca AB, or AstraZeneca. Under the MSA, we agreed, on a non-exclusive basis, to provide AstraZeneca with certain of our products and services, including licensed data, sequencing, clinical trial matching, organoid modeling services, algorithm development, and others. In exchange for certain discounted prices, AstraZeneca has committed to spend a minimum of \$200 million on such products and services during the term of the MSA. The minimum commitment may increase to \$300 million upon the occurrence of any of the following events: (i) at AstraZeneca's election on or before December 31, 2024, (ii) the date that AstraZeneca exercises the warrant issued pursuant to the terms thereof (as described below), or (iii) in the event of an initial public offering, if the average closing price of our common stock exceeds two times the offering price for any 30-day trading period following the one-year anniversary of such initial public offering. The term of the master services agreement will continue through December 31, 2026, unless terminated sooner.

Under the warrant, AstraZeneca has the right to purchase up to \$100 million in shares of our Class A common stock at an exercise price equal to the initial public offering price in this offering. The number of shares

[Table of Contents](#)

of Class A common stock issuable upon exercise of the warrant will be determined based on the initial public offering price in this offering (shares of Class A common stock, assuming an initial public offering price of \$ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus). The warrant may be exercised any time following the date that is 180 days following the pricing of our initial public offering through December 31, 2026. AstraZeneca will be entitled to substantially the same registration rights with respect to the shares under the warrant as those granted to holders of registrable securities pursuant to our Ninth Amended and Restated Investors' Rights Agreement, dated November 19, 2020. See "Description of Capital Stock — Warrant." The warrant will be automatically cancelled and terminated for no consideration, if not previously exercised, in the event AstraZeneca declines to extend its financial commitment before December 31, 2024. If AstraZeneca exercises the warrant, AstraZeneca will be required to increase its minimum commitment under the MSA to \$300 million.

Quality Assurance

We are committed to providing reliable and accurate molecular information to our customers. We have established sophisticated laboratory workflows and automated procedures to ensure accurate specimen identification, timely communication of results, and prompt discovery and correction of errors. We monitor our quality through a variety of methods, including objectively measured performance improvement indicators. Any quality concerns and incidents are subject to risk assessment, root cause analysis, and corrective action plans. Safeguarding protected health information, or PHI, is of primary importance.

We have established a comprehensive quality assurance program for our laboratory. Our quality assurance program includes policies and procedures covering personnel qualifications and training requirements, process and test validation, quality control of reagents and test processes, proficiency testing, routine monitoring, and internal audit. We have implemented policies and procedures to adhere to applicable requirements necessary for federal and state licenses and accreditation for clinical diagnostic laboratories, including policies and procedures related to patient and employee safety, hazardous waste disposal, and general laboratory management.

Supply chain

We have a highly automatic system in place to manage our workflow called LIMS, which also connects to our various supply chain systems through which we ensure materials our ordered in a timely manner, and the logistics of each order are overseen to ensure we are delivering orders, in the shortest time possible, with the highest quality possible.

We maintain significant inventory on hand of both laboratory consumables and other materials to avoid work stoppages and/or material delays. Our systems, processes, and procedures are designed to scale, as evidenced by the fact that we have become one of the largest sequences of cancer patients in the United States in just a few years and implemented COVID-19 testing in May of 2020, and have run approximately 2.3 million tests in the last twelve months ended December 31, 2021.

We rely on a limited number of suppliers, or, in some cases, sole suppliers to provide our products and services. Illumina, Inc., is our primary supplier of sequencers and laboratory reagents; however, we purchase laboratory supplies from other companies as well, such as Roche Holdings, Inc., Integrated DNA Technologies, and PerkinsElmer. We rely on standard commercial carriers for the delivery of samples to our laboratories.

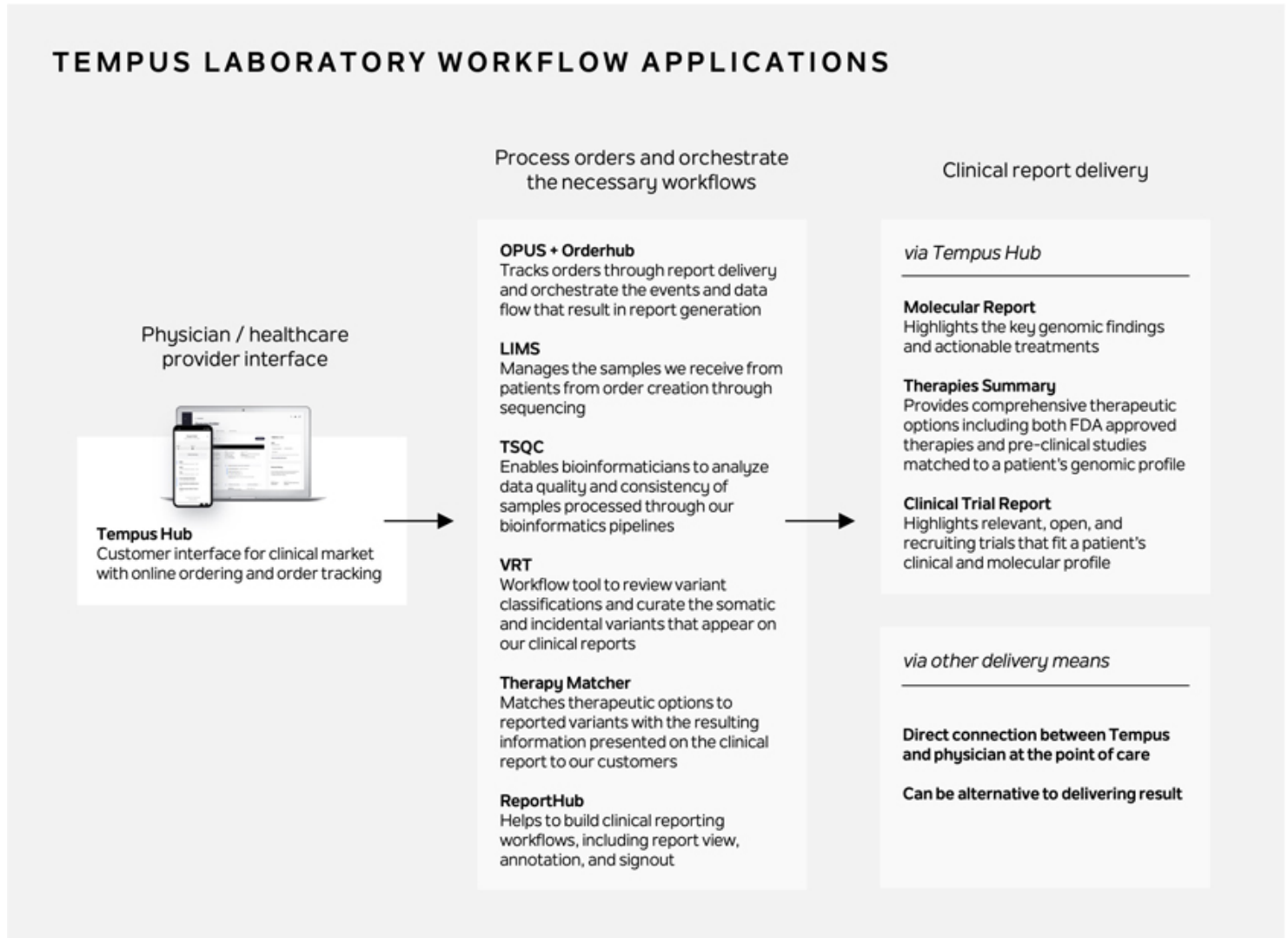
In June 2021, we entered into a supply agreement with Illumina to provide products and services that can be used for certain research and clinical activities, including certain sequencers, reagents, and other consumables for use with the Illumina sequencers, as well as service contracts for the maintenance and repair of the sequencers. The supply agreement does not require us to order minimum amounts of hardware, or to use exclusively the Illumina platform for conducting our sequencing. The term of the supply agreement continues for a period of 12 years, unless either we or Illumina terminate the supply agreement for the other's uncured material breach, bankruptcy or insolvency-related events, or in the event a regulatory authority notifies such party that continued performance under the supply agreement would violate applicable laws or regulations. Illumina may terminate the agreement in the event we consummate a change of control transaction with a sequencing products company, and we may terminate the supply agreement for convenience upon 90 days' prior written notice.

[Table of Contents](#)

In addition to suppliers who provide products supporting our provision of laboratory tests, we have cloud agreements with both AWS and Google. In June 2020, we signed a multi-year strategic partnership with Google that included an agreement through which Tempus procures extensive cloud services from Google. The cloud agreement includes a convertible note that is reduced as we procure services from Google and also contemplates co-innovation projects that we may work on with Google from time to time.

Laboratory Workflow Applications

With respect to the provision of laboratory services, in addition to Hub, our consumer-facing application, we have developed multiple software tools that facilitate back-end processing, workflow, and report generation. Our back-office software stack was custom developed around our workflow, allowing us to automate material components of our laboratory and order generation process. The following diagram represents the software applications supporting our laboratory workflow.



We have also developed a series of tools that allow us to access our connected dataset and our internal workflow tools, as we seek to query our own data and make it available both internally and externally. In an effort to facilitate a connection between our providers and our data, we built an application called *Tempus One*, which is both a physical device and a mobile software application that relays information contained in our oncology reports and supporting database to physicians through voice activated interactions in real time. We believe *Tempus One* has the potential to create a more efficient workflow for healthcare professionals, reducing the time needed to review and process information, providing more time for them to focus on patient care. Over time, we intend to embed more insights into *Tempus One*, and other similar applications we develop, thereby enhancing the amount of information readily available to our ordering physicians.

Data Structuring Applications

After we generate a clinical report through the provision of laboratory services, or once we obtain data through one of our dedicated connections to providers, we utilize a different suite of proprietary software applications to abstract, structure, and de-identify the resulting data to help augment our existing multimodal dataset and provide additional healthcare services to our customers. Our tools have become highly efficient over time allowing us to abstract data, often between 50-100 discrete data elements per patient case, in approximately an hour (or the cost equivalent), which do both onshore and offshore through dedicated teams we have established to perform the data curation and abstraction. In addition, we have the capability to perform enhanced abstraction, which can take several hours per patient case, allowing us to define a custom set of features over a defined period of time that we want abstracted. Each of our proprietary tools is designed to enhance our customers' experience, either by creating useful information that assists in the treatment of patients, or by creating an efficient back-end infrastructure that allows us to deliver our services more quickly and efficiently.

Information Security

We endeavor to maintain a robust information security program in an effort to protect all of the sensitive data we maintain, including PHI and PII and we take all threats to the availability, integrity and confidentiality of that data with the utmost seriousness. Our security program consists of a layered defense approach starting with appropriate data and system design through architectural principles that include security as a core component at every step of the process. This security by design approach is enhanced with physical security, host and endpoint device management, application security, and infrastructure and cloud security. In each of those areas, we utilize industry-standard third-party tools that are designed to assist our team of security professionals in their various tasks and we work closely with our vendors, including those who provide cloud computing services that make up substantial parts of our infrastructure (e.g., Google and Amazon).

Our security program is operationalized through documented policies, procedures and required training for all staff in the entire company, with special emphasis on key teams in engineering and IT operations who develop, monitor and maintain the applications and systems used in our business. In an effort to ensure that these policies are adhered to and that no new vulnerabilities arise, we conduct regular auditing of a wide swath of our security related measures, including a mix of self-audits, external penetration testing, external application security audits and audits performed by our customers and partners. Our security team is also instrumental in maintaining our ISO 27001 certification and assisting the compliance and legal teams with other legally required audits and provides detailed reports regularly to upper management and the Board on security related matters.

Intellectual Property

Our success depends in part on our ability to obtain and maintain intellectual property and proprietary protection for our products and technology, defend and enforce our intellectual property rights, preserve the confidentiality of our trade secrets, and operate without infringing, misappropriating or otherwise violating valid and enforceable intellectual property and proprietary rights of others. We are actively involved in research and development and therefore seek to protect the investments we have made into the development of our products and technology by relying on a combination of patents, trademarks, trade secrets, know-how, and license agreements. We also seek to protect our proprietary technology, in part, by requiring our employees, consultants, contractors and other third parties to execute confidentiality agreements and invention assignment agreements and by implementing technological protections for our intellectual property.

As of March 31, 2022, our patent portfolio included owned and in-licensed patents and patent applications, including 33 issued or allowed U.S. patents or pending applications and 71 pending U.S. non-provisional patent applications, 24 pending U.S. provisional patent applications, 28 pending Patent Cooperation Treaty (international) patent applications, and 8 issued foreign patents and 74 pending foreign patent applications. Our issued patents are expected to begin expiring in December 2029, assuming payment of all appropriate

[Table of Contents](#)

maintenance, renewal, annuity or other governmental fees. These patents and applications generally fall into four broad categories:

- applications and patents relating to our Platform, including claims directed to product ordering processes; data processing and multimodal data analytics;
- applications and patents relating to our Genomics business, including claims directed to detecting and monitoring cancer and other diseases by determining genetic variations and other biomarkers in biological samples;
- applications and patents relating to our Data business, including claims directed to analysis of healthcare records and patient outcomes; and
- applications and patents related to our Algos business, including claims directed to machine learning diagnostics and predictions in cancer and cardiology.

The term of individual patents depends upon the legal term of the patents in the countries in which they are obtained. In most countries in which we file or intend to file, including the United States, the patent term is 20 years from the earliest date of filing a non-provisional patent application. Additionally, a U.S. provisional patent application expires twelve months from its filing date, and its subject matter can only be claimed in an issued patent if, among other things, we timely file a non-provisional patent application making a valid priority claim to that provisional patent application before it expires. In the United States, a patent's term may be lengthened by patent term adjustment, which compensates a patentee for administrative delays by the USPTO in examining and granting a patent, or may be shortened if a patent is terminally disclaimed over an earlier filed patent. We cannot be sure that patents will be granted with respect to any current pending patent application or with respect to any patent applications filed by us in the future, nor can we be sure that any current or future patents will be commercially useful in protecting our platform, products, services, technologies and processes. In addition, any patents that we may hold, whether owned or licensed, may be challenged, circumvented or invalidated by third parties.

The success of our business strategy also depends in part on our continued ability to protect our branded services, and we own registered trademarks on “TEMPUS” and product related brand names in the United States and worldwide.

We also rely on trade secrets, including know-how, unpatented technology and other proprietary information, to strengthen our competitive position. We seek to protect trade secrets and confidential and unpatented know-how, in part, by entering into non-disclosure and confidentiality agreements with parties who have access to such knowledge, such as our employees, collaborators, manufacturers, consultants, advisors and other third parties. We also seek to enter into confidentiality and invention or patent assignment agreements with our employees and consultants that obligate them to maintain confidentiality and assign their inventions to us.

Our ability to stop third parties from making, using, selling, offering to sell or importing our Platform, services and products depends on the extent to which we have rights under valid and enforceable patents, trade secrets or other intellectual property and proprietary rights that cover these activities. We pursue intellectual property protection to the extent we believe it would advance our business objectives. Notwithstanding these efforts, there can be no assurance that we will adequately protect our intellectual property or provide any competitive advantage. For more information regarding risks relating to intellectual property, see “Risk Factors—Risks Related to Our Intellectual Property.”

Government Regulation

Regulation of Medical Devices in the United States

Our diagnostic products and services are subject to extensive and ongoing regulation by the FDA under the Federal Food, Drug, and Cosmetic Act of 1938 and its implementing regulations, collectively referred to as the

[Table of Contents](#)

FDCA, as well as other federal and state regulatory bodies in the United States. The laws and regulations govern, among other things, product design and development, pre-clinical and clinical testing, manufacturing, packaging, labeling, storage, record keeping and reporting, clearance or approval, marketing, distribution, promotion, import and export and post-marketing surveillance. Failure to comply with applicable requirements may subject a device and/or its manufacturer to a variety of administrative sanctions, such as FDA refusal to approve pending premarket applications, issuance of warning letters, mandatory product recalls, import detentions, civil monetary penalties, and/or judicial sanctions, such as product seizures, injunctions and criminal prosecution.

FDA Premarket Clearance and Approval Requirements

Unless an exemption applies, each medical device commercially distributed in the United States requires either FDA clearance of a 510(k) premarket notification, approval of a petition for premarket approval, or PMA, or grant of a de novo request for classification. During public emergencies, the FDA also may grant emergency use authorizations, or EUA, to allow commercial distribution of devices intended to address the public health emergency. Under the FDCA, medical devices are classified into one of three classes—Class I, Class II or Class III—depending on the degree of risk associated with each medical device and the extent of manufacturer and regulatory control needed to provide reasonable assurance of its safety and effectiveness. Classification of a device is important because the class to which a device is assigned determines, among other things, the necessity and type of FDA review required prior to marketing the device.

Class I devices include those with the lowest risk to the patient and are those for which safety and effectiveness can be reasonably assured by adherence to the FDA's "general controls" for medical devices, which include compliance with the applicable portions of the FDA's Quality System Regulation, or QSR, facility registration and product listing, reporting of adverse medical events and malfunctions through the submission of Medical Device Reports, or MDRs, and appropriate, truthful and non-misleading labeling, advertising, and promotional materials. Some Class I devices also require 510(k) premarket notification clearance as described below.

Class II devices are moderate risk devices subject to the FDA's general controls, and any other "special controls" deemed necessary by the FDA to ensure the safety and effectiveness of the device, such as performance standards, product-specific guidance documents, special labeling requirements, patient registries or post-market surveillance. Premarket review and clearance by the FDA for Class II devices is accomplished through the 510(k) process. The 510(k) submission must demonstrate that the device is "substantially equivalent" to a legally marketed predicate device, which in some cases may require submission of clinical data.

Class III devices include devices deemed by the FDA to pose the greatest risk, such as life-sustaining, life-supporting or implantable devices and devices deemed not substantially equivalent to a predicate device following a 510(k) submission. The safety and effectiveness of Class III devices cannot be reasonably assured solely by general or special controls. Submission and FDA approval of a PMA application is required before marketing of a Class III device can proceed. A PMA application is intended to demonstrate that the device is reasonably safe and effective for its intended use and must be supported by extensive data, typically including data from pre-clinical studies and clinical trials.

Emergency Use Authorization

In emergency situations, such as a pandemic, the FDA has the authority to allow unapproved medical products or unapproved uses of cleared or approved medical products to be used in an emergency to diagnose, treat or prevent serious or life-threatening diseases or conditions when there are no adequate, approved, and available alternatives.

Under this authority, the FDA may issue an EUA for an unapproved device if the following four statutory criteria have been met: (1) a serious or life-threatening condition exists; (2) evidence of effectiveness of the

[Table of Contents](#)

device exists; (3) a risk-benefit analysis shows that the benefits of the product outweigh the risks; and (4) no other alternatives exist for diagnosing, preventing or treating the disease or condition. Evidence of effectiveness includes medical devices that “may be effective” to prevent, diagnose, or treat the disease or condition identified in a declaration of emergency issued by the Secretary of U.S. HHS. The “may be effective” standard for EUAs requires a lower level of evidence than the “effectiveness” standard that the FDA uses for product clearances or approvals in non-emergency situations. Once granted, an EUA will remain in effect and generally terminate on the earlier of (1) the determination by the Secretary of U.S. HHS that the public health emergency has ceased or (2) a change in the approval status of the product such that the authorized use(s) of the product are no longer unapproved. After the EUA is no longer valid, the product is no longer considered to be legally marketed and one of the FDA’s non-emergency premarket pathways would be necessary to resume or continue distribution of the subject product.

The FDA also may revise or revoke an EUA if the circumstances justifying its issuance no longer exist, the criteria for its issuance are no longer met, or other circumstances make a revision or revocation appropriate to protect the public health or safety.

Clinical Trials

Clinical trials are typically required to support a PMA and are sometimes required to support a 510(k) submission. All clinical investigations of devices to determine safety and effectiveness must be conducted in accordance with the FDA’s investigational device exemption, or IDE, regulations which govern investigational device labeling, prohibit promotion of the investigational device, and specify an array of recordkeeping, reporting and monitoring responsibilities of study sponsors and study investigators. If the device presents a “significant risk” to human health, the FDA requires the device sponsor to submit an IDE application to the FDA, which must be approved prior to commencing clinical trials. A significant risk device is one that presents a potential for serious risk to the health, safety or welfare of a patient and either is implanted, purported or represented to be used in supporting or sustaining human life, is for a use that is substantially important in diagnosing, curing, mitigating or treating disease or otherwise preventing impairment of human health, or otherwise presents a potential for serious risk to a subject.

An IDE supplement must be submitted to, and approved by, the FDA before a sponsor or investigator may make a change to the investigational plan that may affect its scientific soundness, study plan or the rights, safety or welfare of human subjects. In addition, the clinical trials must be approved by, and conducted under the oversight of, an Institutional Review Board, or IRB, for each clinical site. The IRB is responsible for the initial and continuing review of the IDE and may pose additional requirements for the conduct of the study. If an IDE application is approved by the FDA and one or more IRBs, clinical trials may begin at a specific number of investigational sites with a specific number of patients, as approved by the FDA. If the device is considered a “non-significant risk,” IDE submission to FDA is not required. Instead, only approval from the IRB overseeing the investigation at each clinical trial site is required.

Post-market Regulation

After a device is cleared or approved for marketing, numerous and pervasive regulatory requirements continue to apply. These include:

- establishment of registration and device listing with the FDA;
- QSR requirements, which require manufacturers and contract manufacturers, including any third-party manufacturers, to follow stringent design, testing, control, documentation and other quality assurance procedures during all aspects of the design and manufacturing process;
- labeling regulations and FDA prohibitions against the promotion of investigational products, or “off-label” uses of cleared or approved products;

[Table of Contents](#)

- requirements related to promotional activities;
- clearance or approval of product modifications to 510(k)-cleared devices that could significantly affect safety or effectiveness or that would constitute a major change in intended use of a cleared device;
- medical device reporting regulations, which require that a manufacturer report to the FDA if a device it markets may have caused or contributed to a death or serious injury, or has malfunctioned and the device or a similar device that it markets would be likely to cause or contribute to a death or serious injury, if the malfunction were to recur;
- correction, removal and recall reporting regulations, which require that manufacturers report to the FDA field corrections, product removals or recalls if undertaken to reduce a risk to health posed by the device or to remedy a violation of the FDCA that may present a risk to health;
- the FDA's recall authority, whereby the agency can order device manufacturers to recall from the market a product that is in violation of governing laws and regulations; and
- post-market surveillance activities and regulations, which apply when deemed by the FDA to be necessary to protect the public health or to provide additional safety and effectiveness data for the device.

The FDA has broad regulatory compliance and enforcement powers. If the FDA determines that we failed to comply with applicable regulatory requirements, it can take a variety of compliance or enforcement actions, which may result in any of the following sanctions:

- untitled letters, warning letters, fines, injunctions, consent decrees and civil penalties;
- unanticipated expenditures to address or defend such actions;
- customer notifications for repair, replacement, refunds;
- recall, withdrawal, administrative detention or seizure;
- operating restrictions or partial suspension or total shutdown of production;
- refusal of or delay in granting our requests for 510(k) clearance or PMA approval of new tests or modified tests;
- operating restrictions, partial suspension or total shutdown of production;
- withdrawing 510(k) clearance or PMA approvals that are already granted;
- refusal to grant export approval; or
- criminal prosecution.

Laboratory-Developed Tests (LDTs)

LDTs have generally been considered to be tests that are designed, developed, validated and used within a single laboratory. The FDA takes the position that it has the authority to regulate such tests as medical devices under the FDCA. The FDA has historically exercised enforcement discretion and has not required clearance or approval of LDTs prior to marketing. In addition, the New York Clinical Laboratory Evaluation Program separately approves certain LDTs offered to New York State patients.

On October 3, 2014, the FDA issued two draft guidance documents regarding oversight of LDTs. These draft guidance documents proposed more active review of LDTs. The draft guidance documents have been the subject of considerable controversy, and in November 2016, the FDA announced that it would not be finalizing the 2014 draft guidance documents. On January 13, 2017, the FDA issued a discussion paper which laid out elements of a possible revised future LDT regulatory framework, but did not establish any regulatory requirements.

[Table of Contents](#)

The FDA's efforts to regulate LDTs have prompted the drafting of legislation governing diagnostic products and services that sought to substantially revise the regulation of both LDTs and in vitro diagnostics, or IVDs. Congress may act to provide further direction to the FDA on the regulation of LDTs.

CLIA and State Laboratory Licensing

Under the Clinical Laboratory Improvement Amendments, or CLIA, a laboratory is any facility that performs laboratory testing on specimens derived from humans for the purpose of providing information for the diagnosis, prevention or treatment of disease, or the impairment of or assessment of health. CLIA requires that a laboratory hold a certificate applicable to the type of laboratory examinations it performs and that it complies with, among other things, standards covering operations, personnel, facilities administration, quality systems and proficiency testing, which are intended to ensure, among other things, that clinical laboratory testing services are accurate, reliable and timely. We have a current CLIA certificate to perform our tests at our laboratories in Chicago, Illinois, Atlanta, Georgia and Raleigh, North Carolina. To renew our CLIA certificate, we are subject to survey and inspection every two years to assess compliance with program standards.

Laboratories performing high complexity testing are required to meet more stringent requirements than laboratories performing less complex tests. In addition, a laboratory that is certified as "high complexity" under CLIA may develop, manufacture, validate and use LDTs. CLIA requires analytical validation including accuracy, precision, specificity, sensitivity and establishment of a reference range for any LDT used in clinical testing. The regulatory and compliance standards applicable to the testing we perform may change over time and any such changes could have a material effect on our business.

CLIA provides that a state may adopt laboratory regulations that are more stringent than those under federal law, and a number of states have implemented their own more stringent laboratory regulatory requirements. State laws may require that nonresident laboratories, or out-of-state laboratories, maintain an in-state laboratory license to perform tests on samples from patients who reside in that state. As a condition of state licensure, these state laws may require that laboratory personnel meet certain qualifications, specify certain quality control procedures or facility requirements or prescribe record maintenance requirements.

Failure to comply with CLIA certification and state clinical laboratory licensure requirements may result in a range of enforcement actions, including certificate or license suspension, limitation, or revocation, directed plan of action, onsite monitoring, civil monetary penalties, criminal sanctions, and revocation of the laboratory's approval to receive Medicare and Medicaid payment for its services, as well as significant adverse publicity.

The College of American Pathologists, or CAP, maintains a clinical laboratory accreditation program. While not required to operate a CLIA-certified laboratory, many private insurers require CAP accreditation as a condition to contracting with clinical laboratories to cover their tests. In addition, some countries outside the United States require CAP accreditation as a condition to permitting clinical laboratories to test samples taken from their citizens. We have obtained CAP accreditation for our Chicago, Illinois and Atlanta, Georgia laboratories, and we expect to apply for CAP accreditation for our Raleigh, North Carolina laboratory. In order to maintain CAP accreditation, we are subject to survey for compliance with CAP standards every two years. Failure to maintain CAP accreditation could have a material adverse effect on the sales of our tests and the results of our operations.

Federal and State Health Care Laws

Federal Physician Self-Referral Prohibition

We are also subject to the federal physician self-referral prohibition, commonly known as the Stark Law, and to comparable state laws. Together these restrictions generally prohibit us from billing a patient or governmental or private payer for certain designated health services, including clinical laboratory services, when

[Table of Contents](#)

the physician ordering the service, or a member of such physician's immediate family, has a financial relationship, such as an ownership or investment interest in or compensation arrangement, with us, unless the relationship meets an applicable exception to the prohibition. Several Stark Law exceptions are relevant to many common financial relationships involving clinical laboratories and referring physicians, including: (1) fair market value compensation for the provision of items or services; (2) payments by physicians to a laboratory for clinical laboratory services; (3) space and equipment rental arrangements that satisfy certain requirements and (4) personal services arrangements that satisfy certain requirements. The laboratory cannot submit claims to the Medicare Part B program for services furnished in violation of the Stark Law, and Medicaid reimbursements may be at risk as well. These prohibitions apply regardless of any intent by the parties to induce or reward referrals or the reasons for the financial relationship and the referral. Penalties for violating the Stark Law include significant civil, criminal and administrative penalties, such as the return of funds received for all prohibited referrals, fines, civil monetary penalties, exclusion from the federal healthcare programs, integrity oversight and reporting obligations, and imprisonment. In addition, knowing violations of the Stark Law may also serve as the basis for liability under the federal False Claims Act, or FCA, which can result in additional civil and criminal penalties.

Federal Anti-Kickback Law

The federal Anti-Kickback Statute, or AKS, makes it a felony for a person or entity, including a clinical laboratory, to knowingly and willfully offer, pay, solicit or receive any remuneration, directly or indirectly, overtly or covertly, in cash or in kind, in order to induce business that is reimbursable under any federal health care program. The government may also assert that a claim that includes items or services resulting from a violation of the AKS constitutes a false or fraudulent claim under the FCA, which is discussed in greater detail below. Additionally, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation. Although the AKS applies only to items and services reimbursable under any federal health care program, a number of states have passed statutes substantially similar to the AKS that apply to all payers. Penalties for violations of such state laws include imprisonment and significant monetary fines. Federal and state law enforcement authorities scrutinize arrangements between health care providers and potential referral sources to ensure that the arrangements are not designed as a mechanism to induce patient care referrals or induce the purchase or prescribing of particular products or services. Generally, courts have taken a broad interpretation of the scope of the AKS, holding that the statute may be violated if merely one purpose of a payment arrangement is to induce referrals or purchases. In addition to statutory exceptions to the AKS, regulations provide for a number of safe harbors. If an arrangement meets the provisions of an applicable exception or safe harbor, it is deemed not to violate the AKS. An arrangement must fully comply with each element of an applicable exception or safe harbor in order to qualify for protection. Failure to meet the requirements of the safe harbor, however, does not render an arrangement illegal. Rather, the government may evaluate such arrangements on a case-by-case basis, taking into account all facts and circumstances.

Other Health Care Laws

In addition to the requirements discussed above, several other health care fraud and abuse laws could have an effect on our business.

The FCA prohibits, among other things, a person from knowingly presenting, or causing to be presented, a false or fraudulent claim for payment or approval and from making, using, or causing to be made or used, a false record or statement material to a false or fraudulent claim in order to secure payment or retain an overpayment by the federal government. In addition to actions initiated by the government itself, the statute authorizes actions to be brought on behalf of the federal government by a private party having knowledge of the alleged fraud. Because the complaint is initially filed under seal, the action may be pending for some time before the defendant is even aware of the action. If the government intervenes and is ultimately successful in obtaining redress in the matter or if the plaintiff succeeds in obtaining redress without the government's involvement, then the plaintiff will receive a percentage of the recovery. Finally, the Social Security Act includes its own provisions that prohibit the filing of false claims or submitting false statements in order to obtain payment. Several states have enacted comparable false claims laws which may be broader in scope and apply regardless of payer.

[Table of Contents](#)

The Social Security Act includes civil monetary penalty provisions that impose penalties against any person or entity that, among other things, is determined to have presented or caused to be presented a claim to a federal health program that the person knows or should know is for an item or service that was not provided as claimed or is false or fraudulent. In addition, a person who offers or provides to a Medicare or Medicaid beneficiary any remuneration, including waivers of co-payments and deductible amounts (or any part thereof), that the person knows or should know is likely to influence the beneficiary's selection of a particular provider, practitioner or supplier of Medicare or Medicaid payable items or services may be liable under the civil monetary penalties statute. Moreover, in certain cases, providers who routinely waive copayments and deductibles for Medicare and Medicaid beneficiaries, for example, in connection with patient assistance programs, can also be held liable under the AKS and FCA. One of the statutory exceptions to the prohibition is non-routine, unadvertised waivers of copayments or deductible amounts based on individualized determinations of financial need or exhaustion of reasonable collection efforts. The Office of Inspector General of the HHS emphasizes, however, that this exception should only be used occasionally to address special financial needs of a particular patient.

The federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, created new federal criminal statutes that prohibit, among other actions, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program, including private third-party payers, and knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services. Like the AKS, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation.

The Eliminating Kickbacks in Recovery Act of 2018, or EKRA, prohibits knowingly and willfully soliciting or receiving any remuneration (including any kickback, bribe or rebate) directly or indirectly, overtly or covertly, in cash or in kind, in return for referring a patient or patronage to a laboratory; or paying or offering any remuneration (including any kickback, bribe or rebate) directly or indirectly, overtly or covertly, in cash or in kind, to induce a referral of an individual to a laboratory or in exchange for an individual using the services of that laboratory. EKRA was enacted to help reduce opioid-related fraud and abuse. However, EKRA defines the term "laboratory" broadly and without reference to any connection to substance use disorder treatment. The EKRA applies to all payers including commercial payers and government payers. Violations of EKRA are subject to significant fines and/or up to ten years in jail, separate and apart from existing AKS regulations and penalties. The law includes a limited number of exceptions, some of which closely align with corresponding AKS exceptions and safe harbors, and others that materially differ. Currently, there is no regulation interpreting or implementing EKRA, nor any guidance released by a federal agency regarding the scope of EKRA.

HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009, or HITECH, and their respective implementing regulations, impose obligations on "covered entities," including certain healthcare providers, health plans, and healthcare clearinghouses, as well as their respective "business associates" that create, receive, maintain or transmit individually identifiable health information for or on behalf of a covered entity, with respect to safeguarding the privacy, security and transmission of individually identifiable health information. Additionally, HITECH created four new tiers of civil monetary penalties, amended HIPAA to make civil and criminal penalties directly applicable to business associates, and gave state attorneys general new authority to file civil actions for damages or injunctions in U.S. federal courts to enforce HIPAA and seek attorneys' fees and costs associated with pursuing federal civil actions.

The Physician Payments Sunshine Act, enacted as part of the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Affordability Reconciliation Act, or the ACA, also imposed annual reporting requirements on manufacturers of certain devices, drugs and biologics for payments and other transfers of value by them during the previous year to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors) and teaching hospitals, as well as ownership and investment interests held by such physicians and their immediate family members. Beginning in 2022, applicable manufacturers also will be required to report such information regarding their payments and other transfers of value to physician assistants,

[Table of Contents](#)

nurse practitioners, clinical nurse specialists, anesthesiologist assistants, certified registered nurse anesthetists and certified nurse midwives during the previous year.

Also, many states have laws similar to those listed above that may be broader in scope and may apply regardless of payer.

Efforts to ensure that our internal operations and business arrangements with third parties comply with applicable laws and regulations involve substantial costs. Any action brought against us for violation of these or other laws or regulations, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management's attention from the operation of our business. Additionally, certain of our business practices, including our consulting and advisory board arrangements with physicians and other healthcare providers, a small number of whom may receive stock or restricted stock units as compensation for services provided, may not comply with current or future corporate practice of medicine statutes, regulations, agency guidance or case law. If our operations are found to be in violation of any of the fraud and abuse laws described above or any other laws that apply to us, we may be subject to penalties, including potentially significant criminal, civil and administrative penalties, damages, fines, disgorgement, imprisonment, exclusion from participation in government healthcare programs, contractual damages, reputational harm, integrity oversight and reporting obligations, limitations to the sale of certain products or services, diminished profits and future earnings, and the curtailment or restructuring of our operations.

Data Privacy and Security

We are, or may become, subject to numerous federal, state, local and foreign laws, regulations, standards, and guidance regarding data privacy and security. For example, HIPAA, as mentioned above, imposes privacy, security and breach reporting obligations with respect to individually identifiable health information upon "covered entities" (health plans, health care clearinghouses and certain health care providers), and their respective business associates, individuals or entities that create, receive, maintain or transmit protected health information in connection with providing a service for or on behalf of a covered entity. HIPAA mandates the reporting of certain breaches of health information to the U.S. Department of Health and Human Services, or HHS, affected individuals and if the breach is large enough, the media. Entities that are found to be in violation of HIPAA, including as the result of a breach of unsecured PHI, a complaint about privacy practices or an audit by HHS, may be subject to significant civil, criminal and administrative fines and penalties and/or additional reporting and oversight obligations if required to enter into a resolution agreement and corrective action plan with HHS to settle allegations of HIPAA non-compliance.

Even when HIPAA does not apply, failing to take appropriate steps to keep consumers' personal information secure may constitute unfair acts or practices in or affecting commerce in violation of Section 5(a) of the Federal Trade Commission Act, 15 U.S.C § 45(a). The FTC expects a company's data security measures to be reasonable and appropriate in light of the sensitivity and volume of consumer information it holds, the size and complexity of its business, and the cost of available tools to improve security and reduce vulnerabilities. Personally identifiable health information is considered sensitive data that merits stronger safeguards. The FTC's guidance for appropriately securing consumers' personal information is similar to what is required by the HIPAA Security Rule. In addition, certain state laws govern the privacy and security of personal information, including health information in certain circumstances, some of which are more stringent than HIPAA and many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts. Failure or perceived failure to comply with these laws, where applicable, can result in material adverse effects to our business, including the imposition of significant civil and/or criminal penalties and private litigation.

The California Consumer Privacy Act, or CCPA, which went into effect January 1, 2020, is an example of the increasingly stringent privacy laws at the state level in the United States. The CCPA, among other things, imposes several obligations on covered companies, including requiring specific disclosures related to a

[Table of Contents](#)

business's collection, use and sharing of personal information and requirements to respond to requests related to their personal information (e.g. requests to understand personal information collection practices, to delete personal information, and to opt out of certain disclosures of their information). The CCPA also created a private right of action with statutory damages for certain data breaches, thereby potentially increasing risks associated with a data breach.

Additionally, in November 2020, California voters passed the California Privacy Rights Act of 2020, or CPRA. The CPRA, which is expected to take effect on January 1, 2023 and create additional obligations with respect to certain data relating to consumers, significantly expands the CCPA, including by introducing additional obligations such as data minimization and storage limitations, granting additional rights to consumers, such as correction of personal information and additional opt-out rights, and creates a new entity, the California Privacy Protection Agency, to implement and enforce the law. The CCPA and CPRA may increase our compliance costs and potential liability. In addition to the CCPA, numerous other states' legislatures have passed or are considering similar laws that will require ongoing compliance efforts and investment. For example, Virginia passed its Consumer Data Protection Act, and Colorado passed the Colorado Privacy Act, both of which differ from the CPRA and become effective in 2023.

Outside the United States, there are an increasing number of laws and regulations governing the collection, use and processing of personal data. For example, the European Union's General Data Protection Regulation, or EU GDPR applies to any company established in the European Economic Area, or EEA, and to companies established outside the EEA that process personal information in connection with the offering of goods or services to data subjects in the EEA or the monitoring of the behavior of data subjects in the EEA. These regulations are often more restrictive than those in the United States and may restrict transfers of personal data from the EEA to the United States and other countries unless certain requirements are met. The EU GDPR provides that EU member states may make their own further laws and regulations limiting the processing of genetic, biometric or health data, which could limit our ability to use and share personal data or could cause our costs to increase, and harm our business and financial condition. Further, the United Kingdom's decision to leave the European Union has created uncertainty with regard to data protection regulation in the United Kingdom. As of January 1, 2021, we are also subject to the UK General Data Protection Regulation and UK Data Protection Act of 2018, which retains the GDPR in substantially similar form in the United Kingdom's national law. Failure to comply with any of these obligations could expose us to material adverse effects, including significant fines.

For more information regarding risks relating to data privacy and security, see "Risk Factors – Risks related to our highly regulated industry – Our collection, processing, use and disclosure of personally identifiable information, including patient and employee information, is subject to privacy and security regulations, and our failure to comply with those regulations or to adequately secure the information in our possession could result in significant liability or reputational harm."

Health Reform

In March 2010, the ACA became law. This law substantially changed the way health care is financed by both commercial payers and government payers, and significantly impacted our industry. The ACA contains a number of provisions that impacted existing state and federal healthcare programs or result in the development of new programs, including those governing enrollments in state and federal healthcare programs, reimbursement changes and fraud and abuse.

Since its enactment, there have been efforts to repeal all or part of the ACA. For example, on June 17, 2021 the U.S. Supreme Court dismissed a challenge on procedural grounds that argued the ACA is unconstitutional in its entirety because the "individual mandate" was repealed by Congress. Thus, the ACA will remain in effect in its current form. Further, prior to the U.S. Supreme Court ruling on January 28, 2021, President Biden issued an executive order that initiated a special enrollment period for purposes of obtaining health insurance coverage through the ACA marketplace, which began on February 15, 2021 and remained open through August 15, 2021.

[Table of Contents](#)

The executive order also instructed certain governmental agencies to review and reconsider their existing policies and rules that limit access to healthcare, including among others, reexamining Medicaid demonstration projects and waiver programs that include work requirements, and policies that create unnecessary barriers to obtaining access to health insurance coverage through Medicaid or the ACA. It is possible that other challenges to the ACA will be made in the future. It is unclear how any such challenges and litigation, and the healthcare reform measures of the Biden administration will impact the ACA.

In addition, other legislative changes have been proposed and adopted since the ACA was enacted. On August 2, 2011, the Budget Control Act of 2011 was signed into law, which, among other things, reduced Medicare payments to providers by 2% per fiscal year, effective on April 1, 2013 and, due to subsequent legislative amendments to the statute, will remain in effect through 2030, with a temporary suspension from May 1, 2020 through December 31, 2021 due to the COVID-19 pandemic, unless additional Congressional action is taken.

We expect that additional state, federal, and foreign healthcare reform measures will be adopted in the future. It is also possible that additional governmental action will be taken in response to the COVID-19 pandemic.

Coverage and Reimbursement

The availability and extent of reimbursement by governmental and private payers is essential for most patients to be able to afford our current and future diagnostic products. Each payer makes its own decision as to whether to provide coverage for our tests, whether to enter into a contract with us and the reimbursement rate for a test. Coverage determinations by a payer may depend on a number of factors, including but not limited to a payer's determination that a test is appropriate, medically necessary or cost-effective. Negotiating with payers is time-consuming, and payers often insist on their standard form contracts, which may allow payers to terminate coverage on short notice, impose significant obligations on us and create additional regulatory and compliance hurdles for us. Further, when we contract with a payer as a participating provider, reimbursements by the payer are generally made pursuant to a negotiated fee schedule and are limited to only covered indications or where prior approval has been obtained. Becoming a participating provider can result in higher reimbursement amounts for covered uses of our tests and, potentially, no reimbursement for non-covered uses identified under the payer's policies or the contract.

Although we are a participating provider with a limited number of commercial payers, certain other large, national commercial payers, including Anthem, Aetna and Humana, have issued non-coverage policies that consider tissue and liquid comprehensive genomic profile testing, including certain of our Genomics tests, as experimental or investigational.

In the United States, many significant decisions about reimbursement for new diagnostics are made by the Centers for Medicare & Medicaid Services, or CMS, which makes a national coverage determination, or NCD, as to whether and to what extent a new diagnostic will be covered and reimbursed under Medicare, although it frequently delegates this authority to local Medicare Administrative Contractors, or MACs, which may make a local coverage determination, or LCD, with respect to coverage and reimbursement. Private payers tend to follow Medicare to a substantial degree. It is difficult to predict what CMS or the applicable MACs will decide with respect to reimbursement for novel diagnostic products such as ours. Medicare's NCD for NGS, first established in 2018 and subsequently updated in 2020, states that NGS oncology tests (such as our Tempus xT and Tempus xF tests), would be covered by Medicare nationally if and when: (1) performed in a CLIA-certified laboratory, (2) ordered by a treating physician, (3) the patient meets certain clinical and treatment criteria, including having recurrent, relapsed, refractory, metastatic, or advanced stages III or IV cancer, (4) the test is approved or cleared by the FDA as a companion in vitro diagnostic for an FDA approved or cleared indication for use in that patient's cancer, and (5) results are provided to the treating physician for management of the patient using a report template to specify treatment options. The NGS NCD also states that each MAC may provide local coverage of

[Table of Contents](#)

other NGS tests for cancer patients only when the test is performed by a CLIA-certified laboratory, ordered by a treating physician and the patient meets the same clinical and treatment criteria required of nationally covered NGS tests under the NGS NCD. An NGS typically test is not covered by Medicare when cancer patients do not have the above-noted indications for cancer under either an NCD or LCD.

National Government Services, Inc., or the Local MAC, is the MAC that makes local coverage determinations, or LCDs, for tests conducted at our Chicago laboratory. The Local MAC has issued two LCDs related to genetic testing in cancer, each of which currently requires claims to be submitted under a single CPT code that describes the test. Because no CPT code comprehensively describes our NGS oncology tests, we have historically submitted claims using individual codes based on the cancer subtype profiled. On March 25, 2021, the Local MAC instructed us to submit our claims using a different designated CPT code and indicated that such claims would be individually reviewed. In addition to claims submitted after the March 25, 2021 guidance, on July 23, 2021, the Local MAC issued revised instructions for CPT coding, which may be applicable to our NGS oncology tests performed after the date of the revised guidance, and further updated those instructions on July 29, 2021. We have sought additional clarification on this guidance from the Local MAC in order to understand its impact on our coding procedures. We are also attempting to assess the impact of this updated guidance on the payments we may receive for Medicare claims submitted to the Local MAC. Claims submitted under the March 2021 and July 2021 guidance were summararily denied and we are in the process of appealing these denials, but the process is typically slow and costly, and multiple levels of appeal may be required for adjudication of outstanding claims.

On February 10, 2022, the Local MAC jurisdiction issued a revised LCD (L37810), and a corresponding Billing and Coding update (A56867). The increased scope of coverage provided for in the revised LCD will result in the CPT code they instructed us to begin billing in July 2021 being reimbursed at the prevailing Medicare rate for those tests which meet the revised coverage criteria. The modified LCD is effective April 1, 2022 and applies to genomic sequence analysis panel tests in the treatment of solid tumors, which primarily impacts our solid tumor assay, xT, given the modified scope of coverage in the revised LCD. We are in the process of assessing the impact of the LCD on any claims submitted after April 1, 2022, as well as monitoring any impact the LCD has on the claims currently in the appeal process.

During the fourth quarter of 2021, we began receiving favorable results on outstanding level 2 claims that were adjudicated and have received payment on a subset of these claims as a result of the appeal process. As a result, beginning in the second quarter of 2021, we estimated the reimbursement rate for tests performed within our contractual allowances with a significantly reduced percent expected reimbursement for these tests, which is guided by the updated Local MAC guidance and appeal outcomes through year-end. As of December 31, 2021, Medicare claims represent 29% of our clinical testing volume.

In addition, pursuant to the regulations of CMS, we cannot bill Medicare directly for tests provided for Medicare beneficiaries in some situations. CMS adopted an exception to its laboratory date of service regulation, and if certain conditions are met, molecular testing laboratories such as us can rely on that exception to bill Medicare directly, instead of seeking payment from the hospital. If this exception is repealed or curtailed by CMS, or its laboratory date of service regulation is otherwise changed to adversely impact our ability to bill Medicare directly, our revenue could be materially reduced.

Some payers have implemented, or are in the process of implementing, laboratory benefit management programs, often using third-party benefit managers to manage these programs. The stated goals of these programs are to help improve the quality of outpatient laboratory services, support evidence-based guidelines for patient care and lower costs. The impact on laboratories, such as us, of active laboratory benefit management by third parties is unclear, and we expect that it would have a negative impact on our revenue in the short term. Payers may resist reimbursement for our tests in favor of less expensive tests, require pre-authorization for our tests, or impose additional pricing pressure on and substantial administrative burden for reimbursement for our tests. We expect to continue to focus substantial resources on increasing adoption of, and coverage and reimbursement for, our current

[Table of Contents](#)

tests and any future tests we may develop. We believe it may take several years to achieve broad coverage and adequate contracted reimbursement with a majority of payers for our tests. However, we cannot predict whether, under what circumstances, or at what price levels payers will cover and reimburse our tests.

Outside the United States, the reimbursement process and timelines vary significantly. Certain countries, including a number of member states of the European Union, set prices and make reimbursement decisions for diagnostic products, with limited participation from the marketing authorization or CE mark holders, or may take decisions that are unfavorable to the authorization or CE mark holder where they have participated in the process. There can be no assurance that we can achieve acceptable prices and reimbursement decisions.

Legal Proceedings

From time to time, we are involved in various legal proceedings arising from the normal course of business activities. We are not presently a party to any litigation the outcome of which, we believe, if determined adversely to us, would individually or taken together have a material adverse effect on our business, operating results, cash flows or financial condition. Defending such proceedings is costly and can impose a significant burden on management and employees. The results of any current or future litigation cannot be predicted with certainty, and regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources, and other factors.

Facilities

Our headquarters is located in Chicago, Illinois, where we lease approximately 180,000 square feet of laboratory and office space pursuant to a lease that expires in February 2029. We also lease an aggregate of approximately 25,000 square feet of laboratory and office space in Atlanta, Georgia pursuant to two leases that expire in September 2024 and September 2025, respectively. Our CLIA-certified laboratories are located in these facilities. We are currently operationalizing a new genomics lab in Raleigh, North Carolina. We also have offices in New York, New York and Redwood City, California. We do not own any real property. While we believe our existing facilities are adequate to meet our current requirements, we expect to expand our facilities as our operations grow over time. We believe we will be able to obtain such additional space on acceptable and commercially reasonable terms.

Employees and Human Capital

As of December 31, 2021, we had a total of 1,567 employees, of which 575 were technical and were engaged in product and engineering, and research and development. As of December 31, 2021, 830 employees were based at our headquarters in Chicago, Illinois, and 65 employees were based in Atlanta, Georgia. None of our employees are represented by a labor union or covered under a collective bargaining agreement, and we have never experienced a work stoppage. We consider our relationship with our employees to be positive.

Our human capital resources objectives include, as applicable, identifying, recruiting, retaining, incentivizing and integrating our existing and additional employees. The principal purposes of our equity and other incentive plans are to attract, retain and reward personnel through the granting of stock-based and cash-based compensation awards, in order to increase stockholder value and the success of our company by motivating such individuals to perform to the best of their abilities and achieve our objectives.

MANAGEMENT

The following sets forth information, as of December 31, 2021, regarding our current executive officers and directors:

<u>Name</u>	<u>Age</u>	<u>Position</u>
<i>Executive Officers:</i>		
Eric Lefkofsky	52	Chief Executive Officer, Founder and Director
Ryan Fukushima	36	Chief Operating Officer
Erik Phelps	51	Executive Vice President and Chief Administrative and Legal Officer
James Rogers	36	Chief Financial Officer
<i>Non-Employee Directors:</i>		
Peter J. Barris	70	Director
Eric D. Belcher	53	Director
Jennifer A. Doudna, Ph.D.	57	Director
Wayne A.I. Frederick, M.D.	50	Director
Robert Ghenchev	38	Director
Scott Gottlieb, M.D.	49	Director
Theodore J. Leonsis	65	Director
Nadja West, M.D.	60	Director

Executive Officers

Eric Lefkofsky is our Founder and has served as our Chief Executive Officer and a member of our board of directors since our inception. Before founding Tempus, Mr. Lefkofsky co-founded Groupon, Inc. in 2008, where he held various roles, including Executive Chairman (through August 2013), Chief Executive Officer (August 2013 to November 2015), and Chairman of the board of directors (November 2015 to June 2020). He continues to serve as a member of Groupon's board of directors. Mr. Lefkofsky also co-founded Lightbank LLC in 2008, a private venture capital firm specializing in investments in technology companies, and has served as its managing member since inception. Mr. Lefkofsky also co-founded InnerWorkings, Inc., Mediaocean, LLC, and Echo Global Logistics, Inc., and served on each company's board of directors or board of managers. Mr. Lefkofsky holds a bachelor's degree from the University of Michigan and a J.D. from the University of Michigan Law School. We believe that Mr. Lefkofsky is qualified to serve on our board of directors because of his perspective and experience as our Founder and Chief Executive Officer, and his extensive knowledge of the venture capital and technology industries.

Ryan Fukushima has served as our Chief Operating Officer since September 2015. Prior to joining us, Mr. Fukushima was an Entrepreneur-in-Residence and Vice President at Lightbank LLC, a private venture capital firm specializing in investments in technology companies, from February 2014 to September 2015. Mr. Fukushima holds a B.S. from California Polytechnic University and a M.B.A. from the Ross School of Business at the University of Michigan.

Erik Phelps has served as our Executive Vice President and Chief Administrative and Legal Officer since June 2020. Prior to this, Mr. Phelps served as our Executive Vice President and General Counsel from March 2017 to June 2020. Prior to joining us, Mr. Phelps served as the General Counsel at Epic Systems Corporation, a software company that provides electronic health records for medical groups, hospitals and healthcare organizations, from May 2013 to March 2017. Mr. Phelps holds a B.A. from Beloit College and a J.D. from the George Washington University Law School.

James Rogers has served as our Chief Financial Officer since April 2021. Prior to this, Mr. Rogers served as our Vice President of Finance from February 2020 to April 2021, as our Senior Director of Finance from February 2018 to February 2020, and as our Director of Finance from August 2017 to February 2018. Prior to joining us, Mr. Rogers held various finance positions at Groupon from April 2011 to August 2017, including most recently leading financial planning and analysis for its North America business from February 2017 to August 2017 and serving as the financial controller of Asia Pacific operations from January 2015 to January 2017. Mr. Rogers holds a B.B.A. from the University of Notre Dame and an M.S. from Northern Illinois University.

Non-Employee Directors

Peter J. Barris has served as a member of our board of directors since September 2017. Mr. Barris has also served on the boards of directors of Berkshire Grey, Inc. since April 2016, Sprout Social, Inc. since February 2011 and Groupon since January 2008. Mr. Barris joined New Enterprise Associates, Inc., or NEA, a global venture capital fund investing in technology and healthcare, where he specialized in information technology investing, in 1992 and retired at the end of 2019. Prior to his retirement, Mr. Barris held several roles at NEA, including Managing General Partner from 1999 to 2017. After retiring in 2019, Mr. Barris now serves as Chairman of NEA. Mr. Barris holds a B.S. from Northwestern University and an M.B.A. from the Tuck School of Business at Dartmouth University. We believe that Mr. Barris is qualified to serve on our board of directors because of his investment management and financial expertise, and his experience serving on public company boards.

Eric D. Belcher has served as a member of our board of directors since January 2019. Mr. Belcher has served as the Chief Executive Officer of Market Track, LLC (d/b/a Numerator), a data and technology company in the market research industry, since June 2019. Mr. Belcher has also held various positions at InnerWorkings, Inc. since May 2005, including most recently serving as its Chief Executive Officer and President from January 2009 to April 2018. Mr. Belcher served as a member of the board of directors of InnerWorkings, Inc. from January 2009 to December 2018, including as the Chairman of its board of directors from April 2018 to September 2018. Mr. Belcher holds a bachelor's degree from Bucknell University and an M.B.A. from the University of Chicago Booth School of Business. We believe that Mr. Belcher is qualified to serve on our board of directors because of his extensive experience in the technology industry and leading high growth companies.

Jennifer A. Doudna, Ph.D. has served as a member of our board of directors since April 2021. Dr. Doudna has also served on the board of directors of Johnson & Johnson since April 2018. Since July 2002, Dr. Doudna has served as a Professor of Biochemistry & Molecular Biology at the University of California, Berkeley, where she directs the Innovative Genomics Institute, a joint UC Berkeley-UC San Francisco center, holds the Li Ka Shing Chancellor's Professorship in Biomedical and Health, and is the Chair of the Chancellor's Advisory Committee on Biology. Since 2002, Dr. Doudna has served as Principal Investigator at the Doudna Lab at UC Berkeley. Dr. Doudna has founded and served on the Scientific Advisory Boards of Caribou Biosciences, Inc. and Intellia Therapeutics, Inc., each of which are leading CRISPR genome engineering companies, since 2010. She has also been an Investigator with the Howard Hughes Medical Institute since 1997. Dr. Doudna is the recipient of numerous scientific awards in biochemistry and genetics, including the Nobel Prize in Chemistry in 2020. Dr. Doudna holds a bachelor's degree from Pomona College and a Ph.D. from Harvard Medical School. We believe that Dr. Doudna is qualified to serve on our board of directors because of her expertise in scientific research and innovation.

Wayne A.I. Frederick, M.D. has served as a member of our board of directors since October 2020. Dr. Frederick has served on the boards of directors of several other public companies, including serving as a member of the board of directors of Insulet Corp since October 2020, Forma Therapeutics Holdings, Inc. since July 2020, and Humana Inc. since February 2020. He also serves on the boards of directors of privately held companies and charitable organizations. Dr. Frederick is the President of Howard University, having held this position since July 2014, and also serves as the Charles R. Drew Endowed Chair of Surgery at Howard

[Table of Contents](#)

University's College of Medicine. Dr. Frederick holds a B.S./M.D. dual degree, and an M.B.A. from Howard University. We believe that Dr. Frederick is qualified to serve on our board of directors because of his vast experience in medical research, healthcare academics and business administration, and his service on the boards of multiple public companies.

Robert Ghenchev has served as a member of our board of directors since May 2019 and is currently employed as Senior Partner at Novo Holdings Equity US Inc. which provides consulting services to Novo Holdings A/S. Since January 2018, Mr. Ghenchev has also served as Head of Novo Growth at Novo Holdings A/S. Prior to joining Novo Holdings, Mr. Ghenchev served as a Senior Vice President at Moelis & Company in London where he focused on mergers and acquisitions within the healthcare industry, from April 2010 to January 2018. Mr. Ghenchev also serves on the boards of directors of a European public company and other private companies. Mr. Ghenchev holds a B.A. in Economics and Finance from McGill University and an M.Sc. in Financial Economics from the University of Oxford. We believe that Mr. Ghenchev is qualified to serve on our board of directors because of his expertise in finance and the healthcare industry.

Scott Gottlieb, M.D. has served as a member of our board of directors since October 2019. Dr. Gottlieb has also served on the boards of directors of Illumina, Inc. since February 2020 and Pfizer Inc. since June 2019. Dr. Gottlieb has served as a Special Partner on NEA's healthcare investment team since April 2019, and a Resident Fellow at American Enterprise Institute since April 2021. Prior to that, he served as the 23rd Commissioner of the U.S. Food and Drug Administration from May 2017 to April 2019. Prior to serving as Commissioner, Dr. Gottlieb held several roles in the public and private sectors, including serving as a Venture Partner at NEA from January 2007 to May 2017, and a senior advisor to the Administrator of the Centers for Medicare and Medicaid Services in 2004. He is presently a contributor to CNBC and the CBS News program Face the Nation. Dr. Gottlieb holds a B.A. from Wesleyan University and an M.D. from Mount Sinai School of Medicine. We believe that Dr. Gottlieb is qualified to serve on our board of directors because of his extensive experience as a medical policy expert and public health advocate.

Theodore J. Leonsis has served as a member of our board of directors since January 2019. In November 2011, Mr. Leonsis co-founded Revolution Growth, a private investment firm, and has served as a General Partner thereof since that time. Since 1999, Mr. Leonsis has served as the Founder, Chairman, Majority Owner, and Chief Executive Officer of Monumental Sports & Entertainment, LLC, a sports, entertainment, media, and technology company that owns the NBA's Washington Wizards, the NHL's Washington Capitals, the WNBA's Washington Mystics, the Capital City Go-Go, Wizards District Gaming, Caps Gaming, and the Capital One Arena in Washington, D.C. Mr. Leonsis has served as a director of American Express Co. since July 2010. Mr. Leonsis has also served on the board of directors of Groupon, Inc. since June 2009, including as Chairman of the board of directors from August 2013 to November 2015 and, again, since June 2020. Mr. Leonsis also serves on the boards of directors of several private internet and technology companies, as well as charitable organizations. Mr. Leonsis holds a bachelor's degree from Georgetown University. We believe that Mr. Leonsis is qualified to serve on our board of directors because of his significant operational, investment and financial experience, and his service on the boards of two public companies.

Nadja West, M.D. has served as a member of our board of directors since April 2021. Dr. West has also served on the boards of directors of several other public companies, including serving as a member of the board of directors of Johnson & Johnson since December 2020, Tenet Healthcare Corp since October 2019, and Nucor Corporation since September 2019. From December 2015 to October 2019, Dr. West served as the 44th Surgeon General of the U.S. Army, and the Commanding General of the U.S. Army Medical Command. Dr. West currently serves as Trustee of both the National Recreation Foundation and Mount St. Mary's University, and board member of Americares and The Woodruff Foundation. She was recently appointed an independent member of the NCAA Board of Governors. Dr. West holds a B.S. from the United States Military Academy at West Point, an M.D. from the George Washington University School of Medicine, and an M.S. from National War College. We believe that Dr. West is qualified to serve on our board of directors because of her executive and operational leadership and expertise with strategic planning and healthcare management.

Composition of Our Board of Directors

Our business and affairs are managed under the direction of our board of directors. We currently have nine directors. Each director is elected to the board of directors for a one-year term, to serve until the election and qualification of a successor director at our annual meeting of stockholders, or until the director's earlier removal, resignation, or death. All of our directors currently serve on the board of directors pursuant to the provisions of a voting agreement between us and several of our stockholders. This agreement will terminate upon the closing of this offering, after which there will be no further contractual obligations regarding the election of our directors. Following the closing of this offering, no stockholder will have any special rights regarding the election or designation of members of our board of directors. Our current directors will continue to serve as directors until their resignation, removal or successor is duly elected.

Director Independence

Our board of directors has undertaken a review of the independence of each director. Based on information provided by each director concerning his or her background, employment and affiliations, our board of directors has determined that none of our directors, other than Mr. Lefkofsky, has any relationships that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of these directors is "independent" as that term is defined under the listing standards of the Nasdaq Stock Market. In making these determinations, our board of directors considered the current and prior relationships that each non-employee director has with our company and all other facts and circumstances our board of directors deemed relevant in determining their independence, including the beneficial ownership of our shares by each non-employee director and the transactions described in the section titled "Certain Relationships and Related Party Transactions."

Committees of Our Board of Directors

Our board of directors has established an audit committee, a compensation committee, a nominating and corporate governance committee and an executive committee. The composition and responsibilities of each of the committees of our board of directors are described below. Members serve on these committees until their resignation or until otherwise determined by our board of directors. Our board of directors may establish other committees as it deems necessary or appropriate from time to time.

Audit Committee

After this offering, our audit committee will consist of Eric D. Belcher, Peter J. Barris and Wayne A.I. Frederick. Our board of directors has determined that each of Messrs. Belcher, Barris and Frederick satisfies the independence requirements under the Nasdaq Stock Market listing standards and Rule 10A-3(b)(1) of the Exchange Act. The chair of our audit committee will be Mr. Belcher, who our board of directors has determined is an "audit committee financial expert" within the meaning of SEC regulations. Each member of our audit committee can read and understand fundamental financial statements in accordance with applicable requirements. In arriving at these determinations, our board of directors has examined each audit committee member's scope of experience and the nature of their employment in the corporate finance sector.

The principal duties and responsibilities of our audit committee include, among other things:

- selecting a qualified firm to serve as the independent registered public accounting firm to audit our financial statements;
- helping to ensure the independence and performance of the independent registered public accounting firm;
- helping to maintain and foster an open avenue of communication between management and the independent registered public accounting firm;

Table of Contents

- discussing the scope and results of the audit with the independent registered public accounting firm, and reviewing, with management and the independent accountants, our interim and year-end operating results;
- developing procedures for employees to submit concerns anonymously about questionable accounting or audit matters;
- reviewing our policies on risk assessment and risk management;
- reviewing related party transactions;
- obtaining and reviewing a report by the independent registered public accounting firm at least annually, that describes its internal quality-control procedures, any material issues with such procedures, and any steps taken to deal with such issues when required by applicable law; and
- approving (or, as permitted, pre-approving) all audit and all permissible non-audit services to be performed by the independent registered public accounting firm.

Our audit committee will operate under a written charter, to be effective prior to the closing of this offering, that satisfies the applicable listing standards of the Nasdaq Stock Market.

Compensation Committee

After this offering, our compensation committee will consist of Peter J. Barris and Nadja West. The chair of our compensation committee will be Mr. Barris. Our board of directors has determined that each of Mr. Barris and Ms. West is independent under Nasdaq listing standards and a “non-employee director” as defined in Rule 16b-3 promulgated under the Exchange Act.

The principal duties and responsibilities of our compensation committee include, among other things:

- approving the retention of compensation consultants and outside service providers and advisors;
- reviewing and approving, or recommending that our board of directors approve, the compensation, individual and corporate performance goals and objectives and other terms of employment of our executive officers, including evaluating the performance of our chief executive officer and, with his assistance, that of our other executive officers;
- reviewing and recommending to our board of directors the compensation of our directors;
- administering our equity and non-equity incentive plans;
- reviewing our practices and policies of employee compensation as they relate to risk management and risk-taking incentives;
- reviewing and evaluating succession plans for the executive officers;
- reviewing and approving, or recommending that our board of directors approve, incentive compensation and equity plans; and
- reviewing and establishing general policies relating to compensation and benefits of our employees and reviewing our overall compensation philosophy.

Our compensation committee will operate under a written charter, to be effective prior to the closing of this offering, that satisfies the applicable listing standards of the Nasdaq Stock Market.

Nominating and Corporate Governance Committee

After this offering, our nominating and corporate governance committee will consist of Theodore J. Leonsis, Jennifer A. Doudna and Scott Gottlieb. The chair of our nominating and corporate governance committee will be

[Table of Contents](#)

Mr. Leonsis. Our board of directors has determined that each member of the nominating and corporate governance committee is independent under the applicable listing standards of the Nasdaq Stock Market. In addition, Mr. Lefkofsky will serve as an observer on our nominating and corporate governance committee.

The nominating and corporate governance committee's responsibilities include, among other things:

- identifying, evaluating, and selecting, or recommending that our board of directors approve, nominees for election to our board of directors and its committees;
- approving the retention of director search firms;
- evaluating the performance of our board of directors and of individual directors;
- considering and making recommendations to our board of directors regarding the composition of our board of directors and its committees;
- evaluating the adequacy of our corporate governance practices and reporting; and
- overseeing an annual evaluation of the board's performance.

Our nominating and corporate governance committee will operate under a written charter, to be effective prior to the closing of this offering, that satisfies the applicable listing standards of the Nasdaq Stock Market.

Executive Committee

Our board of directors has established an executive committee comprised of Peter J. Barris, Theodore J. Leonsis and Eric Lefkofsky. The executive committee was formed to facilitate approval of certain corporate actions in the intervals between full meetings of the board. The executive committee has the authority to exercise the power and authority of the board, except with respect to matters which, under the Delaware General Corporation Law or the rules and regulations of the Nasdaq Stock Market, cannot be delegated by the board of directors to a committee.

Code of Conduct

We have adopted a Code of Conduct that applies to all our employees, officers and directors. This includes our principal executive officer, principal financial officer and principal accounting officer or controller, or persons performing similar functions. The full text of our Code of Conduct will be posted on our website at www.tempus.com. We intend to disclose on our website any future amendments of our Code of Conduct or waivers that exempt any principal executive officer, principal financial officer, principal accounting officer or controller, persons performing similar functions or our directors from provisions in the Code of Conduct. Information contained on, or that can be accessed through, our website is not incorporated by reference into this prospectus, and you should not consider information on our website to be part of this prospectus.

Compensation Committee Interlocks and Insider Participation

None of the members of the compensation committee are currently, or have been at any time, one of our officers or employees. None of our executive officers currently serve, or have served during the last year, as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving as a member of our board of directors or compensation committee.

[Table of Contents](#)

Non-Employee Director Compensation

The following table sets forth information regarding compensation earned by or paid to our non-employee directors for the year ended December 31, 2021:

<u>Name</u>	<u>Fees Earned or Paid in Cash</u>	<u>Stock Awards⁽¹⁾ ⁽²⁾</u>	<u>Total</u>
Peter J. Barris	\$ —	\$ —	\$ —
Eric D. Belcher	—	—	—
Jennifer A. Doudna, Ph.D. ⁽³⁾	75,000	800,500	875,500
Wayne A.I. Frederick, M.D.	75,000	800,500	875,500
Robert Ghenchev	—	—	—
Scott Gottlieb, M.D.	100,000	2,376,500 ⁽⁴⁾	2,476,500
Theodore J. Leonsis	—	—	—
Nadja West, M.D. ⁽⁵⁾	75,000	800,500	875,500

- (1) Amounts reported represent the aggregate grant date fair value of RSUs granted to our directors during 2021 under our 2015 Plan, computed in accordance with Financial Accounting Standard Board Accounting Standards Codification, Topic 718, or ASC Topic 718. The assumptions used in calculating the grant date fair value of the stock awards reported in this column are set forth in the notes to our audited consolidated financial statements included elsewhere in this prospectus. This amount does not reflect the actual economic value that may be realized by the non-employee director.
- (2) As of December 31, 2021, the aggregate number of shares underlying outstanding RSUs under our 2015 Plan held by each of our non-employee directors was as follows:

<u>Name</u>	<u>Stock Awards</u>
Peter J. Barris	100,000 ^(a)
Eric D. Belcher	—
Dr. Jennifer A. Doudna ⁽³⁾	25,000 ^(b)
Dr. Wayne A.I. Frederick	25,000 ^(c)
Robert Ghenchev	—
Dr. Scott Gottlieb	50,000 ^(d)
Theodore J. Leonsis	—
Dr. Nadja West ⁽⁵⁾	25,000 ^(b)

- (a) Represents a restricted stock award of 100,000 shares of our Class A common stock, one fourth of which vest on September 7, 2018, and 1/16 of which vest quarterly thereafter, provided that the recipient remains in continuous service with us through each vesting date, and subject to the earlier to occur of (i) the consummation of this offering and (ii) a change in control of our company.
- (b) Represents 25,000 RSUs, one fourth of which vest on January 13, 2022, and 1/16 of which vest quarterly thereafter, provided that the recipient remains in continuous service with us through each vesting date, and subject to the earlier to occur of (i) the consummation of this offering and (ii) a change in control of our company.
- (c) Represents 25,000 RSUs, one fourth of which vest on October 13, 2021, and 1/16 of which vest quarterly thereafter, provided that the recipient remains in continuous service with us through each vesting date, and subject to the earlier to occur of (i) the consummation of this offering and (ii) a change in control of our company.
- (d) Represents 50,000 RSUs, one fourth of which vest on July 1, 2019, and 1/16 of which vest quarterly thereafter, provided that the recipient remains in continuous service with us through each vesting date, and subject to the earlier to occur of (i) the consummation of this offering and (ii) a change in control of our company.
- (3) Dr. Doudna joined our board of directors in April 2021.

[Table of Contents](#)

- (4) Dr. Gottlieb joined our board of directors in October 2019, in connection with which he was entitled to an award of 50,000 RSUs, which were granted and approved by our board of directors in July 2021. The amount shown represents the aggregate grant date fair value of such RSUs as of July 2021.
- (5) Dr. West joined our board of directors in April 2021.

Mr. Lefkofsky, our Chief Executive Officer, Founder and Chairman, is also a member of our board of directors but does not receive any additional compensation for his service as a director. See the section titled “Executive Compensation” for more information regarding the compensation earned by Mr. Lefkofsky.

We intend to adopt a non-employee director compensation policy in connection with this offering on terms to be determined by our board of directors. Under the non-employee director policy, our non-employee directors will be eligible to receive compensation for service on our board of directors and committees of our board of directors.

EXECUTIVE COMPENSATION

Our named executive officers, consisting of our principal executive officer and the next two most highly compensated executive officers, as of December 31, 2021, were:

- Eric Lefkofsky, Chief Executive Officer, Founder and Chairman;
- James Rogers, Chief Financial Officer; and
- Ryan Fukushima, Chief Operating Officer.

Summary Compensation Table

The following table presents all of the compensation awarded to or earned by or paid to our named executive officers for the years ended December 31, 2020 and 2021.

<u>Name and Principal Position</u>	<u>Year</u>	<u>Salary</u>	<u>Stock Awards(1)</u>	<u>All Other Compensation</u>	<u>Total</u>
Eric Lefkofsky	2021	\$ —	\$207,486,240	\$ 2,100(2)	\$207,488,340
<i>Chief Executive Officer, Founder and Chairman</i>	2020	—	—	525(2)	525
James Rogers(3)	2021	335,188(4)	3,871,600	2,100(2)	4,208,888
<i>Chief Financial Officer</i>					
Ryan Fukushima(5)	2021	422,396	5,134,070	67,316(6)	5,623,782
<i>Chief Operating Officer</i>					

- (1) Amounts reported represents the aggregate grant date fair value of RSUs granted to our executive officer during the fiscal year under our 2015 Plan, computed in accordance with ASC Topic 718. The assumptions used in calculating the grant date fair value of the stock awards reported in this column are set forth in the notes to our audited consolidated financial statements included elsewhere in this prospectus. This amount does not reflect the actual economic value that may be realized by the executive officer.
- (2) Amount shown represents pro-rated parking fees in the amount of \$525 earned during 2020 and \$2,100 earned during 2021, as applicable. Our office was closed for part of 2020 and 2021 due to the COVID-19 pandemic during which our named executive officers did not receive parking benefits.
- (3) Mr. Rogers was not one of our named executive officers for the year ended December 31, 2020.
- (4) Mr. Rogers was appointed as our Chief Financial Officer in April 2021. The salary reported represents a pro-rata portion of his salary in 2021. His annualized base salary for 2021 was \$450,000.
- (5) Mr. Fukushima was not one of our named executive officers for the year ended December 31, 2020.
- (6) Amount shown represents a housing stipend in the amount of \$67,316, paid on a monthly basis in the amount of \$7,980 per month.

Outstanding Equity Awards as of December 31, 2021

The following table sets forth certain information about outstanding equity awards granted to our named executive officers that remain outstanding as of December 31, 2021.

Name	Stock Awards(1)		Number of Shares or Units of Stock that Have Not Vested (#)	Market Value of Shares or Units of Stock that Have Not Vested(2)
	Grant Date	Vesting Commencement Date		
Eric Lefkofsky	July 14, 2021	February 1, 2021	4,866,000(3)	\$ 248,360,640
James Rogers	December 11, 2017	July 31, 2017	24,000(4)	1,224,960
	March 13, 2018	February 24, 2018	26,000(4)	1,327,040
	April 17, 2019	February 1, 2019	15,000(4)	765,600
	April 15, 2020	February 1, 2020	15,000(4)	765,600
	April 21, 2021	February 1, 2021	20,000(3)	1,020,800
	April 21, 2021	March 9, 2021	100,000(5)	5,104,000
Ryan Fukushima	March 13, 2018	September 25, 2017	100,000(4)	5,104,000
	April 17, 2019	February 1, 2019	50,000(4)	2,552,000
	October 16, 2019	October 16, 2019	100,000(6)	5,104,000
	April 21, 2021	February 1, 2021	150,000(3)	7,656,000
	April 21, 2021	February 1, 2021	3,500(4)	178,640

- (1) All stock awards listed in this table represent RSUs or PSUs, as applicable, granted pursuant to our 2015 Plan, the terms of which are described below under “—Equity Incentive Plans—2015 Stock Plan.”
- (2) This column represents the fair market value of a share of our common stock of \$51.04 as of November 17, 2021 as determined by our board of directors, multiplied by the amount shown in the column “Stock Awards—Number of Shares or Units of Stock that Have Not Vested.”
- (3) One fourth of these PSUs vest on the one-year anniversary of the vesting commencement date and 1/12 of the remaining PSUs vest quarterly thereafter, provided that the recipient remains in continuous service with us through each vesting date, and subject to the earlier to occur of (i) the consummation of this offering and (ii) a change in control of our company, which we refer to as a Liquidity Event. These PSUs shall only become settleable into our common stock if, on the date on which such Liquidity Event occurs, the valuation of our company equals or exceeds \$6 billion, as determined by our board of directors in its sole discretion.
- (4) One fourth of these RSUs vest on the one-year anniversary of the vesting commencement date and 1/12 of the remaining RSUs vest quarterly thereafter, provided that the recipient remains in continuous service with us through each vesting date, and subject to the earlier to occur of (i) the consummation of this offering and (ii) a change in control of our company.
- (5) One fifth of these RSUs vest on the one-year anniversary of the vesting commencement date and 1/16 of the remaining RSUs vest quarterly thereafter, provided that the recipient remains in continuous service with us through each vesting date, and subject to the earlier to occur of (i) the consummation of this offering and (ii) a change in control of our company.
- (6) These RSUs have satisfied the service-based vesting requirement, and will become fully vested and settleable upon the occurrence of a Liquidity Event, provided that the recipient remains in continuous service with us through such vesting date.

See “—Employment Arrangements” for a description of vesting acceleration applicable to stock awards held by our named executive officers.

We may in the future, on an annual basis or otherwise, grant additional equity awards to our executive officers pursuant to our 2022 Plan the terms of which are described below under “—Equity Incentive Plans—2022 Equity Incentive Plan.”

Employment Arrangements

In January 2022, we entered into revised employment agreements with each of our named executive officers setting forth the terms and conditions of such executive's employment with us. The employment agreements generally provide for at-will employment and set forth the executive officer's initial base salary. Each of our named executive officers has also executed our standard form of proprietary information and inventions assignment agreement. Our current named executive officers are eligible to participate in our employee benefit plans, including our medical, dental, vision, disability and life insurance plans, in each case on the same basis as all of our other employees. Other than as described herein, we generally do not provide perquisites or personal benefits to our named executive officers.

Eric Lefkofsky

We entered into a new employment agreement with Mr. Lefkofsky, our Chief Executive Officer, effective January 2022. Mr. Lefkofsky's employment agreement provides for an annual base salary of \$0, which is subject to review and adjustment by the company in its sole discretion.

In the event of a Change in Control (as defined in our 2015 Plan), 100% of Mr. Lefkofsky's then-unvested equity will immediately accelerate, vest and become exercisable.

James Rogers

We entered into a new employment agreement with Mr. Rogers, our Chief Financial Officer, effective January 2022. Mr. Rogers' employment agreement provides for an annual base salary of \$450,000, which is subject to review and adjustment by the company in its sole discretion.

Under the terms of his employment agreement, if Mr. Rogers resigns for Good Reason or we terminate his employment without Cause (each as defined in his employment agreement), then Mr. Rogers will be eligible to receive salary continuation and reimbursement of premiums to continue health care benefits for a period of twelve months, subject to his execution of a general release in favor of our company. Further, if Mr. Rogers resigns for Good Reason or we terminate Mr. Rogers' employment without Cause, in either case in the event of a Change in Control (as defined in our 2015 Plan), 100% of his then-unvested equity will immediately accelerate, vest and become exercisable.

Ryan Fukushima

We entered into a new employment agreement with Mr. Fukushima, our Chief Operating Officer, effective January 2022. Mr. Fukushima's employment agreement provides for an annual base salary of \$500,000, which is subject to review and adjustment by the company in its sole discretion.

Under the terms of his employment agreement, if Mr. Fukushima resigns for Good Reason or we terminate his employment without Cause (each as defined in his employment agreement), then Mr. Fukushima will be eligible to receive salary continuation and reimbursement of premiums to continue health care benefits for a period of twelve months, subject to his execution of a general release in favor of our company. Further, if Mr. Fukushima resigns for Good Reason or we terminate Mr. Fukushima's employment without Cause, in either case in the event of a Change in Control (as defined in our 2015 Plan), 100% of his then-unvested equity will immediately accelerate, vest and become exercisable.

Equity Incentive Plans

2022 Equity Incentive Plan

Our board of directors has adopted the 2022 Equity Incentive Plan, or the 2022 Plan, that will become effective on the date of the underwriting agreement related to this offering. Our 2022 Plan will come into

[Table of Contents](#)

existence upon its adoption by our board of directors, but no grants will be made under our 2022 Plan prior to its effectiveness. Once our 2022 Plan becomes effective, no further grants will be made under our 2015 Plan.

Types of Awards. Our 2022 Plan provides for the grant of incentive stock options, or ISOs, nonstatutory stock options, or NSOs, stock appreciation rights, restricted stock awards, restricted stock unit awards, performance-based awards and other awards, or collectively, awards. ISOs may be granted only to our employees, including our officers, and the employees of our affiliates. All other awards may be granted to our employees, including our officers, our non-employee directors and consultants and the employees and consultants of our affiliates.

Authorized Shares. The maximum number of shares of our Class A common stock that may be issued under our 2022 Plan is 10,000,000 shares of our Class A common stock. The number of shares of our Class A common stock reserved for issuance under our 2022 Plan will automatically increase on January 1 of each year, beginning on January 1, 2023, and continuing through and including January 1, 2032, by 3% of the aggregate number of shares of common stock (both Class A and Class B) outstanding on December 31 of the preceding calendar year, or a lesser number of shares determined by our board of directors prior to the applicable January 1. The maximum number of shares that may be issued upon the exercise of ISOs under our 2022 Plan is 30,000,000 shares.

Shares issued under our 2022 Plan will be authorized but unissued or reacquired shares of Class A common stock. Shares subject to awards granted under our 2022 Plan that expire or terminate without being exercised in full, or that are paid out in cash rather than in shares, will not reduce the number of shares available for issuance under our 2022 Plan. Additionally, shares issued pursuant to awards under our 2022 Plan that we repurchase or that are forfeited, as well as shares used to pay the exercise price of an award or to satisfy the tax withholding obligations to an award, will become available for future grant under our 2022 Plan.

The maximum number of shares of our Class A common stock subject to stock awards granted under the 2022 Plan or otherwise during any calendar year beginning in 2022 to any non-employee director, taken together with any cash fees paid by us to such non-employee director during such calendar year for service on the board of directors, will not exceed \$750,000 in total value (calculating the value of any such stock awards based on the grant date fair value of such stock awards for financial reporting purposes), or, with respect to the calendar year in which a non-employee director is first appointed or elected to our board of directors, \$1,000,000.

Plan Administration. Our board of directors, or a duly authorized committee of our board, may administer our 2022 Plan. Our board of directors has delegated concurrent authority to administer our 2022 Plan to the compensation committee under the terms of the compensation committee's charter. We sometimes refer to the board of directors, or the applicable committee with the power to administer our equity incentive plans, as the administrator. The administrator may also delegate to one or more of our officers the authority to (1) designate employees (other than officers) to receive specified awards, and (2) determine the number of shares subject to such awards.

The administrator has the authority to determine the terms of awards, including recipients, the exercise, purchase or strike price of awards, if any, the number of shares subject to each award, the fair market value of a share of our Class A common stock, the vesting schedule applicable to the awards, together with any vesting acceleration, and the form of consideration, if any, payable upon exercise or settlement of the award and the terms of the award agreements for use under our 2022 Plan.

In addition, subject to the terms of the 2022 Plan, the administrator also has the power to modify outstanding awards under our 2022 Plan, including the authority to reprice any outstanding option or stock appreciation right, cancel and re-grant any outstanding option or stock appreciation right in exchange for new stock awards, cash or other consideration, or take any other action that is treated as a repricing under generally accepted accounting principles, with the consent of any materially adversely affected participant.

[Table of Contents](#)

Stock Options. ISOs and NSOs are granted pursuant to stock option agreements adopted by the administrator. The administrator determines the exercise price for a stock option, within the terms and conditions of the 2021 Plan, provided that the exercise price of a stock option generally cannot be less than 100% of the fair market value of our Class A common stock on the date of grant. Options granted under the 2022 Plan vest at the rate specified in the stock option agreement as specified in the stock option agreement by the administrator.

The administrator determines the term of stock options granted under the 2022 Plan, up to a maximum of ten years. Unless the terms of an optionholder's stock option agreement provide otherwise, if an optionholder's service relationship with us, or any of our affiliates, ceases for any reason other than disability, death or cause, the optionholder may generally exercise any vested options for a period of three months following the cessation of service. The option term may be extended in the event that either an exercise of the option or an immediate sale of shares acquired upon exercise of the option following such a termination of service is prohibited by applicable securities laws or our insider trading policy. If an optionholder's service relationship with us or any of our affiliates ceases due to disability or death, or an optionholder dies within a certain period following cessation of service, the optionholder or a beneficiary may generally exercise any vested options for a period of 12 months in the event of disability and 18 months in the event of death. In the event of a termination for cause, options generally terminate immediately upon the termination of the individual for cause. In no event may an option be exercised beyond the expiration of its term.

Acceptable consideration for the purchase of our Class A common stock issued upon the exercise of a stock option will be determined by the administrator and may include (1) cash, check, bank draft or money order, (2) a broker-assisted cashless exercise, (3) the tender of shares of Class A common stock previously owned by the optionholder, (4) a net exercise of the option if it is an NSO and (5) other legal consideration approved by the administrator.

Options may not be transferred to third-party financial institutions for value. Unless the administrator provides otherwise, options generally are not transferable except by will, the laws of descent and distribution or pursuant to a domestic relations order. An optionholder may designate a beneficiary, however, who may exercise the option following the optionholder's death.

Tax Limitations on ISOs. The aggregate fair market value, determined at the time of grant, of our Class A common stock with respect to ISOs that are exercisable for the first time by an option holder during any calendar year under all of our stock plans may not exceed \$100,000. Options or portions thereof that exceed such limit will be treated as NSOs. No ISOs may be granted to any person who, at the time of the grant, owns or is deemed to own stock possessing more than 10% of our total combined voting power or that of any of our parent or subsidiary corporations, unless (1) the option exercise price is at least 110% of the fair market value of the stock subject to the option on the date of grant and (2) the term of the ISO does not exceed five years from the date of grant.

Restricted Stock Awards. Restricted stock awards are granted pursuant to restricted stock award agreements adopted by the administrator. Restricted stock awards may be granted in consideration for cash, check, bank draft or money order, services rendered to us or our affiliates or any other form of legal consideration. Class A common stock acquired under a restricted stock award may, but need not, be subject to a share repurchase option in our favor in accordance with a vesting schedule to be determined by the administrator. A restricted stock award may be transferred only upon such terms and conditions as set by the administrator. Except as otherwise provided in the applicable award agreement, restricted stock awards that have not vested may be forfeited or repurchased by us upon the participant's cessation of continuous service for any reason.

Restricted Stock Unit Awards. Restricted stock unit awards are granted pursuant to restricted stock unit award agreements adopted by the administrator. Restricted stock unit awards may be granted in consideration for any form of legal consideration. A restricted stock unit award may be settled by cash, delivery of stock, a combination of cash and stock as deemed appropriate by the administrator or in any other form of consideration

[Table of Contents](#)

set forth in the restricted stock unit award agreement. Additionally, dividend equivalents may be credited in respect of shares covered by a restricted stock unit award. Except as otherwise provided in the applicable award agreement, restricted stock units that have not vested will be forfeited upon the participant's cessation of continuous service for any reason.

Stock Appreciation Rights. Stock appreciation rights are granted pursuant to stock appreciation right grant agreements adopted by the administrator. The administrator determines the strike price for a stock appreciation right, which generally cannot be less than 100% of the fair market value of our Class A common stock on the date of grant. Upon the exercise of a stock appreciation right, we will pay the participant an amount equal to the product of (1) the excess of the per share fair market value of our Class A common stock on the date of exercise over the strike price, multiplied by (2) the number of shares of our Class A common stock with respect to which the stock appreciation right is exercised. A stock appreciation right granted under the 2022 Plan vests at the rate specified in the stock appreciation right agreement as determined by the administrator.

The administrator determines the term of stock appreciation rights granted under the 2022 Plan, up to a maximum of ten years. Unless the terms of a participant's stock appreciation right agreement provide otherwise, if a participant's service relationship with us or any of our affiliates ceases for any reason other than cause, disability or death, the participant may generally exercise any vested stock appreciation right for a period of three months following the cessation of service. The stock appreciation right term may be further extended in the event that exercise of the stock appreciation right following such a termination of service is prohibited by applicable securities laws. If a participant's service relationship with us, or any of our affiliates, ceases due to disability or death, or a participant dies within a certain period following cessation of service, the participant or a beneficiary may generally exercise any vested stock appreciation right for a period of 12 months in the event of disability and 18 months in the event of death. In the event of a termination for cause, stock appreciation rights generally terminate immediately upon the occurrence of the event giving rise to the termination of the individual for cause. In no event may a stock appreciation right be exercised beyond the expiration of its term.

Performance Awards. Our 2022 Plan permits the grant of performance-based stock and cash awards. The compensation committee can structure such awards so that the stock or cash will be issued or paid pursuant to such award only following the achievement of certain pre-established performance goals during a designated performance period. Performance awards that are settled in cash or other property are not required to be valued in whole or in part by reference to, or otherwise based on, our Class A common stock.

The performance goals may be based on any measure of performance selected by the board of directors. The compensation committee may establish performance goals on a company-wide basis, with respect to one or more business units, divisions, affiliates or business segments, and in either absolute terms or relative to the performance of one or more comparable companies or the performance of one or more relevant indices. Unless specified otherwise (i) in the award agreement at the time the award is granted or (ii) in such other document setting forth the performance goals at the time the goals are established, the compensation committee will appropriately make adjustments in the method of calculating the attainment of the performance goals as follows: (1) to exclude restructuring and/or other nonrecurring charges; (2) to exclude exchange rate effects; (3) to exclude the effects of changes to generally accepted accounting principles; (4) to exclude the effects of any statutory adjustments to corporate tax rates; (5) to exclude the effects of items that are "unusual" in nature or occur "infrequently" as determined under generally accepted accounting principles; (6) to exclude the dilutive effects of acquisitions or joint ventures; (7) to assume that any business divested by us achieved performance objectives at targeted levels during the balance of a performance period following such divestiture; (8) to exclude the effect of any change in the outstanding shares of common stock by reason of any stock dividend or split, stock repurchase, reorganization, recapitalization, merger, consolidation, spin-off, combination or exchange of shares or other similar corporate change, or any distributions to common stockholders other than regular cash dividends; (9) to exclude the effects of stock-based compensation and the award of bonuses under our bonus plans; (10) to exclude costs incurred in connection with potential acquisitions or divestitures that are required to be expensed under generally accepted accounting principles and (11) to exclude the goodwill and intangible asset impairment charges that are required to be recorded under generally accepted accounting principles.

[Table of Contents](#)

Other Awards. The administrator may grant other awards based in whole or in part by reference to our Class A common stock. The administrator will set the number of shares under the award and all other terms and conditions of such awards.

Changes to Capital Structure. In the event there is a specified type of change in our capital structure, such as a stock split, reverse stock split or recapitalization, appropriate adjustments will be made to (1) the class and maximum number of shares reserved for issuance under the 2022 Plan; (2) the class and maximum number of shares by which the share reserve may increase automatically each year; (3) the class and maximum number of shares that may be issued upon the exercise of ISOs and (4) the class and number of shares and exercise price, strike price, or purchase price, if applicable, of all outstanding awards.

Corporate Transactions. The following applies to stock awards under the 2022 Plan in the event of a corporate transaction, unless otherwise provided in a participant's stock award agreement or other written agreement with us or one of our affiliates or unless otherwise expressly provided by the administrator at the time of grant. Under the 2022 Plan, a corporate transaction is generally the consummation of (1) a sale or other disposition of all or substantially all of our assets, (2) a sale or other disposition of at least 50% of our outstanding securities, (3) a merger, consolidation or similar transaction following which we are not the surviving corporation or (4) a merger, consolidation or similar transaction following which we are the surviving corporation but the shares of our Class A common stock outstanding immediately prior to such transaction are converted or exchanged into other property by virtue of the transaction.

In the event of a corporate transaction, any stock awards outstanding under the 2022 Plan may be assumed, continued or substituted for by any surviving or acquiring corporation (or its parent company), and any reacquisition or repurchase rights held by us with respect to the stock award may be assigned to the successor (or its parent company). If the surviving or acquiring corporation (or its parent company) does not assume, continue or substitute for such stock awards, then (i) with respect to any such stock awards that are held by participants whose continuous service has not terminated prior to the effective time of the corporate transaction, or current participants, the vesting (and exercisability, if applicable) of such stock awards will be accelerated in full to a date prior to the effective time of the corporate transaction (contingent upon the effectiveness of the corporate transaction), and such stock awards will terminate if not exercised (if applicable) at or prior to the effective time of the corporate transaction, and any reacquisition or repurchase rights held by us with respect to such stock awards will lapse (contingent upon the effectiveness of the corporate transaction), and (ii) any such stock awards that are held by persons other than current participants will terminate if not exercised (if applicable) prior to the effective time of the corporate transaction, except that any reacquisition or repurchase rights held by us with respect to such stock awards will not terminate and may continue to be exercised notwithstanding the corporate transaction. In addition, the plan administrator may also provide, in its sole discretion, that the holder of a stock award that will terminate upon the occurrence of a corporate transaction if not previously exercised will receive a payment, if any, equal to the excess of the value of the property the participant would have received upon exercise of the stock award over the exercise price otherwise payable in connection with the stock award.

A stock award may be subject to additional acceleration of vesting and exercisability upon or after a change in control as may be provided in an applicable award agreement or other written agreement, but in the absence of such provision, no such acceleration will occur.

Transferability. A participant may not transfer awards under our 2022 Plan other than by will, the laws of descent and distribution or as otherwise provided under our 2022 Plan.

Plan Amendment or Termination. Our board has the authority to amend, suspend or terminate our 2022 Plan, provided that such action does not materially impair the existing rights of any participant without such participant's written consent. Certain material amendments also require the approval of our stockholders. No ISOs may be granted after the tenth anniversary of the date our board adopted our 2022 Plan. No awards may be granted under our 2022 Plan while it is suspended or after it is terminated.

2022 Employee Stock Purchase Plan

Our board of directors has adopted the ESPP that will become effective immediately prior to and contingent upon the date of the underwriting agreement related to this offering. The purpose of our ESPP will be to secure the services of new employees, to retain the services of existing employees, and to provide incentives for such individuals to exert maximum efforts toward our success and that of our affiliates. The ESPP is implemented through a series of offerings with specific terms approved by the administrator and under which eligible employees are granted purchase rights to purchase shares of our Class A common stock on specified dates during such offerings. Generally, all regular employees, including executive officers, employed by us or by any of our designated affiliates, may participate in the ESPP and may contribute, normally through payroll deductions, with a maximum dollar amount as designated by the administrator. The maximum aggregate number of shares of our Class A common stock that may be issued under our ESPP is 3,000,000 shares. The number of shares of our Class A common stock reserved for issuance under our ESPP will automatically increase on January 1 of each calendar year, beginning on January 1, 2023 and continuing through and including January 1, 2032, by the lesser of (1) 2% of the aggregate number of shares of common stock (both Class A and Class B) outstanding on December 31 of the preceding calendar year, (2) 6,000,000 shares and (3) a number of shares determined by our board. Shares subject to purchase rights granted under our ESPP that terminate without having been exercised in full will not reduce the number of shares available for issuance under our ESPP. Our board, or a duly authorized committee thereof, will administer our ESPP. The implementation of the ESPP and the terms of the offerings thereunder, if any, will be in the discretion of the administrator. The administrator does not currently have any intention to make offerings available under the ESPP.

2015 Stock Plan

The 2015 Plan was adopted by our board of directors and approved by our stockholders in September 2015. Our 2015 Plan has been periodically amended, most recently in February 2022. The 2015 Plan provides for the grant of ISOs, NSOs, restricted stock awards, RSUs, PSUs, and other stock-based awards. Our employees, officers, directors, consultants and advisors are eligible to receive awards under the 2015 Plan; however, ISOs may only be granted to our employees.

Awards. As of December 31, 2021, there were 16,339,419 shares of common stock issuable upon the vesting and settlement of RSUs and PSUs outstanding under the 2015 Plan, there were 4,250,000 shares of restricted stock outstanding under the 2015 Plan, there were 210,000 shares of common stock issuable upon the exercise of stock options outstanding under the 2015 Plan at an exercise price of \$0.8542 per share, no options to purchase shares of our common stock had been exercised, and 1,098,364 shares of common stock were available for future issuance under the 2015 Plan. In February 2022, we increased the share reserve under the 2015 plan by 3,000,000 shares. On and after the effective date of the 2022 Plan described above, we will grant no further stock options or other awards under the 2015 Plan.

Authorized Shares. Subject to certain adjustments as provided in the 2015 Plan, the maximum aggregate number of shares of our Class A common stock that may be issued pursuant to awards under the 2015 Plan will not exceed 25,115,750 shares. The maximum number of shares of Class A common stock that may be issued pursuant to the exercise of ISOs under our 2015 Plan is 25,115,750 shares. Shares issued under our 2015 Plan will consist of authorized but unissued or reacquired shares of common stock or any combination thereof. Shares subject to awards granted under our 2015 Plan that expire, terminate, are cancelled without having been exercised or settled in full, are forfeited or repurchased for an amount not greater than the recipient's exercise or purchase price, will again become available for future grant under our 2015 Plan. Further, shares of Class A common stock tendered to us by a participant to exercise an award shall be added to shares of Class A common stock available for the grant of awards under the 2015 Plan. Additionally, shares underlying awards that are paid out in cash rather than in shares or withheld or reacquired to satisfy tax withholding obligations related to an award, will not reduce the number of shares available for issuance under our 2015 Plan.

[Table of Contents](#)

Plan Administration. The 2015 Plan is administered by our board of directors. Our board of directors has broad discretion to administer the 2015 Plan, including the power and authority to determine the eligible individuals to whom awards will be granted, the number and type of awards to be granted and the terms and conditions of awards. The board may also accelerate the vesting or exercise of any award, reprice or otherwise adjust the exercise price of options or grant a new option in substitution for any option and make all other determinations, perform all other actions with respect to the 2015 Plan or any award thereunder as the board deems advisable to the extent not inconsistent with the provisions of the 2015 Plan or applicable law.

Stock Options. ISOs and NSOs granted under the 2015 Plan are evidenced by award agreements established by our board of directors. Our board of directors determines the exercise price of the stock options, within the terms and conditions of the 2015 Plan, provided that the exercise price of a stock option generally cannot be less than 100% of the fair market value of a share of Class A common stock on the date of grant. Options granted under the 2015 Plan vest at the rate specified in the option agreement as determined by the board. The term of an option may not exceed 10 years. Unless the board provides otherwise, if a participant's service relationship with us, our parent or subsidiary, or collectively, our affiliates, ceases for any reason other than due to the participant's disability or death or a termination for cause, the participant may generally exercise any vested options for a period of three months following the cessation of service. This period may be extended in the event that exercise of the option is prohibited by applicable securities laws. If a participant's service relationship with us or our affiliates ceases due to disability or death, the participant's legal representative or a beneficiary may generally exercise any vested options for a period of 12 months following the cessation of service. In the event that a participant's service relationship with us is terminated for cause, options held by the participant will terminate in their entirety upon the termination date. In no event may an option be exercised beyond the expiration of its term.

Tax Limitations on ISOs. The aggregate fair market value, determined at the time of grant, of an award consisting of ISOs that are exercisable for the first time by a participant during any calendar year under all of our stock plans may not exceed \$100,000. Options or portions thereof that exceed such limit will generally be treated as NSOs. No ISO may be granted to any person who, at the time of the grant, owns or is deemed to own shares of common stock possessing more than 10% of our total combined voting power unless (1) the option exercise price is at least 110% of the fair market value of the shares of common stock subject to the option on the date of grant and (2) the term of the ISO does not exceed five years from the date of grant.

Restricted Stock Awards. RSAs may be granted in the form of restricted stock bonuses, which are shares of Class A common stock for which no monetary payment is required, or restricted stock purchase rights, which are shares of Class A common stock for which a purchase price must be paid. Our board of directors determines the terms and conditions of RSAs, including purchase price, if any, vesting and forfeiture terms. In general, during any vesting period, a participant will have all of the rights of a stockholder holding shares of Class A common stock. If determined by the board and provided in an award agreement, dividends distributed prior to vesting will be subject to the same restrictions and risk of forfeiture as the restricted stock with respect to which the distribution was made. Except as otherwise provided in an award agreement, if a participant's service relationship with us ends for any reason, (1) we may repurchase any shares acquired pursuant to a restricted stock purchase right that remains subject to vesting conditions upon a participant's termination and (2) the participant will forfeit any shares under a restricted stock bonus award that have not vested as of the date of termination.

Restricted Stock Unit Awards. An RSU represents the right to receive on a future date or event a share of Class A common stock or an amount of cash in lieu thereof. RSU awards may be granted in consideration for services actually rendered to us or our affiliates or for the benefit of us or our affiliates. An RSU award may be settled in cash or by delivery of stock or other property as deemed appropriate by the board. Additionally, if provided in the award agreement, dividend equivalents may be credited in respect of shares covered by an RSU award. Except as otherwise provided in the applicable award agreement, RSU awards that have not vested will be forfeited once the participant's continuous service ends for any reason.

In general, RSU awards that have been granted under the 2015 Plan are subject to both a multi-year service-based vesting requirement and a "Liquidity Event" vesting requirement. The Liquidity Event requirement will be

[Table of Contents](#)

satisfied on the first to occur of: (1) a change in control (as described below) or (2) the effective date of a registration statement under the Securities Act of 1933, as amended, or the Securities Act, for the sale of our Class A common stock, or the Liquidity Event Date. The RSU awards vest as follows:

- No RSUs will vest prior to the Liquidity Event Date.
- If the Liquidity Event Date occurs prior to the first anniversary of the vesting start date, then no RSUs will vest on the Liquidity Event Date and thereafter 1/16th of the RSUs will vest for each full three months of continuous service elapsed from the first anniversary of the vesting start date, subject to the participant's continuous service.
- If the Liquidity Event Date occurs on or after the first anniversary of the vesting start date but prior to the second anniversary of the vesting start date, then 1/4th of the RSUs will vest on the Liquidity Event Date and thereafter an additional 1/16th of the RSUs will vest for each full three months of continuous service elapsed from the first anniversary of the vesting start date, subject to the participant's continuous service.
- If the Liquidity Event Date occurs after the second anniversary of the vesting start date then 1/16th of the RSUs will vest on the Liquidity Event Date for each full three months that has elapsed since the vesting start date and thereafter an additional 1/16th of the RSUs will vest for each full three months that occurs from the vesting start date, subject to the participant's continuous service.

We have also granted Performance-Vesting Restricted Stock Unit awards, or PSUs, which include both a Liquidity Event vesting requirement and a performance-vesting condition. Like the RSU awards, the Liquidity Event requirement of the PSUs will be satisfied on the Liquidity Event Date. The performance-vesting condition of the PSUs will be satisfied in full, if, on the Liquidity Event Date, the total enterprise valuation of the company equals or exceeds \$6 billion, subject to certain adjustments as described in the 2015 Plan.

Transferability. Awards are generally not transferable other than by will or the laws of descent and distribution. The board, in its discretion, may allow certain transfers of options as set forth in an award agreement and subject to certain securities law restrictions.

Adjustments. In the event of certain corporate events or changes in our capitalization, the board will make adjustments to one or more of the number and kind of shares that may be delivered under the 2015 Plan or covered by each outstanding award, the ISO share reserve under the 2015 Plan and the exercise or purchase price per share of outstanding awards in order to prevent dilution or enlargement of the participants' rights under the 2015 Plan.

Change in Control. Upon a change in control, without the consent of any participant, the board may provide for any one or more of the following:

- accelerate the time of exercisability, vesting and/or settlement of an award,
- the assumption or substitution of outstanding award by a surviving, continuing, successor or purchasing corporation or other business entity (or any parent thereof); or
- awards to be cancelled, to the extent not vested or exercised before the transaction, in exchange for such cash, stock or other property in an amount equal to the excess, if any, of (1) the fair market value of the consideration paid in the transaction, over (2) any exercise or purchase price payable under such award.

Under the 2015 Plan, a change in control is generally (1) an indirect sale or exchange by our stockholders of securities representing more than 50% of the total combined voting power of then outstanding voting securities entitled to vote generally in the election of directors, (2) a merger or consolidation in which we are a party, (3) the sale, exchange or transfer of all or substantially all our assets, or (4) our complete liquidation or dissolution.

[Table of Contents](#)

Withholding. We have the right to deduct from any and all payments made under the 2015 Plan, or to require the participant, through payroll withholding, cash payment or otherwise, to satisfy any federal, state, local and foreign taxes that are required to be withheld. We are under no obligation to deliver shares of common stock or to release shares from an escrow or to make any payment in cash until such tax withholding obligations have been satisfied by the participant.

Plan Amendment and Termination. The 2015 Plan will continue in effect until its termination by our board, provided that all awards under the 2015 Plan will be granted, if at all, within ten (10) years from the date the 2015 Plan was adopted by our board. Our board may amend, suspend or terminate the 2015 Plan at any time, provided that without stockholder approval, the 2015 Plan cannot be amended to increase the number of shares authorized, change the class of persons eligible to receive incentive stock options, or effect any other change that would require stockholder approval under any applicable law or listing rule. In general, no amendment, suspension or termination of the 2015 Plan may have a materially adverse effect on any outstanding award without the consent of the participant.

Limitations of Liability and Indemnification Matters

On the closing of this offering, our amended and restated certificate of incorporation will contain provisions that limit the liability of our current and former directors for monetary damages to the fullest extent permitted by Delaware law. Delaware law provides that directors of a corporation will not be personally liable for monetary damages for any breach of fiduciary duties as directors, except liability for:

- any breach of the director's duty of loyalty to the corporation or its stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- unlawful payments of dividends or unlawful stock repurchases or redemptions; or
- any transaction from which the director derived an improper personal benefit.

Such limitation of liability does not apply to liabilities arising under federal securities laws and does not affect the availability of equitable remedies such as injunctive relief or rescission.

Our amended and restated certificate of incorporation that will be in effect on the closing of this offering will authorize us to indemnify our directors, officers, employees, and other agents to the fullest extent permitted by Delaware law. Our amended and restated bylaws that will be in effect on the closing of this offering will provide that we are required to indemnify our directors and officers to the fullest extent permitted by Delaware law and may indemnify our other employees and agents. Our amended and restated bylaws that will be in effect on the closing of this offering will also provide that, on satisfaction of certain conditions, we will advance expenses incurred by a director or officer in advance of the final disposition of any action or proceeding, and permit us to secure insurance on behalf of any officer, director, employee, or other agent for any liability arising out of his or her actions in that capacity regardless of whether we would otherwise be permitted to indemnify him or her under the provisions of Delaware law. We have entered and expect to continue to enter into agreements to indemnify our directors, executive officers, and other employees as determined by the board of directors. With certain exceptions, these agreements provide for indemnification for related expenses including attorneys' fees, judgments, fines, and settlement amounts incurred by any of these individuals in any action or proceeding. We believe that these amended and restated certificate of incorporation and amended and restated bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers. We also maintain customary directors' and officers' liability insurance.

The limitation of liability and indemnification provisions in our amended and restated certificate of incorporation and amended and restated bylaws may discourage stockholders from bringing a lawsuit against our directors for breach of their fiduciary duty. They may also reduce the likelihood of derivative litigation against

[Table of Contents](#)

our directors and officers, even though an action, if successful, might benefit us and other stockholders. Further, a stockholder's investment may be adversely affected to the extent that we pay the costs of settlement and damage awards against directors and officers as required by these indemnification provisions.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted for directors, executive officers, or persons controlling us, we have been informed that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Rule 10b5-1 Sales Plans

Our directors and officers may adopt written plans, known as Rule 10b5-1 plans, in which they will contract with a broker to buy or sell shares of our Class A common stock or Class B common stock on a periodic basis. Under a Rule 10b5-1 plan, a broker executes trades under parameters established by the director or officer when entering into the plan, without further direction from them. The director or officer may amend a Rule 10b5-1 plan in some circumstances and may terminate a plan at any time. Our directors and executive officers may also buy or sell additional shares outside of a Rule 10b5-1 plan when they do not possess of material nonpublic information, subject to compliance with the terms of our insider trading policy.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Other than compensation arrangements for our directors and executive officers, which are described elsewhere in this prospectus, below we describe transactions since January 1, 2019 to which we were a party or will be a party, in which:

- the amounts involved exceeded or will exceed \$120,000; and
- any of our directors, executive officers or holders of more than 5% of our capital stock at the time of such transaction, or any member of the immediate family of, or person sharing the household with, the foregoing persons, had or will have a direct or indirect material interest.

Series E Convertible Preferred Stock Financing

From August 2018 through April 2019, we sold an aggregate of 6,630,905 shares of our Series E convertible preferred stock at a price per share of \$16.7428, for an aggregate purchase price of approximately \$111.0 million in private placements to accredited investors. During this period, we issued a total of 7,517,209 shares of our Series E convertible preferred stock, of which 886,304 shares were repurchased from Tempus Series E Investments, LLC at the original issue price per share, for an aggregate repurchase price of approximately \$14.8 million, in order to accommodate the issuance and sale of shares of our Series E convertible preferred stock to additional purchasers. The table below sets forth the number of shares of our Series E convertible preferred stock purchased by our executive officers, directors, holders of more than 5% of our capital stock and their affiliated entities or immediate family members. Each share of Series E convertible preferred stock will automatically convert into one share of our Class A common stock upon the closing of this offering. The holders of our Series E convertible preferred stock listed below are entitled to specified registration rights. See the section titled “Description of Capital Stock—Registration Rights” for additional information regarding these registration rights.

Participants	Number of Series E Shares Purchased	Aggregate Purchase Price
New Enterprise Associates 16, L.P.(1)	358,362	\$ 5,999,983.29
Revolution Growth III, LP(2)	597,271	9,999,988.90
Tempus Series E Investments, LLC(3)	1,134,816(4)	18,999,997.32

- (1) Peter J. Barris, a member of our board of directors, served as a Managing General Partner at NEA at the time of this transaction.
- (2) Theodore J. Leonsis, a member of our board of directors, is a founder and partner at Revolution Growth.
- (3) Tempus Series E Investments, LLC is controlled by Eric Lefkofsky, our Chief Executive Officer, Founder and Chairman.
- (4) Tempus Series E Investments, LLC purchased an aggregate of 1,134,816 shares of our Series E convertible preferred stock, of which 886,304 shares were repurchased by us in April 2019. See the section titled “—Repurchases of Equity Securities—Redemptions of Preferred Stock” below. As a result, Tempus Series E Investments, LLC currently owns 248,512 shares of our Series E convertible preferred stock.

Series F Convertible Preferred Stock Financing

From April through July 2019, we sold an aggregate of 8,077,674 shares of our Series F convertible preferred stock at a price per share of \$24.7596, for an aggregate purchase price of approximately \$200.0 million in private placements to accredited investors. During this period, we issued a total of 8,677,006 shares of our Series F convertible preferred stock, of which an aggregate of 599,332 shares of our Series F convertible preferred stock were repurchased from Tempus Series F Investments, LLC in May and July 2019 at the original issue price per share, for an aggregate repurchase price of approximately \$14.8 million, in order to accommodate

[Table of Contents](#)

the issuance and sale of shares of our Series F convertible preferred stock to additional purchasers. The table below sets forth the number of shares of our Series F convertible preferred stock purchased by our executive officers, directors, holders of more than 5% of our capital stock and their affiliated entities or immediate family members. Each share of Series F convertible preferred stock will automatically convert into one share of our Class A common stock upon the closing of this offering. The holders of our Series F convertible preferred stock listed below are entitled to specified registration rights. See the section titled “Description of Capital Stock—Registration Rights” for additional information regarding these registration rights.

Participants	Number of Series F Shares Purchased	Aggregate Purchase Price
New Enterprise Associates 16, L.P.(1)	403,883	\$ 9,999,981.53
Revolution Growth III, LP(2)	201,941	4,999,978.38
Tempus Series F Investments, LLC(3)	599,332(4)	14,839,220.59

- (1) Peter J. Barris, a member of our board of directors, served as a Managing General Partner at NEA at the time of this transaction.
- (2) Theodore J. Leonsis, a member of our board of directors, is a founder and partner at Revolution Growth.
- (3) Tempus Series F Investments, LLC is controlled by Eric Lefkofsky, our Chief Executive Officer, Founder and Chairman.
- (4) Tempus Series F Investments, LLC purchased an aggregate of 599,332 shares of our Series F convertible preferred stock, of which 203,521 shares were repurchased by us in May 2019 and the remaining 395,811 shares were repurchased by us in July 2019. See the section titled “—Repurchases of Equity Securities—Redemptions of Preferred Stock” below. As a result, Tempus Series F Investments, LLC is no longer a stockholder of our company.

Series G Convertible Preferred Stock Financing

From February through April 2020, we sold an aggregate of 2,537,290 shares of our Series G convertible preferred stock at a price per share of \$38.3524, for an aggregate purchase price of approximately \$97.3 million in private placements to accredited investors. During this period, we issued a total of 2,667,660 shares of our Series G convertible preferred stock, of which 130,370 shares of our Series G convertible preferred stock were repurchased from Tempus Series G Investments, LLC at the original issue price per share, for an aggregate repurchase price of approximately \$5.0 million, in order to accommodate the issuance and sale of shares of our Series G convertible preferred stock to an additional purchaser. The table below sets forth the number of shares of our Series G convertible preferred stock purchased by our executive officers, directors, holders of more than 5% of our capital stock and their affiliated entities or immediate family members. Each share of Series G convertible preferred stock will automatically convert into one share of our Class A common stock upon the closing of this offering. The holders of our Series G convertible preferred stock listed below are entitled to specified registration rights. See the section titled “Description of Capital Stock—Registration Rights” for additional information regarding these registration rights.

Participants	Number of Series G Shares Purchased	Aggregate Purchase Price
Innovation Group Investors, L.P. – 2011 Series(1)	130,370	\$ 5,000,000.63
New Enterprise Associates 16, L.P.(2)	182,517	6,999,962.52
Novo Holdings A/S (3)	260,739	9,999,962.90
Tempus Series G Investments, LLC(1)	451,378(4)	17,311,426.08

- (1) Each of Innovation Group Investors, L.P. – 2011 Series and Tempus Series G Investments, LLC is affiliated with and controlled by Eric Lefkofsky, our Chief Executive Officer, Founder and Chairman.
- (2) Peter J. Barris, a member of our board of directors, served as a Managing General Partner at NEA at the time of this transaction.

- (3) Robert Ghenchev, a member of our board of directors, is the Head of Novo Growth at Novo Holdings A/S.
- (4) Tempus Series G Investments, LLC purchased an aggregate of 451,378 shares of our Series G convertible preferred stock, of which 130,370 shares were repurchased by us in April 2020. See the section titled “—Repurchases of Equity Securities—Redemptions of Preferred Stock” below. As a result, Tempus Series G Investments, LLC currently owns 321,008 shares of our Series G convertible preferred stock.

Series G-2 Convertible Preferred Stock Financing

In November 2020 and January 2021, we sold an aggregate of 3,453,139 shares of our Series G-2 convertible preferred stock at a price per share of \$57.3069 for an aggregate purchase price of approximately \$189.0 million in private placements to accredited investors. During this period, we issued a total of 3,584,015 shares of our Series G-2 convertible preferred stock, of which 130,876 shares of our Series G-2 convertible preferred stock were repurchased from Blue Media, LLC at the original issue price per share, for an aggregate repurchase price of approximately \$7.5 million, in order to accommodate the issuance and sale of shares of our Series G-2 convertible preferred stock to additional purchasers. The table below sets forth the number of shares of our Series G-2 convertible preferred stock purchased by our executive officers, directors, holders of more than 5% of our capital stock, and their affiliated entities or immediate family members. Each share of Series G-2 convertible preferred stock will automatically convert into one share of our Class A common stock upon the closing of this offering. The holders of our Series G-2 convertible preferred stock listed below are entitled to specified registration rights. See the section titled “Description of Capital Stock—Registration Rights” for additional information regarding these registration rights.

Participants	Number of Series G-2 Shares Purchased	Aggregate Purchase Price
Novo Holdings A/S ⁽¹⁾	261,748	\$ 14,999,966.47
Blue Media, LLC ⁽²⁾	130,876 ⁽³⁾	7,500,097.84

- (1) Robert Ghenchev, a member of our board of directors, is the Head of Novo Growth at Novo Holdings A/S.
- (2) Blue Media, LLC is controlled by Eric Lefkofsky, our Chief Executive Officer, Founder and Chairman.
- (3) Blue Media, LLC purchased an aggregate of 130,876 shares of our Series G-2 convertible preferred stock, all of which were repurchased by us in January 2021. See the section titled “—Repurchases of Equity Securities—Redemptions of Preferred Stock” below. As a result, Blue Media, LLC is no longer a holder of our Series G-2 convertible preferred stock.

Series G-3 Convertible Preferred Stock Financing

In April 2022, we sold an aggregate of 1,483,242 shares of our Series G-3 convertible preferred stock at a price per share of \$57.3069 for an aggregate purchase price of approximately \$85.0 million in private placements to accredited investors. As of the date hereof we have received \$68.5 million of the committed \$85.0 million, with the remainder committed from one additional investor, which is due by April 29, 2022. As part of the Series G-3 Financing, we may sell up to an additional 2,006,739 shares of Series G-3 preferred stock within sixty days from April 18, 2022. The table below sets forth the number of shares of our Series G-3 preferred stock purchased by our executive officers, directors, holders of more than 5% of our capital stock, and their affiliated entities or immediate family members. The terms of our Series G-3 preferred stock provide that in the event of an initial public offering of our common stock, each share of Series G-3 preferred stock would be converted into a number of shares of our Class A common stock equal to (i) \$57.3069 per share, plus any accrued and unpaid dividends on such share, divided by (ii) the lesser of (a) \$51.5762 and (b) 90% of the public offering price in this offering (or, if this offering is completed after June 30, 2023, 85% of the public offering price in this offering). The holders of our G-3 convertible preferred stock listed below are entitled to specified registration rights. See the section titled “Description of Capital Stock—Registration Rights” for additional information regarding these registration rights.

Participants	Number of Series G-3 Shares Purchased	Aggregate Purchase Price
Blue Media, LLC(1)	61,074	\$ 3,499,961.61

(1) Blue Media, LLC is controlled by Eric Lefkofsky, our Chief Executive Officer, Founder and Chairman.

Investor Rights, Voting, and Right of First Refusal and Co-Sale Agreements

In connection with our convertible preferred stock financings, we entered into investor rights, voting, right of first refusal, and co-sale agreements containing registration rights, information rights, voting rights, board representation rights, indemnification provisions and rights of first refusal, among other things, with certain holders of our convertible preferred stock and certain holders of our common stock, including entities affiliated with Eric Lefkofsky and Keeks, LLC.

The covenants included in these stockholder agreements generally will terminate upon the closing of this offering, except with respect to registration rights, as more fully described in the section titled “Description of Capital Stock—Registration Rights.” See also the section titled “Principal and Selling Stockholders” for additional information regarding beneficial ownership of our capital stock.

Real Property Leases

In January 2018, we entered into an office lease with a third-party landlord in connection with which Lightbank LLC was allowed to terminate its then-outstanding lease with the landlord. We received \$1.5 million from Lightbank LLC to be amortized over the course of the lease, of which \$1.0 million remains to be amortized. We currently sublease a portion of this office space to Lightbank LLC, Lefkofsky Family Foundation and 346 Investment Partners, each an entity affiliated with and controlled by Mr. Lefkofsky, on a month-to-month basis. As of December 31, 2021, we have received an aggregate of \$0.2 million in sublease income from these related parties.

Aircraft for Business Travel

We entered into an arm’s length arrangement in 2018 pursuant to which we charter for business use an aircraft owned by 346 Investment Partners LLC, an entity affiliated with and controlled by Mr. Lefkofsky, through a third-party aircraft management company, which in turn reimburses 346 Investment Partners LLC at market rates. As of December 31, 2021, we have paid an aggregate of \$0.2 million to 346 Investment Partners LLC pursuant to this arrangement.

Agreements with Pathos

In August 2021, we entered into a master agreement with Pathos AI, Inc., or, Pathos, a healthcare company co-founded by Mr. Lefkofsky, our Chief Executive Officer, Founder and Chairman, and Mr. Fukushima, our Chief Operating Officer. Mr. Lefkofsky currently serves as Executive Chairman and a member of Pathos’ board of directors. As of the date of this prospectus, we have a warrant to purchase 23,456,790 shares, or approximately 19% of the current outstanding equity in Pathos, for \$.0125 per share. The warrant will automatically exercise upon a change of control (as defined therein) or upon an initial public offering of Pathos’ securities. Pursuant to this master agreement, we granted Pathos a limited, non-exclusive, revocable, non-transferable right and license, without right of sublicense, to access and download certain de-identified records from our proprietary database. Pathos in turn agreed to pay us certain license fees depending on the number of de-identified records it elects to license during the term of the master agreement. Pathos also agreed to pay us a subscription fee equal to \$0.4 million per year for access to our Lens product for the term of the master agreement. The master agreement provides for an initial term of five years, with a subsequent five-year renewal provision unless the agreement is terminated. Pathos may own certain analysis, summaries, reports or other information it creates with, or based upon, the de-identified data it licenses from us, and it may continue to use such information following termination of the agreement. Either party may terminate the agreement after the initial five-year term by prior

[Table of Contents](#)

written notice to the other party. In March 2022, Pathos paid us its first annual subscription fee of \$0.4 million. As of the date of this prospectus, we have not exercised the warrant to purchase shares of Pathos common stock.

In March 2022, we and Pathos entered into a sequencing pilot project under the master agreement pursuant to which we will run our xT NGS assay on 15 samples provided by Pathos in exchange for a one-time discounted fee of less than \$0.1 million.

In April 2022, we and Pathos entered into a non-exclusive analytical services program under the master agreement pursuant to which we will provide services to help Pathos use our de-identified data to answer research and development questions posed by Pathos. Under the program, we will initially provide 500 hours of analytical services to Pathos over 6 months in exchange for increasing by \$0.1 million the annual subscription fee payable by Pathos. Pathos has the right to extend the program either in six month increments or by increasing by 1,000 the number of analytical services hours we provide in any six-month period. In each case, the fee paid by Pathos will increase proportionally.

Equity Grants to Directors and Executive Officers

We have granted RSUs to certain of our directors and executive officers. For more information regarding the stock awards granted to our directors and named executive officers, see the sections titled “Management—Non-Employee Director Compensation” and “Executive Compensation.”

Repurchases of Equity Securities

Redemptions of RSUs

In September 2019, we entered into a redemption agreement with Ryan Fukushima, our Chief Operating Officer. Pursuant to the redemption agreement, we repurchased 100,000 vested RSUs from Mr. Fukushima at a purchase price of \$9.64 per RSU, for an aggregate repurchase price of approximately \$1.0 million.

Redemptions of Common and Preferred Stock

In April 2020, we repurchased an aggregate of 190,639 shares of voting common stock from the Lefkofsky Family Foundation, an organization affiliated with Eric Lefkofsky, for a total purchase price of approximately \$7.3 million.

In addition, from April 2019 to January 2021, we repurchased an aggregate of 3,493,205 shares of various series of convertible preferred stock from entities affiliated with and controlled by Eric Lefkofsky at the original issue price for a total purchase price of approximately \$56.5 million. Such repurchases were affected in order to accommodate the issuance and sale of convertible preferred stock to additional purchasers.

Acceleration of Vesting for RSUs

In May 2017, we granted 300,000 RSUs to Erik Phelps, our Executive Vice President and Chief Administrative and Legal Officer, pursuant to a restricted stock unit agreement. In April 2021, our board of directors approved a waiver of a vesting condition such that 8,725 of the RSUs held by Mr. Phelps immediately vested and settled for 8,725 shares of our Class A common stock, 873 of the RSUs were cancelled, and 290,402 of the RSUs remain outstanding.

Indemnification Agreements

Our amended and restated certificate of incorporation that will be in effect on the closing of this offering will contain provisions limiting the liability of directors, and our amended and restated bylaws that will be in effect on the closing of this offering will provide that we will indemnify each of our directors and officers to the fullest extent permitted under Delaware law. Our amended and restated certificate of incorporation and amended and restated bylaws that will be in effect on the closing of this offering will also provide our board of directors

[Table of Contents](#)

with discretion to indemnify our employees and other agents when determined appropriate by the board. In addition, we have entered into an indemnification agreement with each of our directors and executive officers, which requires us to indemnify them. For more information regarding these agreements, see the section titled “Executive Compensation—Limitations of Liability and Indemnification Matters.”

Policies and Procedures for Transactions with Related Persons

Prior to the closing of this offering, we intend to adopt a written policy that our executive officers, directors, nominees for election as a director, beneficial owners of more than 5% of any class of our common stock, and any members of the immediate family of any of the foregoing persons are not permitted to enter into a related person transaction with us without the approval or ratification of our board of directors or our audit committee. Any request for us to enter into a transaction with an executive officer, director, nominee for election as a director, beneficial owner of more than 5% of any class of our common stock, or any member of the immediate family of any of the foregoing persons, in which the amount involved exceeds \$120,000 and such person would have a direct or indirect interest, must be presented to our board of directors or our audit committee for review, consideration, and approval. In approving or rejecting any such proposal, our board of directors or our audit committee is to consider the material facts of the transaction, including whether the transaction is on terms no less favorable than terms generally available to an unaffiliated third party under the same or similar circumstances and the extent of the related person’s interest in the transaction.

PRINCIPAL AND SELLING STOCKHOLDERS

The following table sets forth information with respect to the beneficial ownership of our shares as of December 31, 2021 by:

- each named executive officer;
- each of our directors;
- our directors and executive officers as a group;
- each of the selling stockholders; and
- each other person or entity known by us to own beneficially more than 5% of our Class A common stock and Class B common stock (by number or by voting power).

We have determined beneficial ownership in accordance with the rules and regulations of the SEC, and the information is not necessarily indicative of beneficial ownership for any other purpose. Except as indicated by the footnotes below, we believe, based on information furnished to us, that the persons and entities named in the table below have sole voting and sole investment power with respect to all shares that they beneficially own, subject to applicable community property laws.

Applicable percentage ownership before this offering is based on _____ shares of Class A common stock and 5,374,899 shares of Class B common stock outstanding as of December 31, 2021, after giving effect to the Series G-3 Financing and assuming the automatic conversion of all outstanding shares of our redeemable convertible preferred stock, other than our Series B preferred stock, into _____ shares of Class A common stock, assuming an initial public offering price of \$ _____ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, the issuance of _____ Additional Class A Conversion Shares assuming an initial public offering price of \$ _____ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, the conversion of all outstanding shares of our Series B convertible preferred stock into 5,374,899 shares of Class B common stock, and the automatic conversion of all outstanding shares of our nonvoting common stock into 4,612,450 shares of Class A common stock, each of which will occur upon the closing of this offering. See “Prospectus Summary—The Offering” for a description of the Additional Class A Conversion Shares, as the number of Additional Class A Conversion Shares that will be issued depends on the initial public offering price of our Class A common stock.

Applicable percentage ownership after this offering assumes that the underwriters’ option to purchase additional shares to cover over-allotments, if any, from the selling stockholders is not exercised is based on (1) _____ shares of Class A common stock and (2) 5,374,899 shares of Class B common stock outstanding immediately after the closing of this offering. Applicable percentage ownership after this offering if the underwriters’ option to purchase additional shares to cover over-allotments, if any, from the selling stockholders is exercised in full is based on (1) _____ shares of Class A common stock and (2) 5,374,899 shares of Class B common stock outstanding immediately after the closing of this offering. Applicable percentage ownership after this offering also excludes any potential purchases in this offering by the persons and entities named in the table below. In computing the number of shares beneficially owned by a person and the percentage ownership of such person, we deemed to be outstanding all shares subject to RSUs held by the person that would vest based on service-based vesting conditions within 60 days of December 31, 2021. However, except as described above, we did not deem such shares outstanding for the purpose of computing the percentage ownership of any other person.

Unless otherwise indicated, the address for each beneficial owner listed in the table below is c/o Tempus Labs, Inc., 600 West Chicago Avenue, Suite 510 Chicago, Illinois 60654.

[Table of Contents](#)

Name of Beneficial Owner	Beneficial Ownership Before the Offering			Beneficial Ownership After the Offering if Underwriters' Option is Not Exercised				Number of Shares of Class A Common Stock Being Offered	Beneficial Ownership After the Offering if Underwriters' Option is Exercised in Full		
	Class A Common Stock	Class B Common Stock	% of Total Voting Power Before the Offering	Class A Common Stock	Class B Common Stock	% of Total Voting Power After the Offering	Class A Common Stock		Class B Common Stock	% of Total Voting Power After the Offering	
	Shares	%	Shares	%	Shares	%	Shares		%	Shares	%
5% Stockholders:											
Eric Lefkofsky(1)											
Keeks, LLC(2)											
Other Directors and Named Executive Officers:											
Erik Phelps(3)											
Vanessa Rollings(4)											
Peter J. Barris(5)											
Eric D. Belcher											
Jennifer A. Doudna, Ph.D.(6)											
Wayne A.I. Frederick, M.D.(7)											
Robert Ghenchev											
Scott Gottlieb, M.D.(8)											
Theodore J. Leonsis											
Nadja West, M.D.(9)											

All directors and executive officers as a group (12 persons)(10)

Other Selling Stockholders:

- * Represents beneficial ownership of less than 1%.
- † Percentage of total voting power represents voting power with respect to all shares of our Class A and Class B common stock, as a single class. The holders of our Class B common stock are entitled to votes per share, and holders of our Class A common stock are entitled to one vote per share. See the section titled "Description of Capital Stock—Class A Common Stock and Class B Common Stock" for additional information about the voting rights of our Class A and Class B common stock.
- (1) Prior to this offering, consists of (a) shares of Class A common stock held by Blue Media, LLC, (b) shares of Class A common stock held by Gray Media, LLC, (c) shares of Class A common stock held by Innovation Group Investors, L.P. - Series 3, (d) shares of Class A common stock held by Innovation Group Investors, L.P. - Series 1B, (e) shares of Class A common stock held by Lightbank Investments 1B, LLC, (f) shares of Class A common stock held by Tempus Series A Investments, LLC, (g) shares of Class B common stock held by Tempus Series B Investments, LLC, (h) shares of Class A common stock held by Tempus Series B-1 Investments, LLC, (i) shares of Class A common stock held by Tempus Series B-2 Investments, LLC, (j) shares of Class A common stock held by Tempus Series C Investments, LLC, (k) shares of Class A common stock held by Tempus Series D Investments, LLC, (l) shares of Class A common stock held by Tempus Series E Investments, LLC, (m) shares of Class A common stock held by Tempus Series F Investments, LLC, and (n) shares of Class A common stock held by Tempus Series G Investments, LLC. Concurrently with, and contingent upon, the effectiveness of the registration statement of which this prospectus forms a part, shares of Class A common stock held by each of Tempus Series A Investments, LLC, Tempus Series B-1 Investments, LLC, Tempus Series B-2 Investments, LLC, Tempus Series C Investments, LLC, Tempus Series D Investments, LLC, Tempus Series E Investments, LLC, Tempus Series F Investments, LLC and Tempus Series G Investments, LLC will be distributed pro rata to the members of each entity. Following the distributions, no other stockholder will be a beneficial owner of more than 5% of the company's common stock. Mr. Lefkofsky's beneficial ownership after the offering gives effect to the foregoing distributions, and consists of (i) shares of Class A common stock held by Blue Media, LLC, (ii) shares of Class A common stock held by Gray Media, LLC, (iii) shares of Class A common stock held by Innovation Group Investors, L.P. - Series 1B, (iv) shares of Class A common stock held by Innovation Group Investors, L.P. - 2011 Series, (v) shares of Class A common stock held by Lightbank Global LLC, (vi) shares of Class A common stock held by Lightbank Investments 1B, LLC and (vii) shares of Class B common stock held by Tempus Series B Investments, LLC. Mr. Lefkofsky is the controlling member of, and may be deemed to have shared voting, investment and dispositive power with respect to the shares held by, the aforementioned entities. On the date that is 181 days following the effective date of the registration statement of which this prospectus forms a part, Blue Media LLC, the controlling member of Tempus Series B Investments, LLC, will exchange shares of Class A common stock for all interests in Tempus Series B Investments, LLC such that following the exchange, Mr. Lefkofsky will continue be the controlling member of, and may be deemed to have shared voting, investment and dispositive power with respect to the shares of Class B common stock held by, Tempus Series B Investments, LLC. Mr. Lefkofsky also holds RSUs, for which the service-based vesting condition would be satisfied within 60 days of , 2021.
- (2) Represents shares of Class A common stock held by Keeks, LLC. To our knowledge, Kimberly Keywell is the controlling shareholder of, and may be deemed to have shared voting, investment and dispositive power with respect to the shares held by, the aforementioned entity.

[Table of Contents](#)

- (3) Represents _____ shares of Class A common stock issuable upon settlement of RSUs held by Mr. Phelps for which the service-based vesting condition would be satisfied within 60 days of _____, 2021.
- (4) Represents _____ shares of Class A common stock issuable upon settlement of RSUs held by Ms. Rollings, for which the service-based vesting condition would be satisfied as of September 4, 2021 pursuant to the terms of Ms. Rollings' separation agreement.
- (5) Represents _____ shares of Class A common stock.
- (6) Represents _____ shares of Class A common stock issuable upon settlement of RSUs held by Ms. Doudna for which the service-based vesting condition would be satisfied within 60 days of _____, 2021.
- (7) Represents _____ shares of Class A common stock issuable upon settlement of RSUs held by Mr. Frederick for which the service-based vesting condition would be satisfied within 60 days of _____, 2021.
- (8) Represents _____ shares of Class A common stock issuable upon settlement of RSUs held by Mr. Gottlieb for which the service-based vesting condition would be satisfied within 60 days of _____, 2021.
- (9) Represents _____ shares of Class A common stock issuable upon settlement of RSUs held by Ms. West for which the service-based vesting condition would be satisfied within 60 days of _____, 2021.
- (10) Consists of (a) _____ shares of Class A common stock, (b) _____ shares of Class B common stock and (c) _____ shares of Class A common stock issuable upon the settlement of RSUs for which the service-based vesting condition would be satisfied within 60 days of _____, 2021.

DESCRIPTION OF CAPITAL STOCK

General

The following description of our capital stock and certain provisions of our amended and restated certificate of incorporation and amended and restated bylaws are summaries and are qualified by reference to the amended and restated certificate of incorporation and the amended and restated bylaws that will be in effect following the closing of this offering. Copies of these documents have been filed with the SEC as exhibits to our registration statement, of which this prospectus forms a part. The descriptions of the common stock and convertible preferred stock reflect changes to our capital structure that will be in effect following the closing of this offering.

On the closing of this offering, our amended and restated certificate of incorporation will provide for two classes of common stock: Class A common stock and Class B common stock. In addition, our amended and restated certificate of incorporation that will be in effect on the closing of this offering will authorize shares of undesignated preferred stock, the rights, preferences, and privileges of which may be designated from time to time by our board of directors.

Upon the closing of this offering, our authorized capital stock will consist of 1,025,500,000 shares, all with a par value of \$0.0001 per share, of which:

- 1,000,000,000 shares are designated Class A common stock;
- 5,500,000 shares are designated Class B common stock; and
- 20,000,000 shares are designated preferred stock.

As of December 31, 2021, we had outstanding:

- _____ shares of Class A common stock, which gives effect to (1) the Series G-3 Financing, (2) the conversion of all outstanding shares of convertible preferred stock, other than Series B preferred stock, into _____ shares of Class A common stock, including the issuance of the Additional Class A Conversion Shares (based on an assumed initial public offering price of \$ _____ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus), (3) the conversion of all outstanding shares of nonvoting common stock into 4,612,450 shares of Class A common stock, and (4) the issuance of approximately _____ shares of Class A common stock upon settlement of RSUs for which the service-based vesting condition was satisfied on or before the date of the offering and for which the performance-based vesting condition will be satisfied in connection with this offering, which settlement will occur upon the expiration of the lock-up period in connection with this offering;
- 5,374,899 shares of Class B common stock, which assumes the conversion of all outstanding shares of convertible Series B preferred stock into 5,374,899 shares of Class B common stock.

See “Prospectus Summary—The Offering” for a description of the Additional Class A Conversion Shares, as the number of Additional Class A Conversion Shares that will be issued depends on the initial public offering price of our Class A common stock.

Our outstanding capital stock was held by 64 stockholders of record as of December 31, 2021. Our board of directors is authorized, without stockholder approval except as required by the listing standards of the Nasdaq stock market, to issue additional shares of our capital stock.

Class A Common Stock and Class B Common Stock

Voting Rights

The Class A common stock is entitled to one vote per share on any matter that is submitted to a vote of our stockholders. Holders of our Class B common stock are entitled to 30 votes per share on any matter submitted to

[Table of Contents](#)

our stockholders. Holders of shares of Class B common stock and Class A common stock will vote together as a single class on all matters (including the election of directors) submitted to a vote of stockholders, unless otherwise required by Delaware law or our amended and restated certificate of incorporation.

Under Delaware law, holders of our Class A common stock or Class B common stock would be entitled to vote as a separate class if a proposed amendment to our amended and restated certificate of incorporation would increase or decrease the aggregate number of authorized shares of such class, increase or decrease the par value of the shares of such class, or alter or change the powers, preferences, or special rights of the shares of such class so as to affect them adversely. While the holders of our Class A common stock have waived their right to vote as a separate class as to amendments to our amended and restated certificate of incorporation that would increase or decrease the aggregate number of authorized shares of Class A common stock, they are entitled to the other class protections provided under Delaware law. As a result, in these limited instances, the holders of a majority of the Class A common stock could defeat any amendment to our amended and restated certificate of incorporation. For example, if a proposed amendment of our amended and restated certificate of incorporation provided for the Class A common stock to rank junior to the Class B common stock with respect to (1) any dividend or distribution, (2) the distribution of proceeds were we to be acquired or (3) any other right, Delaware law would require the vote of the Class A common stock. In this instance, the holders of a majority of Class A common stock could defeat that amendment to our amended and restated certificate of incorporation.

Our amended and restated certificate of incorporation that will be in effect on the closing of this offering will not provide for cumulative voting for the election of directors.

Economic Rights

Except as otherwise will be expressly provided in our amended and restated certificate of incorporation that will be in effect on the closing of this offering or required by applicable law, all shares of Class A common stock and Class B common stock will have the same rights and privileges and rank equally, share ratably and be identical in all respects for all matters, including those described below.

Dividends and Distributions. Subject to preferences that may apply to any shares of preferred stock outstanding at the time, the holders of Class A common stock and Class B common stock will be entitled to share equally, identically, and ratably, on a per share basis, with respect to any dividend or distribution of cash or property paid or distributed by the company, unless different treatment of the shares of the affected class is approved by the affirmative vote of the holders of a majority of the outstanding shares of such affected class, voting separately as a class. See the section titled “Dividend Policy” for additional information.

Liquidation Rights. On our liquidation, dissolution, or winding-up, the holders of Class A common stock and Class B common stock will be entitled to share equally, identically, and ratably in all assets remaining after the payment of any liabilities, liquidation preferences, and accrued or declared but unpaid dividends, if any, with respect to any outstanding preferred stock, unless a different treatment is approved by the affirmative vote of the holders of a majority of the outstanding shares of such affected class, voting separately as a class.

Change of Control Transactions. The holders of Class A common stock and Class B common stock will be treated equally and identically with respect to shares of Class A common stock or Class B common stock owned by them, unless different treatment of the shares of each class is approved by the affirmative vote of the holders of a majority of the outstanding shares of the class treated differently, voting separately as a class, on (a) the closing of the sale, transfer, or other disposition of all or substantially all of our assets, (b) the consummation of a merger, reorganization, consolidation, or share transfer which results in our voting securities outstanding immediately before the transaction (or the voting securities issued with respect to our voting securities outstanding immediately before the transaction) representing less than a majority of the combined voting power of the voting securities of the company or the surviving or acquiring entity or (c) the closing of the transfer (whether by merger, consolidation, or otherwise), in one transaction or a series of related transactions, to a person

[Table of Contents](#)

or group of affiliated persons of securities of the company if, after closing, the transferee person or group would hold 50% or more of the outstanding voting power of the company (or the surviving or acquiring entity). However, consideration to be paid or received by a holder of common stock in connection with any such assets sale, merger, reorganization, consolidation, or share transfer under any employment, consulting, severance, or other arrangement will be disregarded for the purposes of determining whether holders of common stock are treated equally and identically.

Subdivisions and Combinations. If we subdivide or combine in any manner outstanding shares of Class A common stock or Class B common stock, the outstanding shares of the other classes will be subdivided or combined in the same manner.

No Preemptive or Similar Rights

Our Class A common stock and Class B common stock are not entitled to preemptive rights, and are not subject to conversion, redemption or sinking fund provisions, except for the conversion provisions with respect to the Class B common stock described below.

Conversion

Each share of Class B common stock is convertible at any time at the option of the holder into one share of Class A common stock. After the closing of this offering, on any transfer of shares of Class B common stock, whether or not for value, each such transferred share will automatically convert into one share of Class A common stock, except for certain transfers detailed below and further described in our amended and restated certificate of incorporation that will be in effect following the closing of this offering.

Any holder's shares of Class B common stock will convert automatically into Class A common stock, on a one-to-one basis, upon certain circumstances, including: (1) the sale or transfer of such shares of Class B common stock, other than to a "controlled entity," which is any person or entity which, directly or indirectly, is controlled by, or is under common control with, the holder of such shares of Class B common stock; (2) the twenty-year anniversary of the filing of the certificate of amendment to our ninth amended and restated certificate of incorporation, which is March 15, 2041; (3) the termination of Mr. Lefkofsky's employment or service with us as an executive officer and member of our board of directors; and (4) the date that Mr. Lefkofsky and his controlled entities hold, in the aggregate, fewer than 10,000,000 shares of our capital stock (as adjusted for stock splits, stock dividends, combinations, subdivisions and recapitalizations).

Once transferred and converted into Class A common stock, the Class B common stock may not be reissued.

Fully Paid and Non-Assessable

In connection with this offering, our legal counsel will opine that the shares of our Class A common stock to be issued under this offering will be fully paid and non-assessable.

Convertible Promissory Note

In June 2020, in connection with our entry into an agreement for use of Google LLC's, or Google's, Google Cloud Platform, we issued Google a convertible promissory note, or the Note, in the original principal amount of \$330 million. In November 2020, in connection with our Series G-2 convertible preferred stock financing, we issued Google \$80 million of our Series G-2 preferred stock in partial satisfaction of the outstanding principal amount under the Note, and we amended and restated the terms of the Note. Under the amended and restated Note, or the Amended Note, the outstanding principal amount accrues interest at the rate set forth therein, and the principal amount is automatically reduced each year based on a formula taking into account the aggregate value of the Google Cloud Platform services used by us. As of December 31, 2021, the value of the Amended Note was

[Table of Contents](#)

\$238.2 million, which consisted of \$246.6 million gross principal, net of \$8.4 million aggregate unapplied principal reduction. The outstanding principal and accrued interest under the Note, or the Outstanding Amount, is due and payable on the earlier of (1) March 22, 2026, which is the maturity date of the Amended Note, (2) the occurrence and continuance of an event of default and (3) the occurrence of an acceleration event, which includes any termination by us of our Google Cloud Platform agreement. If the Amended Note is outstanding at the maturity date, Google may, at its option, convert the then outstanding principal amount and interest accrued under the Amended Note into a number of shares of our Class A common stock equal to the quotient obtained by dividing (1) the Outstanding Amount on the maturity date, by (2) the average of the last trading price on each trading day during the twenty day period ending immediately prior to the maturity date. We generally may not prepay the Outstanding Amount, except that we may, at our option, prepay the Outstanding Amount in an amount such that the principal amount remaining outstanding after such repayment is \$150 million.

Warrant

In November 2021, in connection with our entry into an MSA with AstraZeneca, we issued a warrant to AstraZeneca to purchase \$100 million in shares of our Class A common stock at an exercise price equal to the initial public offering price in this offering. The number of shares of Class A common stock issuable upon exercise of the warrant will be determined based on the initial public offering price in this offering (shares of Class A common stock, assuming an initial public offering price of \$ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus). The warrant may be exercised any time following the date that is 180 days following the pricing of our initial public offering through December 31, 2026. AstraZeneca will be entitled to substantially the same registration rights with respect to the shares under the warrant as those granted to holders of registrable securities pursuant to our Ninth Amended and Restated Investors' Rights Agreement, dated November 19, 2020. The warrant will be automatically cancelled and terminated for no consideration, if not previously exercised, in the event AstraZeneca declines to extend its financial commitment under the MSA before December 31, 2024, as more fully described in the section of this prospectus titled "Business—Operations—Our Strategic Collaboration with AstraZeneca."

Preferred Stock

As of December 31, 2021, there were 61,078,813 shares of our convertible preferred stock outstanding. Upon the closing of this offering, each outstanding share of our convertible preferred, other than our Series B convertible preferred stock, will convert into one share of our Class A common stock, and each outstanding share of our Series B convertible preferred stock will convert into one share of our Class B common stock. In addition, upon the closing of this offering, we expect to issue additional shares of Class A common stock upon the conversion of all of our outstanding shares of our preferred stock, pursuant to provisions of our certificate of incorporation as currently in effect, assuming an initial public offering price of \$ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, which we refer to as the Additional Class A Conversion Shares. See "Prospectus Summary—The Offering" for additional information.

Under our amended and restated certificate of incorporation that will be in effect on the closing of this offering, our board of directors may, without further action by our stockholders (except as noted below), fix the rights, preferences, privileges, and restrictions of up to an aggregate of 20,000,000 shares of preferred stock in one or more series and authorize their issuance. Notwithstanding the foregoing, so long as any shares of Class B common stock remain outstanding, no shares of preferred stock with voting rights equal or superior to those of the Class B common stock may be issued without the approval of the holders of a majority of the outstanding shares of Class B common stock. These rights, preferences, and privileges could include dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences, and the number of shares constituting any series or the designation of such series, any or all of which may be greater than the rights of our Class A common stock or Class B common stock. Any issuance of our preferred stock could adversely affect the voting power of holders of our Class A common stock or Class B common stock, and the likelihood that such holders would receive dividend payments and payments on liquidation. In addition, the issuance of preferred

[Table of Contents](#)

stock could have the effect of delaying, deferring, or preventing a change of control or other corporate action. On the closing of this offering, no shares of preferred stock will be outstanding. We have no present plan to issue any shares of preferred stock.

Options

As of December 31, 2021, we had outstanding a stock option to purchase 210,000 shares under the 2015 Plan.

Restricted Stock Units (RSUs)

As of December 31, 2021, we had outstanding 10,344,419 RSUs under the 2015 Plan.

Performance-Vesting Restricted Stock Units (PSUs)

As of December 31, 2021, we had outstanding 5,995,000 PSUs under the 2015 Plan.

Registration Rights

Stockholder Registration Rights

We are party to an investor rights agreement that provides that certain holders of our convertible preferred stock, including certain holders of at least 5% of our capital stock and entities affiliated with certain of our directors, have certain registration rights, as set forth below. This investor rights agreement was entered into in November 2020. The registration of shares of our Class A common stock (including shares of Class A common stock issuable upon conversion of Class B common stock, along with all Additional Class A Conversion Shares) by the exercise of registration rights described below would enable the holders to sell these shares without restriction under the Securities Act when the applicable registration statement is declared effective. We will pay the registration expenses, other than underwriting discounts and commissions, of the shares registered by the demand, piggyback, and Form S-3 registrations described below.

Generally, in an underwritten offering, the managing underwriter, if any, has the right, subject to specified conditions, to limit the number of shares such holders may include. The demand, piggyback, and Form S-3 registration rights described below will expire five years after the effective date of the registration statement, of which this prospectus forms a part, or with respect to any particular stockholder, such time after the effective date of the registration statement that such stockholder (a) holds less than 1% of our outstanding common stock (including shares issuable on conversion of outstanding convertible preferred stock) and (b) can sell all of its shares under Rule 144 of the Securities Act, or Rule 144, during any 90-day period.

See “Prospectus Summary—The Offering” for a description of the Additional Class A Conversion Shares, as the number of Additional Class A Conversion Shares that will be issued depends on the initial public offering price of our Class A common stock.

Demand Registration Rights

The holders of an aggregate of _____ shares of our Class A common stock and Class B common stock (assuming no exercise of the underwriters’ option to purchase additional shares from selling stockholders to cover over-allotments, if any, in this offering and assuming the issuance of the Additional Class A Conversion Shares) will be entitled to certain demand registration rights. At any time beginning six months after the effective date of this registration statement, the holders of a majority of these shares may, on not more than two occasions, request that we register all or a portion of their shares. Such request for registration must cover shares with an anticipated aggregate offering price, net of underwriting discounts and commissions, of at least \$15.0 million.

Piggyback Registration Rights

In connection with this offering, the holders of an aggregate of _____ shares of our Class A common stock and Class B common stock (assuming no exercise of the underwriters' option to purchase additional shares from selling stockholders to cover over-allotments, if any, in this offering and assuming the issuance of the Additional Class A Conversion Shares) were entitled to, and the necessary percentage of holders waived, their rights to notice of this offering and to include their shares of registrable securities in this offering. After this offering, in the event that we propose to, subject to limited exceptions, register any of our securities under the Securities Act, either for our own account or for the account of other security holders, the holders of these shares will be entitled to certain piggyback registration rights allowing the holder to include their shares in such registration, subject to certain marketing and other limitations. As a result, whenever we propose to file a registration statement under the Securities Act, other than with respect to a demand registration or a registration statement on Forms S-4 or S-8, the holders of these shares are entitled to notice of the registration and have the right to include their shares in the registration, subject to limitations that the underwriters may impose on the number of shares included in the offering.

Form S-3 Registration Rights

The holders of an aggregate of at least 20% of the then outstanding shares of Class A common stock and Class B common stock (assuming no exercise of the underwriters' option to purchase additional shares from selling stockholders to cover over-allotments, if any, in this offering and assuming the issuance of the Additional Class A Conversion Shares) will be entitled to certain Form S-3 registration rights. The holders of an aggregate of at least 20% of these shares can make a request that we register their shares on Form S-3 if we are qualified to file a registration statement on Form S-3 and if the reasonably anticipated aggregate gross proceeds of the shares offered would equal or exceed \$1.0 million. We will not be required to effect more than two registrations on Form S-3 within any 12-month period.

Anti-Takeover Provisions

Certificate of Incorporation and Bylaws to Be in Effect on the Closing of this Offering

Because our stockholders do not have cumulative voting rights, stockholders holding a majority of the voting power of our shares of common stock will be able to elect all of our directors. Our amended and restated certificate of incorporation and amended and restated bylaws to be effective on the closing of this offering will provide for stockholder actions at a duly called meeting of stockholders or, so long as any shares of Class B common stock remain outstanding, by written consent. A special meeting of stockholders may be called by a majority of our board of directors, the chair of our board of directors, our chief executive officer, or, so long as any shares of Class B common stock remain outstanding, by our secretary upon written consent of our stockholders entitled to cast at least a majority of the votes at such meeting. Our amended and restated bylaws to be effective on the closing of this offering will establish an advance notice procedure for stockholder proposals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to our board of directors.

Our amended and restated certificate of incorporation to be effective on the closing of this offering will further provide for a dual-class common stock structure, which provides Eric Lefkofsky, our Chief Executive Officer, Founder, and Chairman, who will beneficially own 100% of our outstanding Class B common stock, with control over all matters requiring stockholder approval, including the election of directors and significant corporate transactions, such as a merger or other sale of our company or its assets. Additionally, so long as any shares of Class B common stock remain outstanding, a majority vote of the outstanding Class B common stock is required to (1) amend, alter, or repeal any provision of the certificate of incorporation or bylaws in a manner that impacts the rights of the holders of the Class B common stock, (2) reclassify any outstanding shares of Class A common stock into shares having (a) dividend or liquidation rights that are senior to the Class B common stock or (b) the right to more than one vote per share, (3) issue any shares of preferred stock having voting rights equal

[Table of Contents](#)

or superior to those of the Class B common stock, and (4) issue any additional shares of Class B common stock or other securities convertible into Class B common stock (except for the issuance of Class B common stock issuable upon a dividend under certain circumstances).

The foregoing provisions will make it more difficult for another party to obtain control of us by replacing our board of directors. Since our board of directors has the power to retain and discharge our officers, these provisions could also make it more difficult for existing stockholders or another party to effect a change in management. In addition, the authorization of undesignated convertible preferred stock makes it possible for our board of directors to issue convertible preferred stock with voting or other rights or preferences that could impede the success of any attempt to change our control.

These provisions, including the dual-class structure of our common stock, are intended to preserve our existing control structure after the closing of this offering, facilitate our continued product innovation and the risk-taking that it requires, permit us to continue to prioritize our long-term goals rather than short-term results, enhance the likelihood of continued stability in the composition of our board of directors and its policies and to discourage certain types of transactions that may involve an actual or threatened acquisition of us. These provisions are also designed to reduce our vulnerability to an unsolicited acquisition proposal and to discourage certain tactics that may be used in proxy fights. However, such provisions could have the effect of discouraging others from making tender offers for our shares and may have the effect of deterring hostile takeovers or delaying changes in our control or management. As a consequence, these provisions may also inhibit fluctuations in the market price of our stock that could result from actual or rumored takeover attempts.

Section 203 of the Delaware General Corporation Law

When we have a class of voting stock that is either listed on a national securities exchange or held of record by more than 2,000 stockholders, we will be subject to Section 203 of the Delaware General Corporation Law, which prohibits a Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years after the date that such stockholder became an interested stockholder, subject to certain exceptions.

Choice of Forum

Our amended and restated certificate of incorporation to be effective on the closing of this offering will provide that the Court of Chancery of the State of Delaware be the exclusive forum for actions or proceedings brought under Delaware statutory or common law: (1) any derivative claim or cause of action brought on our behalf; (2) any claim or cause of action asserting a breach of fiduciary duty; (3) any claim or cause of action against us arising under the Delaware General Corporation Law; (4) any claim or cause of action arising under or seeking to interpret our amended and restated certificate of incorporation or our amended and restated bylaws; or (5) any claim or cause of action against us that is governed by the internal affairs doctrine. The provisions would not apply to suits brought to enforce a duty or liability created by the Exchange Act. Our amended and restated certificate of incorporation further provides that the federal district courts of the United States of America will be the exclusive forum for resolving any complaint asserting a cause or causes of action arising under the Securities Act, including all causes of action asserted against any defendant to such complaint. For the avoidance of doubt, this provision is intended to benefit and may be enforced by us, our officers and directors, the underwriters to any offering giving rise to such complaint, and any other professional entity whose profession gives authority to a statement made by that person or entity and who has prepared or certified any part of the documents underlying the offering. Investors cannot waive compliance with the federal securities laws and the rules and regulations thereunder.

Limitations of Liability and Indemnification

See the section titled “Executive Compensation—Limitations of Liability and Indemnification Matters.”

[Table of Contents](#)

Exchange Listing

Our Class A common stock is currently not listed on any securities exchange. We have applied to have our Class A common stock approved for listing on the Nasdaq Global Select Market under the symbol “TIME.”

Transfer Agent and Registrar

On the closing of this offering, the transfer agent and registrar for our Class A common stock and Class B common stock will be American Stock Transfer & Trust Company, LLC. The transfer agent’s address is 6201 15th Avenue, Brooklyn, New York 11219, and its telephone number is (800) 937-5449.

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there has been no public market for our Class A common stock. Future sales of substantial amounts of our Class A common stock or Class B common stock, including shares issued on the settlement of outstanding RSUs, in the public market after this offering, or the possibility of these sales or issuances occurring, could adversely affect the prevailing market price for our Class A common stock or impair our ability to raise equity capital.

Based on our shares outstanding as of December 31, 2021, on the closing of this offering, a total of _____ shares of Class A common stock and 5,374,899 shares of Class B common stock will be outstanding, assuming the automatic conversion of (1) all of our outstanding shares of convertible preferred stock, other than our Series B convertible preferred stock, into an aggregate of _____ shares of Class A common stock, including the Additional Class A Conversion Shares (assuming an initial public offering price of \$ _____ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus), (2) all of our outstanding shares of Series B convertible preferred stock into an aggregate of 5,374,899 shares of Class B common stock and (3) all of our outstanding shares of nonvoting common stock into 4,612,450 shares of Class A common stock. Of these shares, all of the Class A common stock sold in this offering by us, plus any shares sold by the selling stockholders on exercise of the underwriters' option to purchase additional Class A common stock to cover over-allotments, if any, will be freely tradable in the public market without restriction or further registration under the Securities Act, unless these shares are held by "affiliates," as that term is defined in Rule 144. See "Prospectus Summary—The Offering" for a description of the Additional Class A Conversion Shares, as the number of Additional Class A Conversion Shares that will be issued depends on the initial public offering price of our Class A common stock.

The remaining shares of Class A common stock and Class B common stock will be, and shares of Class A common stock issued on settlement of RSUs will be on issuance, "restricted securities," as that term is defined in Rule 144. These restricted securities are eligible for public sale only if they are registered under the Securities Act or if they qualify for an exemption from registration under Rules 144 or 701 under the Securities Act, which are summarized below. Restricted securities may also be sold outside of the United States to non-U.S. persons in accordance with Rule 904 of Regulation S.

Subject to the lock-up agreements described below and the provisions of Rule 144 or Regulation S under the Securities Act, as well as our insider trading policy, these restricted securities will be available for sale in the public market after the date of this prospectus.

Rule 144

In general, under Rule 144 as currently in effect, once we have been subject to public company reporting requirements of Section 13 or Section 15(d) of the Exchange Act for at least 90 days, an eligible stockholder is entitled to sell such shares without complying with the manner of sale, volume limitation or notice provisions of Rule 144, subject to compliance with the public information requirements of Rule 144. To be an eligible stockholder under Rule 144, such stockholder must not be deemed to have been one of our affiliates for purposes of the Securities Act at any time during the 90 days preceding a sale and must have beneficially owned the shares proposed to be sold for at least six months, including the holding period of any prior owner other than our affiliates. If such a person has beneficially owned the shares proposed to be sold for at least one year, including the holding period of any prior owner other than our affiliates, then such person is entitled to sell such shares without complying with any of the requirements of Rule 144, subject to the expiration of the lock-up agreements described below.

In general, under Rule 144, as currently in effect, our affiliates or persons selling shares on behalf of our affiliates are entitled to sell shares on expiration of the lock-up agreements described below, subject, in the case of restricted securities, to such shares having been beneficially owned for at least six months. Beginning 90 days

[Table of Contents](#)

after the date of this prospectus, within any three-month period, such stockholders may sell a number of shares that does not exceed the greater of:

- 1% of the number of shares of Class A common stock then outstanding, which will equal approximately _____ shares immediately after this offering; or
- the average weekly trading volume of our Class A common stock on the Nasdaq Stock Market during the four calendar weeks preceding the filing of a notice on Form 144 with respect to such sale.

Sales under Rule 144 by our affiliates or persons selling shares on behalf of our affiliates are also subject to certain manner of sale provisions and notice requirements and to the availability of current public information about us.

Rule 701

Rule 701 under the Securities Act, or Rule 701, generally allows a stockholder who was issued shares under a written compensatory plan or contract and who is not deemed to have been an affiliate of our company during the immediately preceding 90 days, to sell these shares in reliance on Rule 144, but without being required to comply with the public information, holding period, volume limitation or notice provisions of Rule 144. Rule 701 also permits affiliates of our company to sell their Rule 701 shares under Rule 144 without complying with the holding period requirements of Rule 144. All holders of Rule 701 shares, however, are required by that rule to wait until 90 days after the date of this prospectus before selling those shares under Rule 701, subject to the expiration of the lock-up agreements described below.

Form S-8 Registration Statements

We intend to file one or more registration statements on Form S-8 under the Securities Act with the SEC to register the offer and sale of shares of our Class A common stock that are issuable under the 2015 Plan, the 2022 Plan and the ESPP. These registration statements will become effective immediately on filing. Shares covered by these registration statements will then be eligible for sale in the public markets, subject to vesting restrictions, any applicable lock-up agreements described below, and Rule 144 limitations applicable to affiliates.

Lock-Up Arrangements

We, all of our directors, executive officers, the selling stockholders and the holders of substantially all of our common stock and securities exercisable for or convertible into our common stock outstanding immediately on the closing of this offering, have agreed, or will agree, with the underwriters that, until 180 days after the date of this prospectus, or the restricted period, subject to certain exceptions, we and they will not, without the prior written consent of Morgan Stanley & Co. LLC and J.P. Morgan Securities LLC, offer, sell, contract to sell, pledge, grant any option to purchase, make any short sale or otherwise dispose of any of our shares of common stock, any options or warrants to purchase any of our shares of common stock or any securities convertible into or exchangeable for or that represent the right to receive shares of our common stock. These agreements are described in the section titled "Underwriting." Morgan Stanley & Co. LLC and J.P. Morgan Securities LLC may release any of the securities subject to these lock-up agreements at any time, subject to applicable notice requirements.

In addition to the restrictions contained in the lock-up agreements described above, we have entered into agreements with substantially all of our security holders that contain market stand-off provisions imposing restrictions on the ability of such security holders to offer, sell or transfer our equity securities for a period of 180 days following the date of this prospectus.

Registration Rights

Upon the closing of this offering, the holders of _____ shares of our Class A common stock and of all shares of our Class B common stock, or their transferees, will be entitled to certain rights with respect to the

[Table of Contents](#)

registration of the offer and sale of their shares under the Securities Act. Registration of these shares under the Securities Act would result in the shares becoming freely tradable without restriction under the Securities Act immediately on the effectiveness of the registration. See the section titled “Description of Capital Stock—Registration Rights” for additional information.

Rule 10b5-1 Plans

After this offering, certain of our employees, including our executive officers, and/or directors may enter into written trading plans that are intended to comply with Rule 10b5-1 under the Exchange Act. Sales under these trading plans would not be permitted until the expiration of the lock-up agreements relating to the offering described above.

**MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES OF NON-U.S. HOLDERS OF OUR
CLASS A COMMON STOCK**

The following summary describes certain material U.S. federal income tax consequences to Non-U.S. Holders (as defined below) of the acquisition, ownership, and disposition of our Class A common stock acquired in this offering. This discussion is not a complete analysis of all potential U.S. federal income tax consequences relating thereto, and does not address foreign, state, and local tax consequences that may be relevant to Non-U.S. Holders in light of their particular circumstances, nor does it address U.S. federal tax consequences (such as gift and estate taxes) other than income taxes. This discussion is limited to Non-U.S. Holders that hold our Class A common stock as a “capital asset” within the meaning of Section 1221 of the Code (generally, property held for investment). This discussion does not address all U.S. federal income tax consequences relevant to a Non-U.S. Holder’s particular circumstances, including the impact of the alternative minimum tax, the special tax accounting rules under Section 451(b) of the Code and the Medicare contribution tax on net investment income. Special rules different from those described below may apply to certain Non-U.S. Holders that are subject to special treatment under the Code, such as financial institutions, insurance companies, tax-exempt organizations, broker-dealers, and traders in securities, U.S. expatriates, “controlled foreign corporations,” “passive foreign investment companies,” corporations that accumulate earnings to avoid U.S. federal income tax, corporations organized outside of the United States, any state thereof or the District of Columbia that are nonetheless treated as U.S. taxpayers for U.S. federal income tax purposes, persons that hold our Class A common stock as part of a “straddle,” “hedge,” “conversion transaction,” “synthetic security,” or integrated investment or other risk reduction strategy, persons who acquire our Class A common stock through the exercise of an option or otherwise as compensation, “qualified foreign pension funds” as defined in Section 897(l)(2) of the Code and entities all of the interests of which are held by qualified foreign pension funds, partnerships, and other pass-through entities or arrangements and investors in such pass-through entities or arrangements. Such Non-U.S. Holders are urged to consult their own tax advisors to determine the U.S. federal, state, local, and other tax consequences that may be relevant to them. Furthermore, the discussion below is based upon the provisions of the Code, and Treasury Regulations, rulings, and judicial decisions thereunder as of the date hereof, and such authorities may be repealed, revoked, or modified, perhaps retroactively, so as to result in U.S. federal income tax consequences different from those discussed below. We have not requested a ruling from the IRS with respect to the statements made and the conclusions reached in the following summary, and there can be no assurance that the IRS will agree with such statements and conclusions.

This discussion is for informational purposes only and is not tax advice. Persons considering the purchase of our Class A common stock pursuant to this offering should consult their own tax advisors concerning the U.S. federal income, estate, and other tax consequences of acquiring, owning, and disposing of our Class A common stock in light of their particular situations as well as any consequences arising under the laws of any other taxing jurisdiction, including any state, local, or foreign tax consequences.

For the purposes of this discussion, a “Non-U.S. Holder” is, for U.S. federal income tax purposes, a beneficial owner of Class A common stock that is neither a U.S. Holder, nor a partnership (or other entity treated as a partnership for U.S. federal income tax purposes regardless of its place of organization or formation). A “U.S. Holder” means a beneficial owner of our Class A common stock that is for U.S. federal income tax purposes any of the following:

- an individual who is a citizen or resident of the United States;
- a corporation or other entity treated as a corporation for U.S. federal income tax purposes created or organized in or under the laws of the United States, any state thereof, or the District of Columbia;
- an estate the income of which is subject to U.S. federal income taxation regardless of its source; or
- a trust if it (1) is subject to the primary supervision of a court within the United States and one or more U.S. persons have the authority to control all substantial decisions of the trust or (2) has a valid election in effect under applicable U.S. Treasury Regulations to be treated as a U.S. person.

Distributions

Distributions, if any, made on our Class A common stock to a Non-U.S. Holder to the extent made out of our current or accumulated earnings and profits (as determined under U.S. federal income tax principles) generally will constitute dividends for U.S. tax purposes and will be subject to withholding tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty, subject to the discussions below regarding effectively connected income, backup withholding, and foreign accounts. To obtain a reduced rate of withholding under a treaty, a Non-U.S. Holder generally will be required to provide us with a properly executed IRS Form W-8BEN (in the case of individuals) or IRS Form W-8BEN-E (in the case of entities), or other appropriate form, certifying the Non-U.S. Holder's entitlement to benefits under that treaty. This certification must be provided to us and/or our paying agent prior to the payment of dividends and must be updated periodically. In the case of a Non-U.S. Holder that is an entity, Treasury Regulations and the relevant tax treaty provide rules to determine whether, for purposes of determining the applicability of a tax treaty, dividends will be treated as paid to the entity or to those holding an interest in that entity. If a Non-U.S. Holder holds stock through a financial institution or other agent acting on the holder's behalf, the holder will be required to provide appropriate documentation to such agent. The holder's agent will then be required to provide certification to us and/or our paying agent, either directly or through other intermediaries. If a Non-U.S. Holder is eligible for a reduced rate of U.S. federal withholding tax under an income tax treaty and such Non-U.S. Holder does not timely file the required certification, such Non-U.S. Holder may be able to obtain a refund or credit of any excess amounts withheld by timely filing an appropriate claim for a refund with the IRS.

We generally are not required to withhold tax on dividends paid to a Non-U.S. Holder that are effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, are attributable to a permanent establishment or fixed base that such holder maintains in the United States) if a properly executed IRS Form W-8ECI, stating that the dividends are so connected, is furnished to us (or, if stock is held through a financial institution or other agent, to such agent). In general, such effectively connected dividends will be subject to U.S. federal income tax, on a net income basis at the regular rates applicable to U.S. Holders. A corporate Non-U.S. Holder receiving effectively connected dividends may also be subject to an additional "branch profits tax," which is imposed, under certain circumstances, at a rate of 30% (or such lower rate as may be specified by an applicable treaty) on the corporate Non-U.S. Holder's effectively connected earnings and profits, subject to certain adjustments. Non-U.S. Holders should consult their tax advisors regarding any applicable income tax treaties that may provide for different rules.

To the extent distributions on our Class A common stock, if any, exceed our current and accumulated earnings and profits, they will first reduce the Non-U.S. Holder's adjusted basis in our Class A common stock, but not below zero, and then will be treated as gain to the extent of any excess amount distributed, and taxed in the same manner as gain realized from a sale or other disposition of Class A common stock as described in the next section.

Gain on Disposition of Our Class A Common Stock

Subject to the discussions below regarding backup withholding and foreign accounts, a Non-U.S. Holder generally will not be subject to U.S. federal income tax with respect to gain realized on a sale or other taxable disposition of our Class A common stock unless (a) the gain is effectively connected with a trade or business of such holder in the United States (and, if required by an applicable income tax treaty, is attributable to a permanent establishment or fixed base that such holder maintains in the United States), (b) the Non-U.S. Holder is a nonresident alien individual and is present in the United States for 183 or more days in the taxable year of the disposition and certain other conditions are met, or (c) we are or have been a "United States real property holding corporation" within the meaning of Code Section 897(c)(2) at any time within the shorter of the five-year period preceding such disposition or such holder's holding period in our Class A common stock. In general, we would be a United States real property holding corporation if our interests in U.S. real property comprise (by fair market value) at least half of our worldwide real property interests and our other assets used or held for use in a trade or

[Table of Contents](#)

business. We believe that we are not, and do not anticipate becoming, a United States real property holding corporation. Even if we are treated as a United States real property holding corporation, gain realized by a Non-U.S. Holder on a disposition of our Class A common stock will not be subject to U.S. federal income tax so long as (1) the Non-U.S. Holder owned, directly, indirectly, and constructively, no more than 5% of our Class A common stock at all times within the shorter of (i) the five-year period preceding the disposition or (ii) the holder's holding period and (2) our Class A common stock is regularly traded on an established securities market, as defined in applicable Treasury Regulations. There can be no assurance that our Class A common stock will qualify as regularly traded on an established securities market. If a Non-U.S. Holder's gain on disposition of our Class A common stock is taxable because we are a United States real property holding corporation and such Non-U.S. Holder's ownership of our Class A common stock exceeds 5%, such Non-U.S. Holder will be taxed on such disposition generally in the manner as gain that is effectively connected with the conduct of a U.S. trade or business (subject to the provisions under an applicable income tax treaty), except that the branch profits tax generally will not apply to a corporate Non-U.S. Holder.

Non-U.S. Holders described in (a) above will be required to pay tax on the net gain derived from the sale at regular U.S. federal income tax rates applicable to U.S. Holders, and corporate Non-U.S. Holders described in (a) above may be subject to the additional branch profits tax on such gain at a 30% rate or such lower rate as may be specified by an applicable income tax treaty. Gain described in (b) above will be subject to U.S. federal income tax at a flat 30% rate, which gain may be offset by certain U.S.-source capital losses (even though a Non-U.S. Holder is not considered a resident of the United States), provided that the Non-U.S. Holder has timely filed U.S. federal income tax returns with respect to such losses.

Information Reporting Requirements and Backup Withholding

Generally, we must report information to the IRS with respect to any distributions we pay on our Class A common stock (even if the payments are exempt from withholding), including the amount of any such distributions, the name and address of the recipient, and the amount, if any, of tax withheld. A similar report is sent to the holder to whom any such distributions are paid. Pursuant to tax treaties or certain other agreements, the IRS may make its reports available to tax authorities in the recipient's country of residence.

Dividends paid by us (or our paying agents) to a Non-U.S. Holder may also be subject to U.S. backup withholding. U.S. backup withholding generally will not apply to a Non-U.S. Holder who provides a properly executed IRS Form W-8BEN, IRS Form W-8BEN-E, or IRS Form W-ECI, or otherwise establishes an exemption. Notwithstanding the foregoing, backup withholding may apply if the payor has actual knowledge, or reason to know, that the holder is a U.S. person who is not an exempt recipient.

U.S. information reporting and backup withholding requirements generally will apply to the proceeds of a disposition of our Class A common stock effected by or through a U.S. office of any broker, U.S. or foreign, except that information reporting and such requirements may be avoided if the holder provides a properly executed IRS Form W-8BEN or IRS Form W-8BEN-E or otherwise meets documentary evidence requirements for establishing non-U.S. person status or otherwise establishes an exemption. Generally, U.S. information reporting and backup withholding requirements will not apply to a payment of disposition proceeds to a Non-U.S. Holder where the transaction is effected outside the United States through a non-U.S. office of a non-U.S. broker. Information reporting and backup withholding requirements may, however, apply to a payment of disposition proceeds if the broker has actual knowledge, or reason to know, that the holder is, in fact, a U.S. person. For information reporting purposes, certain brokers with substantial U.S. ownership or operations will generally be treated in a manner similar to U.S. brokers.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules may be credited against the tax liability of persons subject to backup withholding, provided that the required information is timely furnished to the IRS.

Foreign Accounts

Sections 1471 through 1474 of the Code (commonly referred to as FATCA) impose a U.S. federal withholding tax of 30% on certain payments to a foreign financial institution (as specifically defined by applicable rules) unless such institution enters into an agreement with the U.S. government to withhold on certain payments and to collect and provide to the U.S. tax authorities substantial information regarding U.S. account holders of such institution (which includes certain equity holders of such institution, as well as certain account holders that are foreign entities with U.S. owners). FATCA also generally imposes a federal withholding tax of 30% on certain payments to a non-financial foreign entity unless such entity provides the withholding agent with either a certification that it does not have any substantial direct or indirect U.S. owners or provides information regarding substantial direct and indirect U.S. owners of the entity. An intergovernmental agreement between the United States and an applicable foreign country may modify those requirements. The withholding tax described above will not apply if the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from the rules.

FATCA withholding currently applies to payments of dividends, if any, on our Class A common stock and, subject to the proposed Treasury Regulations described in this paragraph, generally also would apply to payments of gross proceeds from the sale or other disposition of our Class A common stock. The U.S. Treasury Department released proposed regulations which, if finalized in their present form, would eliminate the federal withholding tax of 30% applicable to the gross proceeds of a disposition of our Class A common stock. In its preamble to such proposed regulations, the U.S. Treasury Department stated that taxpayers may generally rely on the proposed regulations until final regulations are issued. Non-U.S. holders are encouraged to consult with their own tax advisors regarding the possible implications of FATCA on their investment in our Class A common stock.

EACH PROSPECTIVE INVESTOR SHOULD CONSULT ITS OWN TAX ADVISOR REGARDING THE TAX CONSEQUENCES OF PURCHASING, HOLDING, AND DISPOSING OF OUR CLASS A COMMON STOCK, INCLUDING THE CONSEQUENCES OF ANY RECENT OR PROPOSED CHANGE IN APPLICABLE LAW FROM ALL FEDERAL, STATE, ESTATE, AND GIFT TAX PERSPECTIVES.

UNDERWRITING

Under the terms and subject to the conditions in an underwriting agreement dated the date of this prospectus, the underwriters named below, for whom Morgan Stanley & Co. LLC, J.P. Morgan Securities LLC and Allen & Company LLC are acting as representatives, have severally agreed to purchase, and we have agreed to sell to them, severally, the number of shares of Class A common stock indicated below:

<u>Name</u>	<u>Number of Shares</u>
Morgan Stanley & Co. LLC	
J.P. Morgan Securities LLC	
Allen & Company LLC	
BofA Securities, Inc.	
Cowen and Company, LLC	
Stifel, Nicolaus & Company, Incorporated	
William Blair & Company, L.L.C.	
Loop Capital Markets LLC	
Needham & Company, LLC	
	Total: _____

The underwriters and the representatives are collectively referred to as the “underwriters” and the “representatives,” respectively. The underwriters are offering the shares of Class A common stock subject to their acceptance of the shares from us and subject to prior sale. The underwriting agreement provides that the obligations of the several underwriters to pay for and accept delivery of the shares of Class A common stock offered by this prospectus are subject to the approval of certain legal matters by their counsel and to certain other conditions. The underwriters are obligated to take and pay for all of the shares of Class A common stock offered by this prospectus if any such shares are taken. However, the underwriters are not required to take or pay for the shares covered by the underwriters’ over-allotment option described below.

The underwriters initially propose to offer part of the shares of Class A common stock directly to the public at the offering price listed on the cover page of this prospectus and part to certain dealers at a price that represents a concession not in excess of \$ _____ per share under the initial public offering price. After the initial offering of the shares of Class A common stock, the offering price and other selling terms may from time to time be varied by the representatives.

The selling stockholders identified in this prospectus have granted to the underwriters an option, exercisable for 30 days from the date of this prospectus, to purchase up to _____ additional shares of Class A common stock at the initial public offering price listed on the cover page of this prospectus, less underwriting discounts and commissions. The underwriters may exercise this option solely for the purpose of covering over-allotments, if any, made in connection with the offering of the shares of Class A common stock offered by this prospectus. To the extent the option is exercised, each underwriter will become obligated, subject to certain conditions, to purchase about the same percentage of the additional shares of Class A common stock as the number listed next to the underwriter’s name in the preceding table bears to the total number of shares of Class A common stock listed next to the names of all underwriters in the preceding table.

The following table shows the per share and total initial public offering price, underwriting discounts and commissions, and proceeds before expenses to us and the selling stockholders. These amounts are shown assuming both no exercise and full exercise of the underwriters’ option to purchase up to an additional _____ shares of Class A common stock.

[Table of Contents](#)

	<u>Per Share</u>	<u>Total</u>	
		<u>No Exercise</u>	<u>Full Exercise</u>
Initial public offering price	\$	\$	\$
Underwriting discounts and commissions to be paid by:			
Us	\$	\$	\$
The selling stockholders	\$	\$	\$
Proceeds, before expenses, to us	\$	\$	\$
Proceeds, before expenses, to selling stockholders	\$	\$	\$

The estimated offering expenses payable by us, exclusive of the underwriting discounts and commissions, are approximately \$ _____ million. We have agreed to reimburse the underwriters for expenses relating to clearance of this offering with the Financial Industry Regulatory Authority up to \$ _____.

The underwriters have informed us that they do not intend sales to discretionary accounts to exceed 5% of the total number of shares of Class A common stock offered by them. We have applied to list our Class A common stock on the Nasdaq Global Select Market under the trading symbol "TIME."

We and all directors and officers and the holders of substantially all of our outstanding stock and stock options will agree that, subject to certain conditions, without the prior written consent of the representatives on behalf of the underwriters, we and they will not, and will not publicly disclose an intention to, during the period ending on and including the 180th day after the date of this prospectus, referred to as the restricted period:

- offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend or otherwise transfer or dispose of, directly or indirectly, any shares of our common stock or any securities convertible into or exercisable or exchangeable for shares of our common stock;
- file any registration statement with the Securities and Exchange Commission, or the SEC, relating to the offering of any shares of common stock or any securities convertible into or exercisable or exchangeable for common stock; or
- enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the common stock,

whether any such transaction described above is to be settled by delivery of common stock or such other securities, in cash or otherwise. In addition, we and each such person will agree that, without the prior written consent of the representatives on behalf of the underwriters, we or such other person will not, during the restricted period, make any demand for, or exercise any right with respect to, the registration of any shares of our common stock or any security convertible into or exercisable or exchangeable for common stock.

The restrictions described in the immediately preceding paragraph do not apply to:

- the sale of shares to the underwriters;
- transactions by any person other than us relating to shares of Class A common stock or other securities acquired in this offering or in open market transactions after the completion of this offering, provided that no filing under the Exchange Act, or other public announcement, reporting a reduction in beneficial ownership of shares of Class A common stock is required or voluntarily made in connection with subsequent sales of Class A common stock or other securities acquired in this offering or in such open market transactions during the restricted period;
- transfers of shares of common stock or any security convertible into or exercisable or exchangeable for common stock (i) as a bona fide gift, (ii) to an immediate family member or to any trust for the direct or indirect benefit of the holder or an immediate family member of the holder, (iii) to any corporation,

partnership, limited liability company, investment fund, trust or other entity controlled or managed, or under common control or management by, the holder, or (iv) by will, other testamentary document or intestate succession to the legal representative, heir, beneficiary or an immediate family member of the holder, provided that, in the case of any such transfer, (a) each transferee shall sign and deliver a lock-up agreement and (b) no filing under the Exchange Act, or other public announcement, reporting a reduction in beneficial ownership of shares of common stock is required or voluntarily made during the restricted period;

- if the holder is a corporation, partnership, limited liability company, trust or other business entity, transfers or distributions of shares of common stock or any security convertible into or exercisable or exchangeable for common stock to general or limited partners, managers or members, stockholders, other equityholders or direct or indirect affiliates (within the meaning of Rule 405 under the Securities Act) of the undersigned or to the estates of any of the foregoing, provided that (i) each transferee or distributee shall sign and deliver a lock-up agreement and (ii) no filing under the Exchange Act, or other public announcement, reporting a reduction in beneficial ownership of shares of common stock is required or voluntarily made during the restricted period;
- the transfer to the company of shares of common stock or any securities convertible into or exercisable or exchangeable for common stock to satisfy any tax, including estimated tax, remittance, or other payment obligations of the holder arising in connection with a vesting event of the company's securities, upon the settlement of restricted stock units or the payment due for the exercise of options or other rights to purchase securities of the company (including, in each case, by way of a "cashless" or "net exercise" basis and any transfer to the company necessary in respect of such amount needed for the payment of taxes, including estimated taxes, and remittance payments due as a result of such vesting, settlement or exercise including by means of a "net settlement," "sell to cover" or otherwise), in all such cases pursuant to equity awards granted under a stock incentive plan or other equity award plan of the company described in this prospectus, provided that (i) any remaining shares of common stock received upon such vesting, settlement or exercise are subject to the aforementioned restrictions, (ii) no filing under the Exchange Act, or other public announcement, shall be voluntarily made during the restricted period and (iii) any filing required under the Exchange Act shall clearly indicate in the footnotes thereto that the filing relates to the circumstances described in this bullet;
- the establishment of a trading plan on behalf of a stockholder, officer or director of the company pursuant to Rule 10b5-1 under the Exchange Act for the transfer of shares of common stock, provided that (i) such plan does not provide for the transfer of common stock during the restricted period and (ii) to the extent a public announcement or filing under the Exchange Act, if any, is required of or voluntarily made by or on behalf of the holder or the company regarding the establishment of such plan, such announcement or filing shall include a statement to the effect that no transfer of common stock may be made under such plan during the restricted period;
- the transfer of shares of common stock or any security convertible into or exercisable or exchangeable for common stock that occurs by operation of law pursuant to a qualified domestic order or in connection with a divorce settlement or other court order, provided that (i) the transferee shall sign and deliver a lock-up agreement and (ii) no filing under the Exchange Act, or other public announcement, shall be required or shall be voluntarily made during the restricted period (other than any filing required under Section 16(a) of the Exchange Act that shall clearly indicate in the footnotes thereto that the filing relates to the circumstances described in this bullet);
- the conversion of shares of the company's convertible preferred stock or Class B common stock into shares of Class A common stock as described in this prospectus, provided that, in each case (i) such shares shall continue to be subject to the aforementioned restrictions on transfer and (ii) no filing under the Exchange Act, or other public announcement, shall be required or voluntarily made during the restricted period (other than any filing required under Section 16(a) of the Exchange Act that clearly indicates in the footnotes thereto that the filing relates to the circumstances described in this bullet);

Table of Contents

- the transfer of shares of common stock or any security convertible into or exercisable or exchangeable for common stock pursuant to a bona fide third-party tender offer, merger, consolidation or other similar transaction that is approved by the board of directors of the company, made to all holders of common stock involving a change of control, provided that, in the event that the tender offer, merger, consolidation or other such transaction is not completed, the common stock owned by the holder shall remain subject to the aforementioned restrictions; or
- any transfer of shares of common stock or any security convertible into or exercisable or exchangeable for common stock pledged in a bona fide transaction to third parties as collateral to secure obligations pursuant to lending or other arrangements in effect as of the date hereof between such third parties (or their affiliates or designees) and the holder or its affiliates or any similar arrangement relating to a financing arrangement for the benefit of the holder or its affiliates, provided that (i) any such pledgee or other party shall, upon foreclosure on the pledged securities, sign and deliver a lock-up agreement and (ii) no filing under the Exchange Act, or any other public filing or disclosure, of such transfer by or on behalf of the holder, shall be required or shall be voluntarily made during the restricted period.

Morgan Stanley & Co. LLC and J.P. Morgan Securities LLC, in their joint discretion, may release the common stock and other securities subject to the lock-up agreements described above in whole or in part at any time, subject to applicable notice requirements. In addition, in the event that any officer, director or other holder holding in excess of 1% of our outstanding shares of common stock is granted an early release from the lock-up restrictions with respect to our securities in an aggregate amount in excess of 1% of our outstanding shares of common stock (whether in one or multiple releases), then every other person subject to lock-up automatically will be granted an equivalent early release from its obligations under the lock-up agreement on a pro rata basis. Such release (i) shall not be applicable if it is effected solely to permit a transfer not for consideration and the transferee has agreed in writing to be bound by the restrictions described above, and (ii) in certain cases, in the event of an underwritten public offering during the restricted period, shall only apply with respect to the holder's participation in the underwritten offering. Notwithstanding any other provisions of the lock-up agreement, in certain cases, if Morgan Stanley & Co. LLC and J.P. Morgan Securities LLC, in their sole judgment, determine that a holder of any securities that is a natural person should be granted an early release from a lock-up agreement due to circumstances of an emergency or hardship, then no other holder shall have any right to be granted an early release from the lock-up agreement.

In order to facilitate the offering of the Class A common stock, the underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the Class A common stock. Specifically, the underwriters may sell more shares than they are obligated to purchase under the underwriting agreement, creating a short position. A short sale is covered if the short position is no greater than the number of shares available for purchase by the underwriters under the over-allotment option. The underwriters can close out a covered short sale by exercising the over-allotment option or purchasing shares in the open market. In determining the source of shares to close out a covered short sale, the underwriters will consider, among other things, the open market price of shares compared to the price available under the over-allotment option. The underwriters may also sell shares in excess of the over-allotment option, creating a naked short position. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the Class A common stock in the open market after pricing that could adversely affect investors who purchase in this offering. As an additional means of facilitating this offering, the underwriters may bid for, and purchase, shares of Class A common stock in the open market to stabilize the price of the Class A common stock. These activities may raise or maintain the market price of the Class A common stock above independent market levels or prevent or retard a decline in the market price of the Class A common stock. The underwriters are not required to engage in these activities and may end any of these activities at any time. Any such stabilization activities will be conducted in accordance with Regulation M.

We, the selling stockholders and the underwriters have agreed to indemnify each other against certain liabilities, including liabilities under the Securities Act.

[Table of Contents](#)

A prospectus in electronic format may be made available on websites maintained by one or more underwriters, or selling group members, if any, participating in this offering. The representatives may agree to allocate a number of shares of Class A common stock to underwriters for sale to their online brokerage account holders. Internet distributions will be allocated by the representatives to underwriters that may make Internet distributions on the same basis as other allocations.

Other Relationships

The underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. Certain of the underwriters and their respective affiliates have, from time to time, performed, and may in the future perform, various financial advisory and investment banking services for us, for which they received or will receive customary fees and expenses.

In addition, in the ordinary course of their various business activities, the underwriters and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments. Such investment and securities activities may involve our securities and instruments. The underwriters and their respective affiliates may also make investment recommendations or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long or short positions in such securities and instruments.

Pricing of the Offering

Prior to this offering, there has been no public market for our Class A common stock. The initial public offering price will be determined by negotiations between us and the representatives. Among the factors to be considered in determining the initial public offering price are our future prospects and those of our industry in general, our sales, earnings and certain other financial and operating information in recent periods, and the price-earnings ratios, price-sales ratios, market prices of securities, and certain financial and operating information of companies engaged in activities similar to ours.

Selling Restrictions

European Economic Area

In relation to each Member State of the European Economic Area, each a Member State, no securities have been offered or will be offered pursuant to the offering to the public in that Member State prior to the publication of a prospectus in relation to the securities which has been approved by the competent authority in that Member State or, where appropriate, approved in another Member State and notified to the competent authority in that Member State, all in accordance with the Prospectus Regulation, except that offers of securities may be made to the public in that Member State at any time under the following exemptions under the Prospectus Regulation:

- (a) to any legal entity which is a qualified investor as defined in the Prospectus Regulation;
- (b) to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Regulation), subject to obtaining the prior consent of the representatives; or
- (c) in any other circumstances falling within Article 1(4) of the Prospectus Regulation,

provided that no such offer of shares shall require us or any of our representatives to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation and each person who initially acquires any shares or to whom any offer is made will be deemed to have represented, acknowledged and agreed to and with each of the representatives and us that it is a “qualified investor” as defined in the Prospectus Regulation.

[Table of Contents](#)

In the case of any shares being offered to a financial intermediary as that term is used in Article 5 of the Prospectus Regulation, each such financial intermediary will be deemed to have represented, acknowledged, and agreed that the shares acquired by it in the offer have not been acquired on a nondiscretionary basis on behalf of, nor have they been acquired with a view to their offer or resale to, persons in circumstances which may give rise to an offer of any shares to the public other than their offer or resale in a Member State to qualified investors as so defined or in circumstances in which the prior consent of the representatives has been obtained to each such proposed offer or resale.

For the purposes of this provision, the expression an “offer of shares to the public” in relation to any shares in any Member State means the communication in any form and by means of sufficient information on the terms of the offer and the shares to be offered so as to enable an investor to decide to purchase shares, the expression “Prospectus Regulation” means Regulation (EU) 2017/1129 (as amended).

United Kingdom

In relation to the United Kingdom, no securities have been offered or will be offered pursuant to this offering to the public in the United Kingdom prior to the publication of a prospectus in relation to the securities that either (i) has been approved by the Financial Conduct Authority, or (ii) is to be treated as if it had been approved by the Financial Conduct Authority in accordance with the transitional provision in Regulation 74 of the Prospectus (Amendment etc.) (EU Exit) Regulations 2019, except that offers of securities may be made to the public in the United Kingdom at any time under the following exemptions under the UK Prospectus Regulation:

- (a) to any legal entity which is a qualified investor as defined in Article 2 of the UK Prospectus Regulation;
- (b) to fewer than 150 natural or legal persons (other than qualified investors as defined in Article 2 of the UK Prospectus Regulation), subject to obtaining the prior consent of the Representative for any such offer; or
- (c) in any other circumstances falling within section 86 of the Financial Services and Markets Act 2000, as amended, or the FMSA,

provided that no such offer of shares shall require the issuer or any underwriter to publish a prospectus pursuant to section 85 of the FSMA or supplement a prospectus pursuant to Article 23 of the UK Prospectus Regulation.

For the purposes of this provision, the expression an “offer of shares to the public” in relation to any shares in the United Kingdom means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares, and the expression “UK Prospectus Regulation” means Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018.

Each underwriter has represented and agreed that:

- (a) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000, or FSMA, received by it in connection with the issue or sale of the shares of our Class A common stock in circumstances in which Section 21(1) of the FSMA does not apply to us; and
- (b) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the shares of our Class A common stock in, from or otherwise involving the United Kingdom.

Canada

The shares of Class A common stock may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus

[Table of Contents](#)

Exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the shares of Class A common stock must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 (or, in the case of securities issued or guaranteed by the government of a non-Canadian jurisdiction, section 3A.4) of National Instrument 33-105 Underwriting Conflicts (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

Japan

No registration pursuant to Article 4, paragraph 1 of the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948, as amended), or the FIEL, has been made or will be made with respect to the solicitation of the application for the acquisition of the shares of Class A common stock.

Accordingly, the shares of Class A common stock have not been, directly or indirectly, offered or sold and will not be, directly or indirectly, offered or sold in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan) or to others for re-offering or re-sale, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan except pursuant to an exemption from the registration requirements, and otherwise in compliance with, the FIEL and the other applicable laws and regulations of Japan.

For Qualified Institutional Investors ("QII")

Please note that the solicitation for newly issued or secondary securities (each as described in Paragraph 2, Article 4 of the FIEL) in relation to the shares of Class A common stock constitutes either a "QII only private placement" or a "QII only secondary distribution" (each as described in Paragraph 1, Article 23-13 of the FIEL). Disclosure regarding any such solicitation, as is otherwise prescribed in Paragraph 1, Article 4 of the FIEL, has not been made in relation to the shares of Class A common stock. The shares of Class A common stock may only be transferred to QIIs.

For Non-QII Investors

Please note that the solicitation for newly issued or secondary securities (each as described in Paragraph 2, Article 4 of the FIEL) in relation to the shares of Class A common stock constitutes either a "small number private placement" or a "small number private secondary distribution" (each as is described in Paragraph 4, Article 23-13 of the FIEL). Disclosure regarding any such solicitation, as is otherwise prescribed in Paragraph 1, Article 4 of the FIEL, has not been made in relation to the shares of Class A common stock. The shares of Class A common stock may only be transferred en bloc without subdivision to a single investor.

Hong Kong

Shares of our Class A common stock may not be offered or sold in Hong Kong by means of any document other than (i) in circumstances which do not constitute an offer to the public within the meaning of the

Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32 of the Laws of Hong Kong) (“Companies (Winding Up and Miscellaneous Provisions) Ordinance”) or which do not constitute an invitation to the public within the meaning of the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong) (“Securities and Futures Ordinance”), or (ii) to “professional investors” as defined in the Securities and Futures Ordinance and any rules made thereunder, or (iii) in other circumstances which do not result in the document being a “prospectus” as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance, and no advertisement, invitation or document relating to shares of our Class A common stock may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to shares of our Class A common stock which are or are intended to be disposed of only to persons outside Hong Kong or only to “professional investors” in Hong Kong as defined in the Securities and Futures Ordinance and any rules made thereunder.

Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of shares of our Class A common stock may not be circulated or distributed, nor may the shares of our Class A common stock be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor (as defined under Section 4A of the Securities and Futures Act, Chapter 289 of Singapore (the “SFA”)) under Section 274 of the SFA, (ii) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA, in each case subject to conditions set forth in the SFA.

Where shares of our Class A common stock are subscribed or purchased under Section 275 of the SFA by a relevant person which is a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor, the securities (as defined in Section 239(1) of the SFA) of that corporation shall not be transferable for six months after that corporation has acquired shares of our Class A common stock under Section 275 of the SFA except: (1) to an institutional investor under Section 274 of the SFA or to a relevant person (as defined in Section 275(2) of the SFA), (2) where such transfer arises from an offer in that corporation’s securities pursuant to Section 275(1A) of the SFA, (3) where no consideration is or will be given for the transfer, (4) where the transfer is by operation of law, (5) as specified in Section 276(7) of the SFA, or (6) as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore (“Regulation 32”).

Where shares of our Class A common stock are subscribed or purchased under Section 275 of the SFA by a relevant person which is a trust (where the trustee is not an accredited investor (as defined in Section 4A of the SFA)) whose sole purpose is to hold investments and each beneficiary of the trust is an accredited investor, the beneficiaries’ rights and interest (howsoever described) in that trust shall not be transferable for 6 months after that trust has acquired shares of our Class A common stock under Section 275 of the SFA except: (1) to an institutional investor under Section 274 of the SFA or to a relevant person (as defined in Section 275(2) of the SFA), (2) where such transfer arises from an offer that is made on terms that such rights or interest are acquired at a consideration of not less than S\$200,000 (or its equivalent in a foreign currency) for each transaction (whether such amount is to be paid for in cash or by exchange of securities or other assets), (3) where no consideration is or will be given for the transfer, (4) where the transfer is by operation of law, (5) as specified in Section 276(7) of the SFA, or (6) as specified in Regulation 32.

[Table of Contents](#)

Solely for purposes of the notification requirements under Section 309B(1)(c) of the Securities and Futures Act, Chapter 289 of Singapore, the shares of our Class A common stock are “prescribed capital markets products” (as defined in the Securities and Futures (Capital Markets Products) Regulations 2018) and Excluded Investment Products (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).

LEGAL MATTERS

The validity of the shares of Class A common stock being offered by this prospectus will be passed upon for us by Cooley LLP, Chicago, Illinois. Certain legal matters in connection with this offering will be passed upon for the underwriters by Davis Polk & Wardwell LLP, Menlo Park, California.

EXPERTS

The financial statements as of December 31, 2021 and 2020, and for each of the two years in the period ended December 31, 2021, included in this prospectus, have been so included in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the shares of Class A common stock offered by this prospectus. This prospectus, which constitutes a part of the registration statement, does not contain all the information set forth in the registration statement, some of which is contained in exhibits to the registration statement as permitted by the rules and regulations of the SEC. For further information with respect to us and our Class A common stock, we refer you to the registration statement, including the exhibits filed as a part of the registration statement. Statements contained in this prospectus concerning the contents of any contract or any other document are not necessarily complete. If a contract or document has been filed as an exhibit to the registration statement, please see the copy of the contract or document that has been filed. Each statement in this prospectus relating to a contract or document filed as an exhibit is qualified in all respects by the filed exhibit. The SEC maintains an internet website that contains reports and other information about issuers, like us, that file electronically with the SEC. The address of that website is www.sec.gov.

On the closing of this offering, we will be subject to the information reporting requirements of the Exchange Act, and we will file reports, proxy statements, and other information with the SEC. These reports, proxy statements, and other information will be available at www.sec.gov.

We also maintain a website at www.tempus.com. Information contained in, or accessible through, our website is not a part of this prospectus, and the inclusion of our website address in this prospectus is only as an inactive textual reference.

[Table of Contents](#)

Tempus Labs, Inc.
Financial Statements
Table of Contents

Report of Independent Registered Public Accounting Firm (PCAOB ID: 238)	F-2
Consolidated Financial Statements	
Consolidated Balance Sheets	F-3
Consolidated Statements of Operations and Comprehensive Loss	F-5
Consolidated Statements of Cash Flows	F-6
Consolidated Statements of Redeemable Convertible Preferred Stock, Common Stock and Stockholders' Deficit	F-8
Notes to Consolidated Financial Statements	F-9–F-39

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of Tempus Labs, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Tempus Labs, Inc. and its subsidiaries (the “Company”) as of December 31, 2021 and 2020, and the related consolidated statements of operations and comprehensive loss, of redeemable convertible preferred stock, common stock and stockholders’ deficit, and of cash flows for the years then ended, including the related notes (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2021 and 2020, and the results of its operations and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits of these consolidated financial statements in accordance with the standards of the PCAOB and in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP
Chicago, Illinois

April 26, 2022

We have served as the Company’s auditor since 2019.

Tempus Labs, Inc.
CONSOLIDATED BALANCE SHEETS
(in thousands, except share and per share amounts)

	<u>December 31,</u> <u>2020</u>	<u>December 31,</u> <u>2021</u>
Assets		
Current Assets		
Cash and cash equivalents	\$ 513,436	\$ 277,686
Accounts receivable, net of allowances of \$478 and \$284 at December 31, 2020 and 2021, respectively	87,259	82,244
Inventory	37,557	22,908
Prepaid expenses and other current assets	11,478	17,291
Deferred offering costs	—	3,859
Total current assets	<u>\$ 649,730</u>	<u>\$ 403,988</u>
Property and equipment, net	38,435	35,395
Goodwill	15,992	15,985
Intangible assets, net	44,459	37,286
Investments and other assets	2,522	6,853
Warrant asset, less current portion	—	31,067
Restricted cash	780	780
Total Assets	<u><u>\$ 751,918</u></u>	<u><u>\$ 531,354</u></u>
Liabilities, Convertible redeemable preferred stock, and Stockholders' deficit		
Current Liabilities		
Accounts payable	53,571	33,753
Accrued expenses	20,178	40,694
Deferred revenue	6,965	16,454
Other current liabilities	4,000	—
Contingent consideration, current	—	8,005
Current maturities of capital lease obligations	723	419
Current maturities of accrued data licensing fees	9,000	8,500
Current portion of deferred rent	1,320	1,356
Accrued dividends	5,625	5,625
Total current liabilities	<u>\$ 101,382</u>	<u>\$ 114,806</u>
Capital lease obligations, less current maturities	724	291
Contingent consideration, non-current	10,271	—
Minimum accrued data licensing fees, less current maturities	19,554	12,905
Convertible promissory note	250,000	238,236
Deferred rent, less current portion	13,594	13,426
Warrant liability	—	37,800
Interest payable and other long-term liabilities	10,221	23,090
Total Liabilities	<u><u>\$ 405,746</u></u>	<u><u>\$ 440,554</u></u>
Commitments and contingencies (Note 6)		
Convertible redeemable preferred stock, \$0.001 par value, 64,760,746 and 64,760,746 shares authorized at December 31, 2020 and 2021, respectively; 60,921,767 and 61,078,813 shares issued and outstanding at December 31, 2020 and 2021, respectively; aggregate liquidation preference of \$871,530 and \$913,138 at December 31, 2020 and 2021, respectively	859,156	898,291

[Table of Contents](#)

	<u>December 31,</u> <u>2020</u>	<u>December 31,</u> <u>2021</u>
Stockholders' deficit		
Voting Common Stock, \$0.001 par value, 187,075,184 and 187,075,184 shares authorized at December 31, 2020 and 2021, respectively, 58,367,961 and 58,367,961 shares issued and outstanding at December 31, 2020 and 2021	\$ 6	\$ 6
Non-voting Common Stock, \$0.001 par value, 63,946,627 and 63,946,627 shares authorized at December 31, 2020 and 2021, respectively; 4,595,000 and 4,612,450 shares issued and outstanding at December 31, 2020 and 2021, respectively	0	0
Additional Paid-In Capital	—	—
Accumulated Other Comprehensive Loss	(1)	(11)
Accumulated deficit	(512,989)	(807,486)
Total Stockholders' deficit	<u>\$ (512,984)</u>	<u>\$ (807,491)</u>
Total Liabilities, Convertible redeemable preferred stock, and Stockholders' deficit	<u>\$ 751,918</u>	<u>\$ 531,354</u>

The accompanying notes are an integral part of these consolidated financial statements.

Tempus Labs, Inc.
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(in thousands, except share and per share amounts)

	<u>December 31,</u> <u>2020</u>	<u>December 31,</u> <u>2021</u>
Net revenue		
Genomics	\$ 151,911	\$195,012
Data products	<u>36,093</u>	<u>62,841</u>
Total net revenue	\$ 188,004	\$ 257,853
Cost and operating expenses		
Cost of revenues, genomics	152,198	162,276
Cost of revenues, data products	7,092	11,933
Technology research and development	45,861	67,190
Research and development	45,415	61,161
Selling, general and administrative	130,892	199,004
Total cost and operating expenses	<u>381,458</u>	<u>501,564</u>
Loss from operations	\$ (193,454)	\$ (243,711)
Interest income	1,495	623
Interest expense	(18,929)	(15,184)
Other expense, net	<u>(466)</u>	<u>(316)</u>
Loss before provision for income taxes	\$ (211,354)	(258,588)
Provision for (benefit from) income taxes	—	—
Earnings (losses) from equity method investments	1,500	(604)
Net Loss	<u>\$ (209,854)</u>	<u>\$ (259,192)</u>
Accretion of convertible preferred stock to redemption value	(7,381)	(106)
Dividends on Series A, B, B-1, B-2, C, D, E, F and G preferred shares	(34,420)	(35,758)
Cumulative Undeclared Dividends on Series C preferred shares	<u>(2,250)</u>	<u>(2,680)</u>
Net loss available to common shareholders, basic and diluted	(253,905)	(297,736)
Net loss per share attributable to common shareholders, basic and diluted	\$ (4.05)	\$ (4.73)
Weighted-average shares outstanding used to compute net loss per share, basic and diluted	<u>62,706</u>	<u>62,975</u>
Comprehensive Loss		
Net loss	\$ (209,854)	(259,192)
Foreign currency translation adjustment	(2)	(10)
Comprehensive loss	<u>\$ (209,856)</u>	<u>(259,202)</u>

The accompanying notes are an integral part of these consolidated financial statements.

Tempus Labs, Inc.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands, except share and per share amounts)

	December 31, 2020	December 31, 2021
Operating activities		
Net loss	\$ (209,854)	\$ (259,192)
Adjustments to reconcile net loss to net cash used in operating activities		
Change in fair value of contingent consideration	\$ 6,891	\$ 5,234
Amortization of warrant asset	—	1,517
Depreciation and amortization	23,052	23,881
Provision for bad debt expense	478	268
Stock compensation expense	399	559
(Income) Loss from equity-method Investments	(1,500)	604
Loss on extinguishment of convertible promissory notes	8,889	—
Minimum accretion expense	535	594
Change in assets and liabilities		
Accounts receivable	(55,844)	4,747
Inventory	(29,278)	14,649
Prepaid expenses and other current assets	(3,012)	(597)
Investments and other assets	(14,077)	(1,927)
Accounts payable	38,132	(30,474)
Deferred revenue	1,395	9,489
Accrued data licensing fees	4,103	(7,801)
Accrued expenses & other	23,130	26,465
Net cash used in operating activities	\$ (206,562)	\$ (211,984)
Investing activities		
Purchases of property and equipment	\$ (13,416)	\$ (11,767)
Investment in unconsolidated subsidiary	—	(5,957)
Cash paid for purchase of AKESOgen (Note 3)	—	(4,000)
Net cash used in investing activities	\$ (13,416)	\$ (21,724)
Financing activities		
Issuance of Series G Preferred Stock, net of offering costs	94,108	—
Issuance of Series G-2 Preferred Stock, net of offering costs	95,823	8,894
Redemption of Common Shares	(7,311)	—
Dividends paid	(5,625)	(5,625)
Issuance of convertible promissory note	330,000	—
Payments on capital lease obligation	(888)	(796)
Payment of contingent consideration	—	(3,380)
Payment of deferred offering costs	—	(1,132)
Net cash provided by (used in) financing activities	\$ 506,107	\$ (2,039)
Effect of foreign exchange rates on cash	\$ (13)	\$ (3)
Net increase (decrease) in Cash, Cash Equivalents and Restricted Cash	\$ 286,116	\$ (235,750)
Cash, cash equivalents and restricted cash, beginning of period	\$ 228,100	\$ 514,216
Cash, cash equivalents and restricted cash, end of period	<u>\$ 514,216</u>	<u>\$ 278,466</u>

[Table of Contents](#)

	December 31, 2020	December 31, 2021
Cash, Cash Equivalents and Restricted Cash are Comprised of:		
Cash and cash equivalents	\$ 513,436	\$ 277,686
Restricted cash and cash equivalents	780	780
Total cash, cash equivalents and restricted cash	<u>\$ 514,216</u>	<u>\$ 278,466</u>
Supplemental disclosure of cash flow information		
Cash paid during the year for interest	<u>\$ 2,053</u>	<u>\$ 80</u>
Cash paid for income taxes	<u>\$ 8</u>	<u>\$ 3</u>
Supplemental disclosure of noncash investing and financing activities		
Accretion of convertible preferred stock to redemption value	<u>\$ 7,381</u>	<u>\$ 106</u>
Dividends payable	<u>\$ 5,625</u>	<u>\$ 5,625</u>
Purchases of property and equipment, accrued but not paid	<u>\$ 2,032</u>	<u>\$ 984</u>
Deferred offering costs, accrued but not yet paid	<u>\$ —</u>	<u>\$ 2,727</u>
Series G-2 issuance cost included in accounts payable	<u>\$ 4,000</u>	<u>\$ —</u>
Extinguishment of debt through conversion of convertible promissory note to Series G-2 preferred stock	<u>\$ 80,000</u>	<u>\$ —</u>
Redemption of convertible promissory note	<u>\$ —</u>	<u>\$ 11,764</u>
Issuance of warrant	<u>\$ —</u>	<u>\$ 37,800</u>

The accompanying notes are an integral part of these consolidated financial statements.

Tempus Labs, Inc.
CONSOLIDATED STATEMENTS OF REDEEMABLE
CONVERTIBLE PREFERRED STOCK, COMMON STOCK AND
STOCKHOLDERS' DEFICIT
(in thousands, except share and per share amounts)

	Redeemable Convertible Preferred Stock		Voting Common Stock		Non-voting Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive (Loss) Income	Total Stockholders' Deficit
	Units	Amount	Units	Amount	Units	Amount				
Balance at January 1, 2020	55,088,384	\$ 544,161	58,558,600	\$ 6	4,595,000	\$ 0	\$ 3,431	\$ (257,853)	\$ 1	\$ (254,415)
Issuance of Series G Preferred Stock, net of stock issuance costs of \$3,203	2,537,290	94,108	—	—	—	—	—	—	—	—
Issuance of Series G-2 Preferred Stock, net of stock issuance costs of \$4,177	3,296,093	184,711	—	—	—	—	—	—	—	—
Stock compensation related to RSU	—	—	—	—	—	—	399	—	—	399
Accretion of convertible preferred stock to redemption	—	7,381	—	—	—	—	(3,830)	(3,551)	—	(7,381)
Redemption of Common Shares	—	—	(190,639)	(0)	—	—	—	(7,311)	—	(7,311)
Foreign currency translation adjustment	—	—	—	—	—	—	—	—	(2)	(2)
Dividends	—	28,795	—	—	—	—	—	(34,420)	—	(34,420)
Net loss	—	—	—	—	—	—	—	(209,854)	—	(209,854)
Balance at December 31, 2020	<u>60,921,767</u>	<u>\$ 859,156</u>	<u>58,367,961</u>	<u>\$ 6</u>	<u>4,595,000</u>	<u>\$ 0</u>	<u>\$ 0</u>	<u>\$ (512,989)</u>	<u>\$ (1)</u>	<u>\$ (512,984)</u>
Issuance of Series G-2 Preferred Stock, net of stock costs of \$106	157,046	8,894	—	—	—	—	—	—	—	—
Stock compensation related to RSU	—	—	—	—	—	—	559	—	—	559
Accretion of convertible preferred stock to redemption	—	106	—	—	—	—	(106)	—	—	(106)
Settlement of Common Shares	—	—	—	—	17,450	0	—	—	—	0
Foreign currency translation adjustment	—	—	—	—	—	—	—	—	(10)	(10)
Dividends	—	30,135	—	—	—	—	(453)	(35,305)	—	(35,758)
Net loss	—	—	—	—	—	—	—	(259,192)	—	(259,192)
Balance at December 31, 2021	<u>61,078,813</u>	<u>\$ 898,291</u>	<u>58,367,961</u>	<u>\$ 6</u>	<u>4,612,450</u>	<u>\$ 0</u>	<u>\$ —</u>	<u>\$ (807,486)</u>	<u>\$ (11)</u>	<u>\$ (807,491)</u>

The accompanying notes are an integral part of these consolidated financial statements.

Tempus Labs, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. DESCRIPTION OF BUSINESS

Company Information

Tempus Labs, Inc., together with the subsidiaries through which it conducts business (the “Company”), is a healthcare technology company focused on bringing artificial intelligence and machine learning to healthcare in order to improve the care of patients across multiple diseases. The Company combines the results of laboratory tests with other multi-modal datasets to improve patient care by supporting all parties in the healthcare ecosystem, including: physicians, researchers, payors, and pharmaceutical companies. The Company primarily derives revenue from selling comprehensive genetic testing to physicians and large academic research institutions, licensing data to third parties, matching patients to clinical trials, and related services.

The Company, based in Chicago, Illinois, was founded by Eric P. Lefkofsky, the Company’s CEO and Executive Chairman, and evolved from a business Mr. Lefkofsky founded called Bioin. Bioin originally was established as a limited liability company. Effective September 21, 2015, Bioin converted its legal form to a corporation organized and existing under the General Corporation Law of the State of Delaware. Bioin subsequently changed its legal name to Tempus Health, Inc. in September 2015 and, ultimately, to Tempus Labs, Inc. in October 2016.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Principles of Consolidation and Basis of Presentation

The consolidated financial statements include the accounts of Tempus Labs, Inc. and its wholly owned subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation. The consolidated financial statements and accompanying notes were prepared in accordance with accounting principles generally accepted in the United States of America (“GAAP”) and include the assets, liabilities, revenue and expenses of all wholly owned subsidiaries. Investments in unconsolidated entities in which the Company does not have a controlling financial interest but has the ability to exercise significant influence, are accounted for under the equity method of accounting. Investments in unconsolidated entities in which the Company is not able to exercise significant influence are accounted for under the cost method of accounting.

The Company believes that its existing cash and cash equivalents at December 31, 2021, inclusive of the Series G-3 Financing undertaken in April 2022, will be sufficient to allow the Company to fund its current operating plan through at least a period of one year after the date the consolidated financial statements are issued. As the Company continues to incur losses, its transition to profitability is dependent upon a level of revenues adequate to support the Company’s cost structure. Future capital requirements will depend on many factors, including the timing and extent of spending on research and development activities and growth related expenditures.

Reclassification

Certain prior year amounts have been reclassified for consistency with the current year presentation. A reclassification has been made within the operating activities section of the consolidated statements of cash flows for the year ended December 31, 2020 to present the change in fair value of contingent consideration as a separate line within operating activities. This amount was previously presented within the change in accrued expenses & other. This reclassification had no effect on the reported financial position, results of operations or cash flows of the Company.

Tempus Labs, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Emerging Growth Company

The Company is an “emerging growth company” as defined in Section 2(a) of the Securities Act of 1933, as amended, (the “Securities Act”), as modified by the Jumpstart our Business Startups Act of 2012, (the “JOBS Act”), and it may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in its periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved.

Further, Section 102(b)(1) of the JOBS Act exempts emerging growth companies from being required to comply with new or revised financial accounting standards until private companies (that is, those that have not had a Securities Act registration statement declared effective or do not have a class of securities registered under the Exchange Act) are required to comply with the new or revised financial accounting standards. The JOBS Act provides that a company can elect to opt out of the extended transition period and comply with the requirements that apply to non-emerging growth companies but any such election to opt out is irrevocable. The Company has elected not to opt out of such extended transition period which means that when a standard is issued or revised and it has different application dates for public or private companies, the Company, as an emerging growth company, can adopt the new or revised standard at the time private companies adopt the new or revised standard. This may make comparison of the Company’s consolidated financial statements with another public company which is neither an emerging growth company nor an emerging growth company which has opted out of using the extended transition period difficult or impossible because of the potential differences in accounting standards used.

Use of Estimates

The preparation of the consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts and classifications of assets and liabilities, revenue and expenses, and the related disclosures of contingent assets and liabilities in the consolidated financial statements and accompanying notes. The most significant estimates are related to revenue, accounts receivable, stock-based compensation, contingent liabilities and the useful lives of property, equipment and intangible assets. Actual results could differ from those estimates.

COVID-19

The COVID-19 global pandemic continues to impact daily life in the United States and abroad. While the negative impacts of the business in the years ended December 31, 2020 and 2021 were minimal, if there are additional disruptions for an extended period, it could have a material impact on the Company’s results. In addition, our agreement with CVS, which resulted in revenue from various customers, accounted for 24.0% and 27.5% of our revenue for the year ended December 31, 2020 and the year ended December 31, 2021, respectively, and expired in July 2021 and was renegotiated in November 2021. The term of the new agreement runs through October 1, 2022. As a result, we will continue to process samples under the renegotiated agreement. Revenue from COVID-19 testing accounted for \$89.5 million, or 47.6%, of total revenue in the year ended December 31, 2020, and \$94.7 million, or 36.7%, of total revenue in the year ended December 31, 2021.

Cash, Cash Equivalents and Restricted Cash

The Company considers all highly-liquid investments with an original maturity of three months or less from the date of purchase to be cash equivalents. Restricted cash primarily represents amounts that the Company is

Tempus Labs, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

unable to access for operational purposes pursuant to a letter of credit with a financial institution in connection with an equipment lease. The Company had \$0.8 million of restricted cash as of December 31, 2020 and 2021, respectively.

Accounts Receivable and Allowances

Accounts receivable primarily represents the net cash due from the Company's customers, including payors, pharmaceutical companies, and research institutions. Payments of accounts receivable are allocated to the specific invoices identified on the remittance advice. Accounts receivables are reported at their gross outstanding balance reduced by an allowance for doubtful accounts. The allowance for doubtful accounts is based on historical loss experience and any specific risks identified in collection matters. An allowance for doubtful accounts was not material as of December 31, 2020 and 2021.

Concentration of Credit Risk

Financial instruments that potentially expose the Company to concentrations of credit risk are primarily cash, restricted cash and accounts receivable. The Company maintains cash balances that may exceed the insured limits by the Federal Deposit Insurance Corporation. The Company has not experienced any losses on its deposits of cash.

The Company has credit risk regarding trade accounts receivable as the Company generally does not require collateral, and a limited number of customers have accounted for a large part of the Company's revenue and accounts receivable to date. Allowances are maintained for potential credit losses.

Revenue from one customer accounted for approximately 16.6% of the Company's total revenues for the year ended December 31, 2020. Revenues from this customer did not represent a significant portion of total revenues for the year ended December 31, 2021. The amount due from this customer is approximately \$14.8 million or 17.0% of accounts receivable as of December 31, 2020. The amount due from this customer did not represent a significant portion of accounts receivable as of December 31, 2021. On April 2, 2022, this customer terminated its contract for COVID-19 testing services.

Revenue from a different customer accounted for approximately 7.2% of the Company's revenues for the year ended December 31, 2021. Revenues from this customer did not represent a significant portion of total revenues for the year ended December 31, 2020. The amount due from this customer is approximately \$9.7 million or 11.8%, respectively, of accounts receivable as of December 31, 2021. The amount due from this customer did not represent a significant portion of accounts receivable as of December 31, 2020.

The Company also has concentration risk around revenue generated from COVID-19 testing. Revenue from COVID-19 testing was \$89.5 million and \$94.7 million or 47.6% and 36.7% of the Company's total revenues for the year ended December 31, 2020 and 2021, respectively.

Inventories

Inventories, consisting of supplies and consumables used in the lab, are accounted for using the first-in, first-out method of accounting and are valued at the lower of cost or net realizable value. The Company periodically reviews inventory for excess or obsolescence and writes-down obsolete or otherwise un-usable inventory to its estimated net realizable value. Amounts written-down due to obsolete inventory are charged to cost of revenues. Inventory write-downs for the year ended December 31, 2020 were not material. For the year

Tempus Labs, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

ended December 31, 2021, the Company recorded \$5.1 million of inventory write-downs to cost of revenues, genomics, primarily related to the expiration of COVID-19 testing kits and oncology lab supplies. As of December 31, 2020, the Company had approximately \$37.0 million of inventory and \$0.6 million of inventory in process in the labs. As of December 31, 2021, the Company had approximately \$22.2 million of inventory and \$0.7 million of inventory in process in the labs.

The Company relies on a sole supplier for certain laboratory materials and equipment. Purchases from this supplier accounted for approximately 23% and 25% of total vendor payments for the year ended December 31, 2020 and 2021, respectively. Amounts due to this vendor approximated \$5.3 million and \$0.9 million at December 31, 2020 and 2021 respectively.

Prepaid expenses and Other Current Assets

Prepaid assets are recorded when paid and consistent primarily of prepayments for insurance, medical, software subscriptions, and cloud storage service. Prepaid expenses are amortized into expense over the related service period. Other current assets included in this line are primarily related to the short-term portion of the Company's warrant asset and other receivables. The Company had \$11.5 million and \$17.3 million at December 31, 2020 and 2021, respectively.

Long-Lived Assets

Property and Equipment and Intangibles

Property and equipment are stated at cost and assets under capital leases are stated at the lesser of the present value of minimum lease payments or their fair market value. Depreciation is recognized using the straight-line method over the estimated useful lives of the related assets. Generally, the useful lives are three years for equipment and seven years for furniture and fixtures. Leasehold improvements are amortized on a straight-line basis over the lesser of the term of the lease or the estimated useful life of the asset. Intangibles, other than indefinite-lived intangibles, are amortized using the straight-line method, which approximates the pattern of usage, over their economic life, generally five to seven years. Assets to be disposed of, if any, are separately presented in the consolidated balance sheet and reported at the lower of the carrying amount or fair value, less costs to sell, and are no longer depreciated. See Note 4, "Balance Sheet Components" for additional information about these assets.

Impairment of Long-Lived Assets

The Company evaluates long-lived assets, including property and equipment, and intangible assets for impairment whenever events or changes in business circumstances indicate that the carrying amount of the asset may not be fully recoverable. Recoverability is measured by a comparison of the carrying amount to the net undiscounted cash flows expected to be generated by the asset group. If such assets are impaired, the impairment to be recognized is measured by the amount by which the carrying amount of a long-lived asset exceeds its fair value. Any loss would be recognized in loss from operations in the period in which the determination is made. There were no impairment charges recognized related to long-lived assets during the years ended December 31, 2020 and 2021.

Goodwill

Goodwill consists of the excess purchase price over the fair value of net assets acquired in business combinations. The Company conducts a test for the impairment of goodwill on at least an annual basis as of

Tempus Labs, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

October 1st or sooner if indicators of impairment arise. The Company first assesses qualitative factors to determine whether it is more likely than not that goodwill is impaired. As part of the qualitative assessment, the Company evaluates factors including macroeconomic conditions, industry and market considerations, cost factors and overall financial performance of its single reporting unit.

If the Company concludes that it is more-likely-than-not that its single reporting unit is impaired or if the Company elects not to perform the optional qualitative assessment, a quantitative assessment is performed. For the quantitative assessment, the fair value of the Company's reporting unit is compared with the carrying amount of net assets, including goodwill, related to the reporting unit. The Company recognizes an impairment charge for the amount, if any, by which the carrying amount of a reporting unit exceeds the fair value of the reporting unit. The Company recorded no impairment loss during the years ended December 31, 2020 and 2021.

Convertible Note

The Company's outstanding promissory note (see Note 10) is accounted for in accordance with ASC 470-20. The Company determined the embedded conversion options, redemption features, and acceleration of repayment upon default are not required to be separately accounted for as derivatives under ASC 815 because they were either determined to be clearly and closely related to the host instrument or the Company has concluded that no value would be associated with the related feature based on the circumstances associated with the note's issuance.

Revenue Recognition

The Company derives revenue from selling lab services ("Genomics") to physicians, academic research institutions, and other parties. The Company also derives revenue from the commercialization of data generated in the lab ("Data and other") through the licensing of de-identified datasets to third parties and from matching patients to clinical trials enrolled in its clinical trial network, and related services. The majority of the Company's revenue is generated in North America.

The Company accounts for revenue in accordance with ASC Topic 606, *Revenue From Contracts With Customers*. The Company commences revenue recognition when control of these products is transferred to customers in an amount that reflects the consideration the Company expects to be entitled to in exchange for such products. This principle is achieved by applying the five-step approach:

(i) we account for a contract when it has approval and commitment from both parties, (ii) the rights of the parties are identified, (iii) payment terms are identified, (iv) the contract has commercial substance and (v) collectability of consideration is probable. Revenues and any contract assets are not recognized until such time that the required conditions are met.

Disaggregation of Revenue

The Company provides disaggregation of revenue based on Genomics and Data and other on the consolidated statements of operations and comprehensive loss, as it believes these best depict how the nature, amount, timing and uncertainty of revenue and cash flows are affected by economic factors.

Genomics

The Company generally recognizes revenue for its Genomics product offering when it has met its performance obligation relating to an order. The Company has determined its sole performance obligation to be

Tempus Labs, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

the delivery of the testing results to the ordering party. The Company receives payments from Medicare, Medicaid, and commercial insurance for clinical orders and directly from research institutions, pharmaceutical companies or other third parties for direct bill orders. The Company recognized Genomics revenue of \$151.9 million and \$195.0 million for the years ended December 31, 2020 and 2021, respectively.

For clinical orders from Medicare, Medicaid, and commercial insurance, the Company determines transaction price by reducing the standard charge by the estimated effects of any variable consideration, such as contractual allowance and implicit price concessions. The Company estimates the contractual allowances and implicit price concessions based on historical collections in relation to established rates, as well as known current or anticipated reimbursement trends not reflected in the historical data. The Company monitors the estimated amount to be collected at each reporting period based on actual cash collections in order to assess whether a revision to the estimate is required. Payment is typically due after the claim has been processed by the payor, generally 30-120 days from date of service. While management believes that the estimates are accurate, actual results could differ and the potential impact on the financial statements could be significant. The Company recognized revenue for clinical orders of \$104.1 million and \$151.1 million for the years ended December 31, 2020 and 2021, respectively.

For direct bill orders from research institutions, pharmaceutical companies, or other third parties, the Company determines the transaction prices based on established contractual rates with the customer, net of any applicable discounts. Payment is typically due between 30 and 60 days following the date of invoice. The Company recognized Genomics revenue for direct bill orders of \$48.0 million and \$43.9 million for the years ended December 31, 2020 and 2021, respectively.

Data and other

Data and other revenue primarily represents data licensing and clinical trial matching services that the Company provides to pharmaceutical and biotechnology companies. The Company's arrangements with these customers often have terms that span multiple years. However, these contracts generally also include customer opt-in or early termination clauses after twelve months without contractual penalty. The customer's option to renew is generally not viewed as a material right, and as a result, the Company's contract period for these agreements is generally considered less than one year. The Company determines the transaction price based on established contractual rates with the customer, net of any applicable discounts. The Company recognizes revenue for its Data and other product offering when it has met its performance obligation under the terms of the agreement with the customer. A description of the Company's two product offerings are as follows:

Insights

The Company's Insights product consists primarily of licensing de-identified records. Each Insights contract is unique and may include multiple promises, including the delivery of licensed de-identified records, including refreshes, analytical services or access to the Company's enhanced Lens application. The Company evaluates each contract to determine which performance obligations are capable of being distinct and separately identifiable from other promises in the contract and, therefore, represent distinct performance obligations. The transaction price is allocated to the distinct performance obligations and revenue is recognized once the performance obligation has been fulfilled.

The Company has determined that the delivery of de-identified records and, when applicable, analytical services and access to our enhanced Lens application are separate and distinct performance obligations. For data deliveries, revenue is recognized upon delivery of the data to the customer, and the Company accounts for

Tempus Labs, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

individual licensed data records as a right to use license. Analytical services typically involve data analysis and research performed on behalf of the customer by the Company. The resulting delivery of data, or a report addressing a series of questions and analytical results, is considered a separate performance obligation. For analytical services or access to Lens, revenue is recognized as the services are provided or over the period to which access is granted. For the periods presented, revenue from analytical services and access to Lens are not material.

Therapies

The Company's Therapies product consists primarily of matching patients to clinical trial sponsors of a potential match. To the extent the contract requires, the Company may also assist in opening the clinical trial site and enrolling the patient in the clinical trial. The Company has determined that, depending on the type of agreement, the performance obligation of these contracts is the delivery of a notification or the enrollment of a patient in a clinical trial. As such, revenue is recognized upon one of the following: delivery of a notification to the physician alerting them to a clinical trial match, or once a patient is enrolled in a trial. Concurrently, the customer, which is the clinical trial sponsor, also receives notification from the Company to establish the performance obligations delivered or fulfilled for the billing period.

For Insights and Therapies arrangements, pricing is fixed and the Company may be compensated through a combination of an upfront payment and performance-based, non-refundable payments due upon completion of the stated performance obligation(s). Payment is generally due 60 to 90 days after the date of service. The Company has no significant obligations for refunds, warranties, or similar obligations for Data and other product offerings. The Company has elected the practical expedient, which allows the Company to not disclose remaining performance obligations for contracts with original terms of twelve months or less. Cancelable contracted revenue is not considered a remaining performance obligation. The Company recognized Data and other revenue from pharmaceutical companies, non-for-profits, and researchers of \$36.1 million and \$62.8 million for the years ended December 31, 2020 and 2021, respectively.

Multi-year contract performance obligations

In the fourth quarter of 2021, the Company entered into certain new multi-year contracts that did not contain early termination or customer opt-in clauses. These contracts contained defined, noncancelable performance obligations that will be fulfilled in future years. The Company's remaining performance obligations related to these contracts was \$97.7 million as of December 31, 2021, of which the Company expects to recognize approximately 34% of its remaining performance obligations as revenue each year for the next two years, and the remaining 31% of its remaining performance obligations as revenue in year three.

Contract Assets

Timing of revenue recognition may differ from the timing of invoicing or consideration payable to customers, and as a result, the Company has recognized two forms of contract assets as of December 31, 2021. The Company recognizes invoicing related contract assets when we have an unconditional right to payment, and when revenues earned on a contract exceeds the billings. These contract assets are presented under accounts receivable, net. Accounts receivable as of December 31, 2020 and December 31, 2021 included contract assets of \$39.6 million and \$18.5 million respectively.

During the fourth quarter of 2021, and in conjunction with the signing of a November 2021 Master Services Agreement ("the MSA") with customer AstraZeneca AB ("AstraZeneca"), the Company recognized a contract

Tempus Labs, Inc.**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

asset for consideration payable concurrent with the issuance of the common stock warrant based on applicable authoritative guidance in Financial Accounting Standards Board ("FASB") ASC 606 *Revenue from Contracts with Customers*. The contract asset was initially measured equal to the initial fair value of the warrant liability based on the authoritative guidance under FASB ASC 718 *Compensation - Stock Compensation*. As revenue is recognized over the period of the contractual commitment of the MSA, the associated contract asset amortization is recorded as reduction of revenue. At each reporting period, the short-term portion of the warrant asset is adjusted based on the financial commitment and reclassified to Prepaids expenses and other current assets.

The following summarized the warrant contract asset presentation as of December 31, 2021 (in thousands):

	December 31, 2021
Prepaid expenses and other current assets	5,216
Warrant asset, less current portion	31,067
Total warrant contract asset	\$ 36,283

Deferred Revenue

Deferred revenue consists of billings or cash received for services in advance of revenue recognition and is recognized as revenue when all the Company's revenue recognition criteria are met. The deferred revenue balance is influenced primarily by upfront contractual payments from our Data product offering and timing of delivery of our de-identified licensed data and clinical test results. The portion of deferred revenue that is anticipated to be recognized as revenue during the succeeding twelve-month period is recorded as deferred revenue, current and any remaining portion is recorded as deferred revenue, non-current. Deferred revenue balances comprised current deferred revenue only as \$7.0 million and \$16.5 million as of December 31, 2020 and 2021, respectively. During the year ended December 31, 2021, deferred revenue increased \$9.5 million as a result of \$27.7 million of additional invoicing which was offset by \$18.1 million of revenue recognized during the same period. The amount of revenue recognized during the year ended December 31, 2021 that was included in deferred revenue at the beginning of the period was \$7.0 million. As of December 31, 2021 all deferred revenue recorded is expected to be recognized in the next twelve months.

Cost of Revenues, Genomics

Cost of revenues for Genomics consists of personnel lab expenses, including salaries, bonuses, employee benefits, amortization of intangible assets, cost of laboratory supplies and consumables, third-party administration fees associated with COVID-19 testing, depreciation of laboratory equipment, shipping costs and certain allocated overhead expenses. Costs associated with performing the Company's tests are recorded as the tests are processed at the time of report delivery.

Cost of Revenues, Data and other

Cost of revenues for Data and other includes data acquisition and royalty fees, and personnel costs related to our delivery of our data services and platform, and certain allocated overhead expenses. Costs associated with performing data services are recorded as incurred.

Research and Development

Research and development expenses include costs incurred to develop new assays and products, and include salaries and benefits of the Company's scientific and laboratory research and development teams, amortization of

Tempus Labs, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

intangible assets, inventory costs, overhead costs, validation costs, contract services and other related costs. Research and development costs are expensed as incurred.

Technology research and development

Technology research and development expense primarily includes personnel costs incurred related to the research and development of the Company's technology platform and applications and the research and development of new products which the Company hopes to bring to the market. Technology research and development costs are expensed as incurred.

401(k) Plan

The Company has a 401(k) tax deferred savings plan under which eligible employees may elect to have a portion of their salary deferred and contributed to the plan. Employer matching contributions are determined by the Company and are discretionary. During the years ended December 31, 2020 and 2021, the Company did not match any employee contributions.

Income Taxes

Income taxes are provided for the tax effects of transactions reported in the consolidated financial statements and consist of taxes currently due plus deferred taxes. Deferred taxes are recognized based on differences between the basis of assets and liabilities for financial reporting and income tax purposes and are measured using enacted rates. The differences relate primarily to timing of deductibility of certain expenses and the estimated future effects of net operating loss carryforwards. Deferred tax assets and liabilities represent the future tax consequences of those differences, which will either be taxable or deductible when the assets and liabilities are recovered or settled. Deferred tax assets and liabilities are adjusted for the effects of changes in tax laws and rates on the date of enactment.

Companies are required to assess whether a valuation allowance should be recorded against their deferred tax assets ("DTAs") based on the consideration of all available evidence, using a "more likely than not" realization standard. The four sources of taxable income that must be considered in determining whether DTAs will be realized are, (1) future reversals of existing taxable temporary differences (i.e., offset of gross deferred tax assets against gross deferred tax liabilities); (2) taxable income in prior carryback years, if carryback is permitted under the tax law; (3) tax planning strategies and (4) future taxable income exclusive of reversing temporary differences and carry forwards.

In assessing whether a valuation allowance is required, significant weight is given to evidence that can be objectively verified. The Company has evaluated its DTAs in each reporting period, including an assessment of its cumulative income or loss, to determine if a valuation allowance was required. After a review of the four sources of taxable income described above, the Company established a valuation allowance against the Company's net deferred tax assets due to uncertainty surrounding the Company's ability to generate future taxable income to realize these assets.

As of December 31, 2021, the Company had federal and state net operating loss ("NOL") carry forwards of approximately \$616.7 million and \$464.8 million, respectively, which may be available to offset future taxable income. The federal NOLs will begin to expire in 2037 and the state NOLs will begin to expire in 2028.

The Company evaluates tax positions under an approach for recognition and measurement of uncertain tax positions. The Company recognizes tax liabilities when the Company believes that certain positions may not be

Tempus Labs, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

fully sustained upon review by tax authorities. Benefits from tax positions are measured at the largest amount of benefit that is more likely than not of being realized upon settlement. To the extent that the final tax outcome of these matters is different than the amounts recorded, such differences impact income tax expense in the period in which such determination is made. Interest and penalties, if any, related to accrue liabilities for potential tax assessments are included in income tax expense.

The Company has concluded that as of December 31, 2020 and 2021, there are no uncertain positions taken or expected to be taken that would require recognition of a liability in the financial statements.

The Company is subject to routine audits by taxing jurisdictions. As of December 31, 2021, the Company was not under audit in any jurisdiction.

Net Loss Per Share Attributable to Common Stockholders

Basic and diluted net loss per share attributable to common stockholders is presented in conformity with the two-class method required for participating securities. The Company considers all series of its redeemable convertible preferred stock to be participating securities. Under the two-class method, the net loss attributable to common stockholders is not allocated to the redeemable convertible preferred stock as the holders of its redeemable convertible preferred stock do not have a contractual obligation to share in the Company's losses. Net income is attributed to common stockholders and participating securities based on their participation rights. Basic net loss per share attributable to common stockholders is computed by dividing the net loss attributable to common stockholders by the weighted-average number of shares of common stock outstanding during the period. Diluted earnings per share attributable to common stockholders adjusts basic earnings per share for the potentially dilutive impact of stock options and redeemable convertible preferred stock. As the Company has reported losses for all periods presented, all potentially dilutive securities are antidilutive and accordingly, basic net loss per share equals diluted net loss per share.

Deferred Offering Costs

Deferred offering costs consist primarily of accounting, legal, and other fees related to the Company's proposed initial public offering ("IPO"). The deferred offering costs will be recorded against IPO proceeds upon the consummation of the IPO. If the IPO is abandoned, deferred offering costs will be expensed in the period the IPO is abandoned. There were no deferred offering costs as of December 31, 2020. The Company had \$3.9 million of deferred offering costs as of December 31, 2021.

Stock-Based Compensation

Compensation expense relating to share-based payments is recognized in operations using a fair value measurement method. Under the fair value method, the estimated fair value of awards is charged to operations on a straight-line basis over the requisite service period, which is generally the vesting period. See Note 9 for further information on stock-based compensation.

Fair Value Measurements

Fair value is defined under GAAP as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Fair value is a market-based measurement that is determined based on assumptions that market participants would use in pricing an asset or a liability.

Tempus Labs, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

To increase the comparability of fair value measures, the following hierarchy prioritizes the inputs in valuation methodologies used to measure fair value:

Level 1—Measurements that reflect quoted prices (unadjusted) for identical assets or liabilities in active markets.

Level 2—Measurements that include other inputs that are directly or indirectly observable in the marketplace.

Level 3—Measurements derived from valuation techniques in which one or more significant inputs or significant value drivers are unobservable.

To the extent that valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgment. Accordingly, the degree of judgment exercised by the Company in determining fair value is greatest for instruments categorized in Level 3. A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Fair value measurements are discussed further in Note 13.

It is the Company's policy, in general, to measure nonfinancial assets and liabilities at fair value on a nonrecurring basis. These items are not measured at fair value on an ongoing basis but are subject to fair value adjustments in certain circumstances (such as evidence of impairment) which, if material, are disclosed in the accompanying notes to these consolidated financial statements.

Warrant Liability

The Company issued a warrant to its customer AstraZeneca in conjunction with the signing of a November 2021 MSA. The warrant to purchase up to \$100 million in shares of the Company's Class A common stock is a freestanding financial instrument classified as noncurrent liability on the Company's consolidated balance sheets. Warrants are accounted for as liability-classified instruments based on an assessment of the warrant's specific terms and applicable authoritative guidance in FASB ASC 480, *Distinguishing Liabilities from Equity* ("ASC 480"). The fair value of the warrant liability is measured each reporting period and any change in fair value of the warrant liability is recorded in Other expense, net within the consolidated statements of operations.

Segment Information

The Company operates as one operating segment. The Company's chief operating decision maker ("CODM") is its chief executive officer, who reviews financial information for purposes of making operating decisions, assessing financial performance and allocating resources. The Company's CODM evaluates financial information on a consolidated basis.

Classification and Accretion of Convertible Preferred Stock

The Company's Series A, B, B-1, B-2, C, D, E, F, G and G-2 convertible preferred stock are classified outside of stockholders' equity (deficit) because the holders of such shares have liquidation rights in the event of a deemed liquidation that, in certain situations, is not solely within the control of the Company.

Foreign Currency

Assets and liabilities of the Company's foreign subsidiaries are translated into U.S. dollars (USD) using period-end exchange rates while revenues and expenses are translated at the average exchange rate for the period

Tempus Labs, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

presented. Gains or losses from balance sheet translation are the only component of accumulated other comprehensive loss in the consolidated balance sheet.

Recently Adopted Accounting Standards

In January 2017, the FASB issued ASU No. 2017-04, *Intangibles—Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment*. ASU 2018-04 simplifies how an entity is required to test goodwill for impairment by eliminating Step 2 from the goodwill impairment test. The guidance is effective for the fiscal year beginning May 1, 2023 with early adoption permitted. The Company early adopted the guidance as of January 1, 2020 using a prospective transition method. Adoption of this guidance did not have a material impact to the Company's consolidated financial statements and related disclosures.

In July 2017, the FASB issued ASU 2017-11, *Earnings Per Share (Topic 260), Distinguishing Liabilities from Equity (Topic 480) and Derivatives and Hedging (Topic 815)*. The amendments in Part I of the Update change the reclassification analysis of certain equity-linked financial instruments (or embedded features) with down-round features. The amendments in Part II of the update re-characterize the indefinite deferral of certain provisions of Topic 480 that now are presented as pending content in the ASC, to a scope exception. The amendments in Part I of this update was effective for the Company on January 1, 2020 (the date it was effective for private companies). The amendments in Part II of the update did not require any transition guidance because those amendments did not have an accounting effect. The adoption did not have a material effect on the Company's consolidated financial statements as of the date of adoption.

The FASB issued ASU 2018-15, *Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement that is a Service Contract*, in August 2018. ASU 2018-15 requires a customer in a cloud computing arrangement that is a service contract to follow the internal-use software guidance in ASC 350-40 to determine which implementation costs to defer and recognize as an asset. The guidance is effective for the fiscal year beginning January 1, 2021, and interim periods within annual periods beginning after December 15, 2021. Early adoption is permitted. The Company adopted the guidance as of January 1, 2021 on a prospective basis. The adoption did not have a material effect on the Company's consolidated financial statements.

In November 2018, the FASB issued ASU 2018-18, *Collaborative Arrangements (Topic 808): Clarifying the Interaction between Topic 808 and Topic 606*. This ASU provides guidance that clarifies when certain transactions between participants in a collaborative arrangement should be accounted for under ASC 606 when the counterparty is a customer, and amends ASC 808 to refer to the unit-of-account guidance in ASC 606. The guidance specifically precludes an entity from presenting consideration from a transaction in a collaborative arrangement as revenue from contracts with customers if the counterparty is not a customer for that transaction. The Company adopted the guidance as of January 1, 2021. The adoption did not have a material effect on the Company's consolidated financial statements.

Recently Issued Accounting Pronouncements Not Yet Adopted

As an emerging growth company, the Company is provided the option to adopt new or revised accounting guidance either (1) within the same periods as those otherwise applicable to public business entities or (2) within the same time periods as private companies, including early adoption when permissible.

The Company has elected to adopt new or revised accounting guidance within the same time period as private companies, as indicated below.

Tempus Labs, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The FASB issued ASU 2016-02, *Leases*, (Topic 842) (ASU 2016-02), in February 2016. ASU 2016-02 will require lessees to recognize, at commencement date, a lease liability representing the lessee's obligation to make payments arising from the lease and a right-of-use asset representing the lessee's right to use or control the use of a specific asset for the lease term. Under the new guidance, lessor accounting is largely unchanged. ASU 2016-02 is effective for annual financial statements of private companies issued for fiscal years beginning after December 15, 2020, and should be applied using a modified retrospective approach, as specified in ASU 2019-10. As long as the Company is an emerging growth company, the current effective date of adoption is January 1, 2022 for calendar year-end private companies. Early adoption is permitted. While the Company continues to assess the effects of adoption, it currently believes the most significant effects relate to the recognition, on the consolidated balance sheet, of right-of-use assets and lease liabilities related to operating leases. The Company is evaluating the full effects that adoption of ASU 2016-02 will have on its financial position, results of operations, and disclosures.

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments* ("ASU No. 2016-13"). ASU No. 2016-13 requires the measurement and recognition of expected credit losses for financial assets that are held at amortized cost, including trade receivables. ASU No. 2016-13 replaces the previous incurred loss impairment model with an expected loss model which requires the use of forward-looking information to calculate credit loss estimates. The guidance is effective for the Company beginning January 1, 2023, with early adoption permitted. The Company is currently evaluating the effect that this guidance will have on the consolidated financial statements and related disclosures. The adoption of the standard is not expected to materially impact the Company's financial statements.

In December 2019, the FASB issued ASU No. 2019-12, *Simplifying the Accounting for Income Taxes* ("ASU No. 2019-12"), which simplifies the accounting for income taxes by eliminating certain exceptions to the guidance in ASC 740 related to the approach for intraperiod tax allocation, the methodology for calculating income taxes in an interim period and the recognition of deferred tax liabilities for outside basis differences. The new guidance also simplifies aspects of the accounting for franchise taxes and enacted changes in tax laws or rates and clarifies the accounting for transactions that result in a step-up in the tax basis of goodwill. It clarifies that single-member limited liability companies and similar disregarded entities that are not subject to income tax are not required to recognize an allocation of consolidated income tax expense in their separate financial statements, but they could elect to do so. The guidance is effective for the Company beginning January 1, 2022. Early adoption is permitted. The Company is currently evaluating the effect that this guidance will have on the consolidated financial statements and related disclosures.

3. BUSINESS COMBINATIONS

AKESOgen

On December 9, 2019, in accordance with a stock purchase agreement, Tempus Labs Inc. purchased 100% of the issued and outstanding shares of capital stock of AKESOgen for \$30.3 million, with an adjustment for working capital. In accordance with the terms of the agreement, \$4.0 million of the consideration was held back, which was subsequently paid in July 2021. The transaction also included a contingent consideration arrangement to transfer shares of non-voting common stock to the former owners with an acquisition date fair value of \$3.4 million, which the company recognized under long-term liabilities. The consideration will be paid out based on AKESOgen's 2020 revenue, with a maximum payout of 726,979 shares of non-voting common stock. On May 19, 2021, the Company entered into a settlement agreement with the former owners of AKESOgen related to the contingent consideration, whereby \$7.5 million was paid in cash and 145,466 shares of non-voting common stock will be paid out on the third anniversary of the Closing date.

Tempus Labs, Inc.**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS****4. BALANCE SHEET COMPONENTS****Property and Equipment, net**

The following summarizes property and equipment, net as of December 31, 2020 and 2021 (in thousands):

	December 31, 2020	December 31, 2021
Equipment	\$ 38,217	\$ 47,750
Leasehold improvements	23,352	23,716
Furniture and fixtures	5,751	6,573
Total property and equipment, gross	67,320	78,039
Less: accumulated depreciation	(28,885)	(42,644)
Property and equipment, net	<u>\$ 38,435</u>	<u>\$ 35,395</u>

Depreciation expense on property and equipment is classified as follows in the accompanying consolidated statements of operations for the years ended December 31, 2020 and 2021 (in thousands):

	December 31, 2020	December 31, 2021
Cost of revenue, genomics	\$ 7,206	\$ 7,504
Selling, general and administrative costs	5,885	6,255
Total depreciation	<u>13,091</u>	<u>13,759</u>

Accrued Expenses

Accrued expenses consist of the following (in thousands):

	December 31, 2020	December 31, 2021
Accrued compensation and employee benefits	\$ 8,690	\$ 12,968
Other accrued expenses	11,488	27,726
Total accrued expenses	<u>\$ 20,178</u>	<u>\$ 40,694</u>

Investments and Other Assets

Investments and other assets include amounts due from related parties (Note 14), and an equity method investment.

On June 21, 2021, the Company contributed \$5.9 million in cash for a minority interest in a research platform in service of advancing data-driven medicine in psychiatry. The Company concurrently entered a Commercial partnership agreement with the investee for the purpose of furthering the commercialization efforts of the associated research platform.

Consistent with purchase obligations disclosed in Note 6, *Commitments and Contingencies*, the commercial partnership agreement includes committed payments for access to the data and additional payments contingent on the commercialization of such data. The annual license fee commitment is not materially significant.

Tempus Labs, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

5. GOODWILL AND INTANGIBLES

Goodwill represents the excess of the purchase price in a business combination over the fair value of net tangible and intangible assets acquired. As disclosed in Note 2, Goodwill is tested for impairment at least annually as of October 1st. The changes in the carrying amount of goodwill for the years ended December 31, 2020 and 2021 were as follows (in thousands):

Balance as of December 31, 2019	\$15,986
Foreign exchange rate adjustment	6
Balance as of December 31, 2020	\$15,992
Foreign exchange rate adjustment	(7)
Balance as of December 31, 2021	\$15,985

There was no goodwill impairment for the years ended December 31, 2020 and 2021.

Intangible assets are initially recorded at their acquisition cost, or fair value if acquired as part of a business combination and amortized over their estimated useful lives. Intangible assets consist of a website domain, customer relationships acquired as part of a business combination, and licensed data acquired by entering into research collaboration agreements. In each license arrangement, the other party provides the Company with specified data, which currently is used primarily for research and development purposes but may also be licensed to third parties. The asset represents the Company's right to use these datasets. The Company also recognizes a liability for the associated minimum payments that are presented within accrued data licensing fees. During the years ended December 31, 2020 and 2021, the gross amount of intangible assets increased \$13.1 million and \$3.0 million, respectively, resulting from the extension of a research collaboration agreement. The amendment extended the minimum length of the contract from five years to seven years.

The following table summarizes intangible assets as of December 31, 2020 and 2021 (in thousands):

	December 31, 2020			December 31, 2021		
	Gross Amount	Accumulated Amortization	Net	Gross Amount	Accumulated Amortization	Net
Customer Relationships	\$ 17,300	\$ 2,471	\$ 14,829	\$ 17,300	\$ 4,943	\$ 12,357
Licensed data	50,586	20,975	29,611	53,535	28,625	24,910
Website domain	19	—	19	19	—	19
	\$ 67,905	\$ 23,446	\$ 44,459	\$ 70,854	\$ 33,568	\$ 37,286

Amortization of intangible assets is recognized using the straight-line method over their estimated useful lives, which range from five to seven years. Amortization expense was \$9.9 million and \$10.1 million for the years ended December 31, 2020 and December 31, 2021, respectively, and is recorded in cost of revenues, technology research and development or research and development, depending on use of the asset. The weighted average life of our intangibles is approximately seven years. As of December 31, 2021, the estimated future amortization expense related to intangible assets is as follows (in thousands):

Tempus Labs, Inc.**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

2022	10,564
2023	10,564
2024	10,164
2025	3,061
2026	2,914
Thereafter	—
Total	\$ 37,267

6. COMMITMENTS AND CONTINGENCIES**Leases**

The Company has entered into various non-cancelable operating lease agreements with lease expirations between 2021 and 2029. Rent expenses under operating leases was \$6.2 million and \$9.3 million for the years ended December 31, 2020 and 2021, respectively.

The Company leases its headquarters located in Chicago, Illinois (“600 West Chicago”). Our lease agreement for 600 West Chicago extends through May 2029 and includes rent escalations of 2.5% per year. The 600 West Chicago lease represents \$35.4 million of the estimated future payments under operating leases shown in the table below. The Company accounts for the 600 West Chicago lease as an operating lease and recognizes rent expense on a straight-line basis, taking into account rent escalations and lease incentives.

The Company has also acquired portions of its equipment under capital lease agreements, with expirations between 2022 and 2023.

As of December 31, 2021, the future payments under operating and capital leases for each of the next five years and thereafter are as follows (in thousands):

	Capital Leases	Operating Leases
2022	\$ 454	\$ 8,444
2023	311	8,632
2024	—	8,621
2025	—	7,954
2026	—	6,479
Thereafter	—	20,183
Total minimum lease payments	765	60,313
Less: Amount representing interest	55	
Present value of net minimum capital lease payments	710	
Less: Current portion of capital lease obligations	419	
Total long-term capital lease obligations	\$ 291	

Purchase Obligations

The Company has entered into non-cancelable arrangements with third parties, primarily related to data licenses and cloud computing services. Where applicable, the Company calculates its obligation based on termination fees that can be paid to exit the contract. The data license agreements include committed payments

Tempus Labs, Inc.**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

for access to the data and additional payments contingent on the commercialization of such data. For the years ended December 31, 2020 and 2021, the Company recognized data licensing and cloud computing expenses of \$27.1 million and \$39.6 million, respectively, related to non-cancelable arrangements.

As of December 31, 2021, future payments under these contractual obligations were as follows (in thousands):

2022	31,063
2023	30,480
2024	30,230
2025	28,730
2026	12,480
Thereafter	3,829
Total purchase obligations	136,812
Less: Amount representing interest	854
Present value of net minimum purchase obligations	135,958
Less: Current portion of purchase obligations	34,904
Total long-term purchase obligations	101,054

Legal Matters

From time to time in the normal course of business, the Company may be subject to various legal matters such as threatened or pending claims or proceedings. The Company had no outstanding litigation as of December 31, 2021.

7. STOCKHOLDERS' EQUITY**Common Stock**

The Company has authorized two classes of common stock, voting and non-voting. In March 2021, the Company amended its certificate of incorporation to bifurcate the voting common stock into two classes, Class A common stock and Class B common stock. As of December 31, 2021, the Company has authorized 181,700,285 shares of Class A common stock, 5,374,899 shares of Class B common stock, and 63,946,627 shares of non-voting common stock. In February 2022, the Company increased the number of authorized shares of non-voting common stock to 66,946,627. In April 2022, the Company increased the number of authorized shares of Class A common stock to 195,865,548 in conjunction with the Series G-3 Financing (see Note 8, Redeemable Convertible Preferred Stock).

Class A common stock, Class B common stock and non-voting common stock are collectively referred to as "Common Stock" throughout the notes to these consolidated financial statements unless otherwise noted.

The rights of the holders of Class A common stock, Class B common stock and non-voting common stock are identical, except with respect to voting. Each share of Class A common stock is entitled to one vote per share and each share of Class B common stock is entitled to fifteen votes per share. Non-voting shares of common stock do not have voting rights.

Each share of Class B common stock is convertible at any time at the option of the holder into one share of Class A common stock. Upon the closing of the IPO, on any transfer of shares of Class B common stock,

Tempus Labs, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

whether or not for value, each such transferred share will automatically convert into one share of Class A common stock, except for certain transfers detailed below and further described in the Company's amended and restated certificate of incorporation that will be in effect following the closing of this offering.

Any holder's shares of Class B common stock will convert automatically into Class A common stock, on a one-to-one basis, upon certain circumstances, including: (1) the sale or transfer of such shares of Class B common stock, other than to a "controlled entity," which is any person or entity which, directly or indirectly, is controlled by, or is under common control with, the holder of such shares of Class B common stock; (2) the twenty-year anniversary of the filing of the certificate of amendment to the Company's ninth amended and restated certificate of incorporation, which is March 15, 2041; (3) the termination of Mr. Lefkofsky's employment or service with the Company as an executive officer and member of the board of directors; and (4) the date that Mr. Lefkofsky and his controlled entities hold, in the aggregate, fewer than 10,000,000 shares of the Company's capital stock (as adjusted for stock splits, stock dividends, combinations, subdivisions and recapitalizations).

Once transferred and converted into Class A common stock, the Class B common stock may not be reissued.

Shares of non-voting common stock automatically convert into shares of Class A common stock immediately upon the closing of an initial public offering ("IPO").

The Company issues stock-based awards to its employees in the form of stock options, restricted stock units, performance stock units and restricted stock, all of which have the potential to increase the outstanding shares of common stock in the future (see Note 9, Stock-Based Compensation).

Upon any liquidation, dissolution or winding up of the Company, the remaining assets of the Company would first be distributed to the holders of Series G-3 Preferred Stock, Series G-2 Preferred Stock, Series G Preferred Stock, Series F Preferred Stock, followed by distributions to the holders of Series E Preferred Stock, Series D Preferred Stock, Series C Preferred Stock, Series B-2 Preferred Stock, Series B-1 Preferred Stock, Series B Preferred Stock, and Series A Preferred Stock. After distribution to the preferred stockholders, the remaining assets of the Company would be distributed to the holders of shares of Series C Preferred Stock and Common Stock, pro rata based on the number of shares then held by each holder, treating all Series C Preferred Stock as if they had been converted into Common Stock.

Common Stock Warrant

In connection with a 2021 strategic collaboration with AstraZeneca, the Company granted warrants to purchase \$100 million in shares of the Company's Class A common stock at an exercise price equal to the price per share at which the Company's common stock is valued in connection with the consummation of an IPO or a de-SPAC transaction, if an IPO or de-SPAC is completed on or before December 31, 2022. If no such transaction has occurred, the exercise price will be the latest equity financing price. The warrant will be automatically cancelled and terminated for no consideration, if not previously exercised, in the event AstraZeneca declines to extend its financial commitment before December 31, 2024. If AstraZeneca exercises the warrant, AstraZeneca will be required to increase its minimum commitment under the MSA from \$200 million to \$300 million through December 2026.

8. REDEEMABLE CONVERTIBLE PREFERRED STOCK

In April 2020, the Company authorized and issued 2,537,290 shares of Series G Preferred Stock ("Series G Preferred"). In November 2020, the Company authorized 7,135,072 shares and issued 3,296,093 shares of Series

Tempus Labs, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

G-2 Preferred stock (“Series G-2 Preferred”). In January 2021, the Company issued 287,922 shares of Series G-2 Preferred Stock for aggregate proceeds of \$16.5 million. In conjunction with this issuance, the Company redeemed 130,876 shares of Series G-2 Preferred Stock from a related party in exchange for \$7.5 million. Each share has a par value of \$.0001. The Company used the proceeds from such issuances for working capital and general corporate purposes.

In April 2022, the Company issued 1,483,242 shares of Series G-3 Preferred stock (“Series G-3 Preferred”) for aggregate proceeds of \$85.0 million. Each share has a par value of \$.0001. The Company will use the proceeds for working capital and general corporate purposes.

Redeemable convertible preferred stock outstanding as of December 31, 2020 and 2021, consisted of the following (in thousands, except share amounts):

Series Preferred	Year Issued	As of December 31, 2020			
		Shares Authorized	Outstanding	Liquidation Amount	Carrying Value
Series A	2015	10,000,000	10,000,000	\$ 10,500	10,000
Series B	2016	5,374,899	5,374,899	10,500	10,000
Series B-1	2016	2,500,000	2,500,000	10,500	10,000
Series B-2	2017	4,191,173	4,191,173	31,500	30,000
Series C	2017	9,779,403	9,779,403	78,777	70,403
Series D	2018	8,534,330	8,534,330	91,623	90,623
Series E	2018	6,630,905	6,630,905	127,306	127,306
Series F	2019	8,077,674	8,077,674	219,749	219,749
Series G	2020	2,537,290	2,537,290	102,186	102,186
Series G-2*	2020	7,135,072	3,296,093	188,889	188,889
Total convertible preferred stock		64,760,746	60,921,767	\$ 871,530	859,156

* Excludes amounts related to the conversion of convertible note

Series Preferred	Year Issued	As of December 31, 2021			
		Shares Authorized	Outstanding	Liquidation Amount	Carrying Value
Series A	2015	10,000,000	10,000,000	\$ 10,500	\$ 10,000
Series B	2016	5,374,899	5,374,899	10,500	10,000
Series B-1	2016	2,500,000	2,500,000	10,500	10,000
Series B-2	2017	4,191,173	4,191,173	31,500	30,000
Series C	2017	9,779,403	9,779,403	80,865	70,000
Series D	2018	8,534,330	8,534,330	95,855	94,873
Series E	2018	6,630,905	6,630,905	134,939	134,939
Series F	2019	8,077,674	8,077,674	232,934	232,934
Series G	2020	2,537,290	2,537,290	107,656	107,656
Series G-2*	2020/2021	7,135,072	3,453,139	197,889	197,889
Total convertible preferred stock		64,760,746	61,078,813	\$ 913,138	\$ 898,291

* Excludes amounts related to the conversion of convertible note

Tempus Labs, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Stock issuance costs that reduced the initial value of preferred stock were fully accreted in the period of the Series issuance. As of December 31, 2020 and 2021, all cumulative dividends have been paid and/or accrued.

The Series A Preferred, Series B Preferred, Series B-1 Preferred, Series B-2 Preferred, Series C Preferred, Series D Preferred, Series E Preferred, Series F Preferred, Series G Preferred, Series G-2 Preferred, and Series G-3 Preferred, collectively, are referenced below as the "Series Preferred." The rights, preferences, privileges, restrictions and other matters relating to the Series Preferred are as follows:

Dividends

Except for the holders of Series G-2 and Series G-3 Preferred, the holders of Series Preferred are entitled to dividends at a rate of 5% or 6% of the original issue price (subject to adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such class or series), depending on the series each holder participated in and/or the holders' election to receive cash dividends annually or to accrue. The holders of Series G-3 Preferred are entitled to dividends at a rate of 4% of the original issue price, paid in non-assessable shares of Series G-3 Preferred Stock ("Series G-3 PIK Dividends").

The dividends are cumulative and accrued from the date of issue while the shares are redeemable at the option of the holders. Any cash payments are subject to approval by the Board.

Voting Rights

With the exception of the Series B Preferred stockholders, Preferred stockholders are entitled to the number of votes equal to the product obtained by multiplying the number of shares of voting common stock into which their shares could be converted. Series B Preferred stockholders are entitled to the number of votes equal to the product obtained by multiplying the number of shares of voting common stock into which their shares could be converted by ten.

Series B Preferred stockholders are entitled to a number of votes equal to the product obtained by multiplying the number of shares of Class B common stock into which their shares could be converted by fifteen.

Liquidation Preference

Holders of Series Preferred are entitled to receive, upon a liquidation event, the amount that would have been received if all shares of Series Preferred had been converted into voting common stock immediately prior to such liquidation event. If, upon the liquidation event, the assets of the Company are insufficient to fully pay the amounts owed to Series Preferred stockholders, the holders of Series Preferred will have preferential payment over other preferred holders in the following order: Series G-3, Series G-2, Series G, Series F, Series E, Series D, Series C, Series B-2, Series B-1, Series B, Series A.

Redemption

Each outstanding share of Series G-3 Preferred, Series G-2 Preferred, Series G Preferred, Series F Preferred, Series E Preferred, and Series D Preferred shall be redeemed by the Company at a price equal to the original issuance price per share, plus any accruing dividends accrued but unpaid thereon whether or not declared, together with any other dividends declared but unpaid, in one cash payment not more than sixty days after the receipt by the Company, at any time during the period commencing on the date that is seven years from the original issue date of the Series G-3 Preferred shares and ending sixty days thereafter, of written notice from the

Tempus Labs, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

holders of each preferred series, voting as separate class, requesting redemption of all shares of the preferred series. Upon receipt of a redemption request, the Company shall apply all of its assets to such redemption, and to no other corporate purpose, except to the extent prohibited by Delaware law governing distributions to stockholders.

Conversion

Each share of Series Preferred shall be convertible, at the option of the holder, at any time, into such number of fully paid and non-assessable shares of voting common stock. Each share of Series Preferred shall automatically be converted into shares of voting common stock upon either (i) the closing of a public offering at an offering price of \$68.7683 resulting in at least \$100,000,000 of gross proceeds to the Company or (ii) the date and time, of the occurrence of an event, specified by vote or written consent of the holders of the outstanding shares of each individual series of preferred shares. There were no shares of voting common stock issued as a result of conversion for the periods ended December 31, 2020 and 2021. In the event of an initial public offering (“IPO”), the Series G-3 Preferred conversion price is subject to a 10% discount off the lesser of price per share of Class A Common Stock, and Series G-3 original issue price, or, if this offering is completed after June 30, 2023, a 15% discount off of the public offering price.

9. STOCK-BASED COMPENSATION

Stock Plan

In 2015, the Company adopted the Tempus Labs, Inc. 2015 Stock Plan (the Plan), which has been amended and restated numerous times to increase the aggregate shares authorized to be issued to employees, consultants, and directors of the Company. As of December 31, 2020 and 2021, there were 22,115,750 shares authorized under the Plan. In February 2022, the Plan was amended to increase the aggregate shares authorized to be issued to 25,115,750.

The Plan provides for awards in the form of stock options, restricted stock awards, restricted stock unit awards, and performance stock units. The maximum contractual term of awards issued under the Plan is seven years. The Plan is administered by the Board of Directors of the Company, who determine the number of awards to be issued. As of December 31, 2020 and 2021, 8,572,503 and 971,331 shares, respectively, were available for future issuance under the Plan.

The Company recognized stock-based compensation expense of \$0.4 million and \$0.6 million in the years ended December 31, 2020 and 2021, respectively, within Selling, general and administrative expense. The Company accounts for forfeitures as they occur.

Tempus Labs, Inc.**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS****Restricted Stock Units**

The restricted stock units (“RSUs”) granted under the Plan are subject to two vesting conditions. The first is a time-based component. The majority of the awards are eligible to vest over a four-year period, with 25% of the awards being eligible to vest after one year and the remaining awards becoming eligible to vest on a quarterly basis thereafter. The second vesting condition is the occurrence of a liquidity event, as defined in the grant agreement. The fair value of each RSU is estimated on the date of grant using the 409a value of a non-voting share of common stock on such date. The table below summarizes restricted stock unit activity under the Plan for the year ended December 31, 2021:

	Restricted Stock Units	Weighted - Average Grant Date Fair Value
Unvested at December 31, 2020	8,738,247	\$ 4.17
Granted	2,255,425	\$ 31.12
Forfeited	(649,253)	\$ 15.46
Redeemed	—	\$ —
Unvested at December 31, 2021	<u>10,344,419</u>	<u>\$ 9.49</u>

There were no restricted stock units that vested during the years ended December 31, 2020 and 2021. As of December 31, 2021, there was \$115.6 million of unrecognized stock compensation expense relating to RSUs. Because of the liquidity event requirement, the Company cannot estimate the weighted-average period over which this expense will be recognized.

Performance Stock Units

The performance stock units (“PSUs”) granted under the Plan are subject to two vesting conditions. For PSUs granted in 2020, the first is the achievement of a revenue target before December 31, 2021 while remaining employed. This target was not met as of December 31, 2021, which resulted in the forfeiture of 200,000 PSUs. For PSUs granted in 2021, the first condition is the achievement of a valuation target. The second vesting condition is the occurrence of a liquidity event, as defined in the grant agreement. The fair value of each PSU is estimated on the date of grant using the 409a value of a non-voting share of common stock on such date. The table below summarizes performance stock unit activity under the Plan for the year ended December 31, 2021:

	Performance stock units	Weighted - Average Grant Date Fair Value
Unvested at December 31, 2020	200,000	\$ 8.26
Granted	6,000,000	\$ 40.96
Forfeited	(205,000)	\$ 4.33
Unvested at December 31, 2021	<u>5,995,000</u>	<u>\$ 40.97</u>

There were no PSUs that vested during the years ended December 31, 2020 and 2021. As of December 31, 2021, there was \$244.0 million of unrecognized stock compensation expense relating to PSUs. Because of the liquidity event requirement, the Company cannot estimate the weighted-average period over which this expense will be recognized should the performance condition be met.

Tempus Labs, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Stock Options

Options granted pursuant to the Plan vest on varying schedules, based upon individual agreements. The fair value of each option granted is estimated on the date of grant using the Black-Scholes option-pricing model. The estimated life for the stock options was based on the term of the agreement. The risk-free interest rate is based on the rate for a U.S. government security with the same estimated life at the time of the option grant and the stock purchase rights.

	<u>Number of Options</u>	<u>Exercise Price Ranges</u>	<u>Weighted- Average Exercise Price</u>
Outstanding—December 31, 2020	210,000	\$ 0.85	\$ 0.85
Granted	—	—	—
Exercised	—	—	—
Forfeited	—	—	—
Outstanding—December 31, 2021	<u>210,000</u>	<u>\$ 0.85</u>	<u>\$ 0.85</u>
Options exercisable—December 31, 2021	<u>210,000</u>	<u>\$ 0.85</u>	<u>\$ 0.85</u>

The outstanding stock options were fully expensed prior to 2020. As such, no stock compensation expense relating to stock options was recorded in the year ended December 31, 2020 and 2021, and there is no unrecognized expense relating to stock options.

Restricted Stock Awards

The Company has previously granted restricted stock awards to employees. Compensation expense on those awards was recognized on a straight-line basis over the requisite service periods of the awards, typically three to four years.

	<u>Restricted</u>	<u>Unrestricted</u>	<u>Total</u>	<u>Weighted - Average Grant Date Fair Value</u>
Balance at December 31, 2020	—	4,250,000	4,250,000	\$ 0.42
Vesting of restricted stock into unrestricted	—	—	—	\$ 0.42
Balance at December 31, 2021	<u>—</u>	<u>4,250,000</u>	<u>4,250,000</u>	<u>\$ 0.42</u>

Total compensation expense for vesting of restricted stock into unrestricted stock was \$0.4 million for the year ended December 31, 2020. No compensation cost was recognized for the year ended December 31, 2021, and as of December 31, 2021, there was no unrecognized compensation cost related to non-vested restricted stock awards.

10. CONVERTIBLE PROMISSORY NOTES

On June 22, 2020, in connection with our entry into an agreement for use of Google LLC's, or Google's, Google Cloud Platform, we issued Google a convertible promissory note, or the Note, in the original principal amount of \$330.0 million. On November 19, 2020, in connection with our Series G-2 convertible preferred stock financing, we issued Google \$80 million of our Series G-2 preferred stock, at a 10% discount to the purchase price per share in such financing, in partial satisfaction of the outstanding principal amount under the Note, and we amended and restated the terms of the Note.

Tempus Labs, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The amended and restated Note, or the Amended Note, has a principal amount of \$250.0 million, and bears interest at the rate set forth therein. The principal amount is automatically reduced each year based on a formula taking into account the aggregate value of the Google Cloud Platform services used by us. As of December 31, 2021, the value of the note was \$238.2 million, which consisted of \$246.6 million gross principal, net of \$8.4 million aggregate unapplied principal reduction. The Company accounts for the principal reductions as an offset to our cloud and compute spend within selling, general and administrative in its Consolidated Statements of Operations and Comprehensive Loss. The outstanding principal and accrued interest under the Amended Note, or the Outstanding Amount, is due and payable on the earlier of (1) March 22, 2026, which is the maturity date of the Amended Note, (2) upon the occurrence and during the continuance of an event of default, and (3) upon the occurrence of an acceleration event, which includes any termination by us of our Google Cloud Platform agreement. We generally may not prepay the Outstanding Amount, except that we may, at our option, prepay the Outstanding Amount in an amount such that the principal amount remaining outstanding after such repayment is \$150.0 million.

If the Amended Note is outstanding at the maturity date, Google may, at its option, convert the then outstanding principal amount and interest accrued under the Amended Note into a number of shares of our Class A common stock equal to the quotient obtained by dividing (1) the Outstanding Amount on the maturity date, by (2) the average of the last trading price on each trading day during the twenty day period ending immediately prior to the maturity date.

The Company concluded that one of the conversion features meets the definition of an embedded derivative that is required to be accounted for as a separate unit of accounting. The fair value of the embedded derivative is not material and was therefore not bifurcated. As such, upon issuance of the Note the Company recorded a promissory note of \$330.0 million. The Company recognized interest expense of \$10.0 million and \$15.2 million during the year ended December 31, 2020 and 2021, respectively.

The Company accounted for the conversion of the \$80.0 million as a debt extinguishment and recognized a loss on extinguishment of debt of \$8.9 million within Interest Expense in the consolidated statement of operations and comprehensive loss during the year ended December 31, 2020. The loss on extinguishment of debt was calculated as the difference between (i) the fair value of shares of Series G-2 issued and (ii) the carrying value of the Notes that were converted.

11. NET LOSS PER SHARE ATTRIBUTABLE TO COMMON STOCKHOLDERS

Basic net loss per share is calculated by dividing the net loss by the weighted average number of outstanding shares of Common Stock each period. Diluted net loss per share is calculated by giving effect to all potential dilutive Common Stock equivalents, which includes stock options, RSUs, RSAs, PSUs, and preferred stock. Because the Company incurred net losses each period, the basic and diluted calculations are the same.

Tempus Labs, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The following table presents the calculation for basic and diluted net loss per share (in thousands, except share and per share data):

	<u>Year-Ended December 31,</u>	
	<u>2020</u>	<u>2021</u>
Numerator:		
Net loss	(209,854)	(259,192)
Accretion of convertible preferred stock to redemption value	(7,381)	(106)
Dividends on Series A, B, B-1, B-2, C, D, E, F and G preferred shares	(34,420)	(35,758)
Cumulative Undeclared Dividends on Series C preferred shares	(2,250)	(2,680)
Net loss attributable to common stockholders	<u>(253,905)</u>	<u>(297,736)</u>
Denominator:		
Weighted-average common shared outstanding, basic and diluted	62,706	62,975
Net loss per share attributable to common stockholders, basic and diluted	<u>\$ (4.05)</u>	<u>\$ (4.73)</u>

The following outstanding shares of common stock equivalents were excluded from the calculation of diluted net loss per share for each period, as the impact of including them would have been anti-dilutive. As disclosed in Note 7, the Company issued a warrant for \$100 million in shares of the Company's Class A common stock. As per the terms of the warrant, potentially dilutive shares are based on the latest equity financing price.

	<u>As of December 31,</u>	
	<u>2020</u>	<u>2021</u>
Shares associated with contingent consideration	—	145,466
Stock options outstanding	210,000	210,000
Convertible preferred stock	60,921,767	61,078,813
Warrant	—	1,744,991
Total potentially dilutive shares	<u>61,131,767</u>	<u>63,179,270</u>

As disclosed in Note 9, the Company's RSUs include a triggering liquidation performance condition prior to vesting. As disclosed in Note 10, contingent upon certain financing events, the Company's Convertible Promissory Note will be converted to shares at the holder's option, based on the amount outstanding at the maturity date, which is subject to reduction based on services used by us prior to the maturity date. As such, these are treated as contingently issuable shares and will be excluded from potential dilutive impact until the triggering liquidation performance condition is satisfied.

Tempus Labs, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

12. INCOME TAXES

Deferred income taxes consist of the following as of December 31, 2020 and 2021 (in thousands):

	December 31,	
	2020	2021
Deferred Income Tax Assets:		
Charitable Contribution Carryforwards	\$ 9	\$ 138
Accrued Compensation	289	—
Net Operating Loss Carryforwards	98,895	163,656
Deferred Rent	3,974	4,038
Stock Compensation	43	44
Deferred Revenue	807	22
IRC §163(j) Interest Expense Limitation Carryover	2,675	6,451
Deferred Payroll taxes	1,197	344
Other	126	76
	<u>\$ 108,015</u>	<u>\$ 174,769</u>
Less Valuation Allowance	(102,981)	(161,749)
	<u>\$ 5,034</u>	<u>\$ 13,020</u>
Deferred Income Tax Liabilities		
Excess of Tax Basis over Book Basis Fixed Assets	(1,594)	(356)
Contract Asset	—	(9,831)
Excess of Book Basis over Tax Basis Intangibles	(3,440)	(2,833)
	<u>\$ (5,034)</u>	<u>\$ (13,020)</u>
Net Deferred Income Tax (Liability)	<u>\$ —</u>	<u>\$ —</u>

The provision for income taxes consists of the following as of December 31, 2020 and 2021 (in thousands):

	December 31,	
	2020	2021
Current tax expense (benefit)		
Federal	—	—
State	—	—
Total	<u>\$ —</u>	<u>\$ —</u>
Deferred tax expense (benefit)		
Federal	(40,710)	(44,698)
State	(10,520)	(14,071)
Total	<u>(51,230)</u>	<u>(58,769)</u>
Change in valuation allowance	<u>51,230</u>	<u>58,769</u>
Total income tax expense (benefit)	<u>\$ —</u>	<u>\$ —</u>

Tempus Labs, Inc.**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

The components of income before income taxes as follows (in thousands):

	<u>December 31,</u>	
	<u>2020</u>	<u>2021</u>
Domestic	\$ (209,891)	\$ (258,780)
Foreign	37	(422)

A reconciliation of the difference between the federal statutory rate and the effective income tax rate as a percentage of income before taxes for the years ended December 31, 2020 and 2021:

	<u>December 31,</u>	
	<u>2020</u>	<u>2021</u>
Federal Statutory Tax Rate	21.00%	21.00%
State Statutory Tax Rate	5.43%	5.44%
Permanent Differences	-2.16%	-0.57%
Contract Asset	—	-3.07%
Other	0.14%	-0.07%
Change in Valuation Allowance	-24.41%	-22.73%
Total	0.00%	0.00%

Net change in valuation allowance as follows (in thousands):

	<u>December 31,</u>	
	<u>2020</u>	<u>2021</u>
Valuation Allowance, beginning of year	\$ 51,237	\$ 102,981
Charges	51,230	58,768
Purchase accounting adjustments	514	—
Valuation Allowance, end of year	\$ 102,981	\$ 161,749

The Company's income tax benefit as recorded in the financial statements differs from the benefit computed by applying statutory tax rates to net loss before income taxes due to permanent differences related to the deductibility of certain expenses and the valuation allowance. There is no current income tax benefit for the years ended December 31, 2020 or 2021.

As of December 31, 2021, the Company had federal net operating loss ("NOL") carry forwards of \$616.7 million and state NOL carry forwards of approximately \$464.8 million, which may be available to offset future taxable income. The federal NOLs will begin to expire in 2037 and the state NOLs will begin to expire in 2028. A full valuation allowance has been recorded against the NOL carry forwards.

The Company files income tax returns in the U.S. federal jurisdiction and various state jurisdictions. Due to its operating loss carryforwards, the U.S. federal statute of limitations remains open for tax year 2016 and onward and the Company continues to be subject to examination by the Internal Revenue Service for tax years 2016 and later. The resolutions of any examinations are not expected to be material to these financial statements. As of December 31, 2021, and 2020, there are no penalties or accrued interest recorded in the consolidated financial statements. The calculation of the Company's tax obligations involves dealing with uncertainties in the application of complex tax laws and regulations. ASC 740, Income Taxes, provides that a tax benefit from an

Tempus Labs, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

uncertain tax position may be recognized when it is more likely than not that the position will be sustained upon examination, including resolutions of any related appeals or litigation processes, on the basis of the technical merits. The Company has assessed its income tax positions and recorded tax benefits for all years subject to examination, based upon its evaluation of the facts, circumstances and information available at each period end. For those tax positions where the Company has determined there is a greater than 50% likelihood that a tax benefit will be sustained, the Company has recorded the largest amount of tax benefit that may potentially be realized upon ultimate settlement with a taxing authority that has full knowledge of all relevant information. For those income tax positions where it is determined there is less than 50% likelihood that a tax benefit will be sustained, no tax benefit has been recognized. The Company had no uncertain tax positions during the years ended December 31, 2021 and 2020.

The Company recognizes interest and, if applicable, penalties for any uncertain tax positions. Interest and penalties are recorded as a component of income tax expense. In the years ended December 31, 2021 and 2020, the Company did not have any accrued interest or penalties associated with any unrecognized tax benefits.

The Company does not provide for U.S. income taxes on unremitted earnings of foreign subsidiaries. Unremitted earnings of foreign subsidiaries were immaterial on December 31, 2020 and 2021.

13. FAIR VALUE MEASUREMENTS

The carrying amounts of financial instruments, including cash and cash equivalents, accounts receivable, capital lease obligations, minimum royalties, accounts payable, and accrued expenses approximate fair value due to the short maturity of these instruments. The carrying amounts of the related party receivable, capital lease obligations, and minimum royalties approximate fair value because the interest rates used fluctuate with market interest rates or the fixed rates are based on current rates offered to the Company for debt with similar terms and maturities.

The valuation methodologies used for the Company's assets and liabilities measured at fair value and their classification in the valuation hierarchy are summarized below:

Contingent consideration—The Company is subject to a contingent consideration arrangement to transfer non-voting shares of common stock to the former owners of a business acquired in December 2019. See Note 3, Business Combinations, for further discussion of that acquisition.

Liabilities for contingent consideration are measured at fair value each reporting period, with the acquisition date fair value included as part of the consideration transferred in the related business combination and subsequent changes in fair value recorded in earnings within operating expense on the consolidated statements of operations and comprehensive loss. The Company used a risk-neutral simulation model and option pricing framework to value the contingent consideration. We classify the contingent consideration liabilities as Level 3 due to the lack of relevant observable market data over fair value inputs such as probability-weighting of payment outcomes.

Tempus Labs, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Warrant liability—As discussed in Note 7, the Company issued a \$100 million warrant to AstraZeneca. The warrant liability is measured at fair value each reporting period, using a Black-Scholes option pricing model which takes into consideration the likelihood of the Company completing an IPO, which would allow AstraZeneca to exercise the warrant. The following table summarizes the assumptions used in the model:

	<u>Initial Public Offering</u>	<u>Stay Private</u>
Expected term (in years)	4.42	2.00
Risk-free interest rates	1.37%	1.25%
Expected volatility	50.00%	50.00%
Expected dividend yield	0.00%	0.00%
Scenario weighting	70.00%	30.00%

We classify the warrant liability as Level 3 due to the lack of relevant observable market data over fair value inputs such as the probability-weighting and expected term of the IPO and stay private scenarios.

Convertible promissory note—The Company has a convertible promissory note with Google, which is reduced each year based on a formula taking into account the aggregate value of the Google Cloud Platform services used by us. The carrying value of the note is equivalent to the fair value. See Note 10 for further discussion of the note. We classify the convertible promissory note as Level 3 due to the lack of relevant observable market data over fair value inputs.

The following table summarizes liabilities that are measured at fair value on a recurring basis as of December 31, 2020 and 2021 (in thousands):

	<u>December 31,</u> <u>2020</u>	<u>Fair Value Measurement at Reporting Date Using</u>		
		<u>Quoted Price in Active Market for Identical Assets (Level 1)</u>	<u>Significant Other Observable Inputs (Level 2)</u>	<u>Significant Unobservable Inputs (Level 3)</u>
Liabilities				
Contingent consideration	\$ 10,271	\$ —	\$ —	\$ 10,271
	<u>December 31,</u> <u>2021</u>	<u>Quoted Price in Active Market for Identical Assets (Level 1)</u>	<u>Significant Other Observable Inputs (Level 2)</u>	<u>Significant Unobservable Inputs (Level 3)</u>
Liabilities				
Contingent consideration	\$ 8,005	\$ —	\$ —	\$ 8,005
Warrant liability	\$ 37,800	\$ —	\$ —	\$ 37,800
Convertible promissory note	\$ 238,236			\$ 238,236

The following table provides a reconciliation of the beginning and ending balances for the liabilities measured at fair value using significant unobservable inputs (Level 3) (in thousands):

	<u>Contingent Consideration</u>	<u>Warrant Liability</u>	<u>Convertible Promissory Note</u>
Balance at December 31, 2019	\$ 3,380	\$ —	\$ —
Change in fair value	6,891	—	—
Balance at December 31, 2020	<u>\$ 10,271</u>	<u>\$ —</u>	<u>\$ —</u>

Tempus Labs, Inc.**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

	<u>Contingent Consideration</u>	<u>Warrant Liability</u>	<u>Convertible Promissory Note</u>
Balance at December 31, 2020	\$ 10,271	\$ —	\$ 250,000
Settlement paid in cash	(7,500)	—	—
Issuance of warrant	—	37,800	—
Principal reduction	—	—	(11,764)
Change in fair value	5,234	—	—
Balance at December 31, 2021	<u>\$ 8,005</u>	<u>\$ 37,800</u>	<u>\$ 238,236</u>

For the year ended December 31, 2020, the Company recognized expense of \$6.9 million in selling, general and administrative expense due to the change in fair value determined by Level 3 valuation techniques.

For the year ended December 31, 2021, the Company recognized expense of \$5.2 million in selling, general and administrative expense due to the change in the fair value of the contingent consideration liability.

14. RELATED PARTIES

In 2018, the Company received \$1.5 million from a related party for assuming an office lease from such party. The Company is amortizing this amount over the course of its lease with the building. The Company had a remaining related liability of \$1.1 million and \$1.0 million for the years ended December 31, 2020 and 2021, respectively. The liability is included on the balance sheet in deferred rent, less current portion. See Note 6, Commitments and Contingencies, for additional information on the Company's operating leases. The Company subleases a portion of office space to this related party on a month-to-month basis. Sublease income received from the related party was insignificant for the years ended December 31, 2020 and 2021.

As of December 31, 2020 the amount due to related parties was \$1.3 million, and as of December 31, 2021 there was no amount due to related parties. As of December 31, 2020 and 2021, respectively, the amount due from related parties was \$0.1 million.

During 2020, the Company reimbursed payroll related costs of \$0.8 million to a related party for contracted engineers. As of December 31, 2020 and 2021, respectively, there were no amounts due to this related party.

Strategic Investment

On August 19, 2021, the Company entered into a related party arrangement with Pathos, Inc. for the purpose of furthering the commercialization efforts of drug development. Tempus received a warrant to purchase 23,456,790 shares, or approximately 19% of the current outstanding equity in Pathos, for \$0.0125 per share. The warrant will automatically exercise upon a change of control (as defined therein) or upon an IPO of Pathos' securities. The Company also has an optional exercise election window during the last 10 days of the 20 year term of the warrant agreement. Pursuant to this master agreement, the Company granted Pathos a limited, non-exclusive, revocable, non-transferable right and license, without right of sublicense, to access and download certain de-identified records from the Company's proprietary database. Pathos in turn agreed to certain license fees depending on the number of de-identified records it elects to license during the term of the master agreement. Pathos also agreed to pay the Company a subscription fee equal to \$0.4 million per year for access to our Lens product. The master agreement provides for an initial term of five years, with a subsequent five-year renewal provision unless the agreement is terminated. Either party may terminate the agreement after the initial five-year term by prior written notice to the other party.

Tempus Labs, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

15. SUBSEQUENT EVENTS

For its consolidated financial statements as of December 31, 2021, the Company evaluated subsequent events through April 26, 2022, the date on which those financial statements were available to be issued.

Acquisition of Highline Consulting, LLC

On January 4, 2022, the Company entered into a Unit Purchase Agreement with Highline Consulting, LLC, a California limited liability company, or Highline, Highline Consulting Parent, LLC, and the unitholders of Highline, or collectively, the Sellers, pursuant to which the Company acquired all of the issued and outstanding equity interests in Highline, which transaction is referred to as the “Highline Acquisition.” Highline manages and executes on early and late-stage clinical trials, applying a customized approach to each study. Highline’s capabilities and expertise will help support and grow new and established business lines within Tempus, allowing the Company to vertically integrate more clinical trial services when appropriate to complement its existing CRO partnerships.

The Company acquired Highline for a purchase price of \$35.5 million, subject to customary cash and net working capital adjustments. In addition, following the closing, the Sellers will be entitled to receive contingent consideration from the Company in an aggregate amount of up to \$5.0 million, payable in a combination of cash and shares of the Company’s Class A common stock, contingent upon certain individual Sellers remaining employed by the Company as of the first and second anniversary of the closing. In addition, the Company established a retention bonus pool of restricted stock units with an aggregate value of \$4.0 million to be allocated among Highline employees retained by the Company. The retention bonus pool will be recorded as compensation expense over the requisite service period.

Due to the limited time since the closing of the transaction, the initial accounting for the Highline acquisition is still in process, but a significant portion of the purchase price is expected to be allocated to intangible assets and goodwill. The remaining disclosures under ASC 805, *Business Combinations*, will be provided upon finalization of our preliminary purchase accounting in the first quarter of 2022.

Series G-3 Financing

In April 2022, the Company authorized 4,362,476 and issued 1,483,242 shares of Series G-3 Preferred stock (“Series G-3 Preferred”) for aggregate proceeds of \$85.0 million (See Note 8, Redeemable Convertible Preferred Stock). As of the date hereof we have received \$68.5 million of the committed \$85.0 million, with the remainder committed from one additional investor, which is due by April 29, 2022.

Shares

Class A Common Stock

"T'EMPUS

MORGAN STANLEY
BofA SECURITIES
STIFEL
LOOP CAPITAL MARKETS

J.P. MORGAN

ALLEN & COMPANY LLC
COWEN
WILLIAM BLAIR
NEEDHAM & COMPANY

Through and including _____, 2022 (the 25th day after the date of this prospectus), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

_____, 2022.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Unless otherwise indicated, all references to “Tempus,” the “company,” “we,” “our,” “us” or similar terms refer to Tempus Labs, Inc. and its subsidiaries.

Item 13. Other Expenses of Issuance and Distribution.

The following table sets forth all expenses to be paid by us, other than underwriting discounts and commissions, in connection with this offering. All amounts shown are estimates except for the SEC registration fee, the FINRA filing fee and the exchange listing fee.

SEC registration fee	\$	*
FINRA filing fee		*
Exchange listing fee		*
Printing and engraving expenses		*
Legal fees and expenses		*
Accounting fees and expenses		*
Transfer agent and registrar fees		*
Miscellaneous		*
Total	\$	*

*To be completed by amendment.

Item 14. Indemnification of Directors and Officers.

Section 145 of the Delaware General Corporation Law authorizes a court to award, or a corporation’s board of directors to grant, indemnity to directors and officers in terms sufficiently broad to permit such indemnification under certain circumstances for liabilities, including reimbursement for expenses incurred, arising under the Securities Act. Our amended and restated certificate of incorporation that will be in effect on the closing of this offering permits indemnification of our directors, officers, employees, and other agents to the maximum extent permitted by the Delaware General Corporation Law, and our amended and restated bylaws that will be in effect on the closing of this offering provide that we will indemnify our directors and executive officers and permit us to indemnify our other officers, employees, and other agents, in each case to the maximum extent permitted by the Delaware General Corporation Law.

We have entered into indemnification agreements with our directors and executive officers, whereby we have agreed to indemnify our directors and executive officers to the fullest extent permitted by law, including indemnification against expenses and liabilities incurred in legal proceedings to which the director or executive officer was, or is threatened to be made, a party by reason of the fact that such director or executive officer is or was a director, executive officer, employee, or agent of Tempus Labs, Inc., provided that such director or executive officer acted in good faith and in a manner that the director or executive officer reasonably believed to be in, or not opposed to, the best interest of Tempus Labs, Inc. At present, there is no pending litigation or proceeding involving a director or executive officer of Tempus Labs, Inc. regarding which indemnification is sought, nor is the registrant aware of any threatened litigation that may result in claims for indemnification.

We maintain insurance policies that indemnify our directors and officers against various liabilities arising under the Securities Act and the Securities Exchange Act of 1934, as amended, that might be incurred by any director or officer in his capacity as such.

The underwriters are obligated, under certain circumstances, under the underwriting agreement to be filed as Exhibit 1.1 hereto, to indemnify us and our officers and directors against liabilities under the Securities Act.

Item 15. Recent Sales of Unregistered Securities.

The following sets forth information regarding all unregistered securities sold since January 1, 2019:

- (1) We have granted, under our 2015 Plan, RSUs representing 7,532,363 shares of our Class A common stock to our employees, consultants, and directors, having a fair market value ranging from \$3.60 to \$50.70 per share.
- (2) We have granted, under our 2015 Plan, PSUs representing 6,000,000 shares of our Class A common stock to our employees, consultants, and directors, having a fair market value ranging from \$33.48 to \$42.64 per share.
- (3) We have granted, under our 2015 Plan, an option to purchase 210,000 shares of our Class A common stock to Revolution Growth Management Company, Inc., having an exercise price of \$0.8542 per share.
- (4) In July 2019, we issued and sold an aggregate of 1,058,600 shares of our voting common stock at a price per share of \$9.64, for an aggregate purchase price of approximately \$10.2 million, in private placements to two accredited investors.
- (5) From August 2018 through April 2019, we issued and sold an aggregate of 6,630,905 shares of our Series E convertible preferred stock at a price per share of \$16.7428, for an aggregate purchase price of approximately \$111.0 million, in private placements to 17 accredited investors, exclusive of the 886,304 shares repurchased by us in April 2019 at the original issue price per share, for an aggregate repurchase price of approximately \$14.8 million.
- (6) From April through July 2019, we issued and sold an aggregate of 8,077,674 shares of our Series F convertible preferred stock at a price per share of \$24.7596, for an aggregate purchase price of approximately \$200.0 million, in private placements to 22 accredited investors, exclusive of the 203,521 shares and the 395,811 shares repurchased by us in May and July 2019, respectively, at the original issue price per share, for an aggregate repurchase price of approximately \$14.8 million.
- (7) From February through April 2020, we issued and sold an aggregate of 2,537,290 shares of our Series G convertible preferred stock at a price per share of \$38.3524, for an aggregate purchase price of approximately \$97.3 million, in private placements to 20 accredited investors, exclusive of the 130,370 shares repurchased by us in April 2020 at the original issue price per share, for an aggregate repurchase price of approximately \$5.0 million.
- (8) In November 2020 and January 2021, we issued and sold an aggregate of 3,453,139 shares of our Series G-2 convertible preferred stock at a price per share of \$57.3069, for an aggregate purchase price of approximately \$189.0 million, in private placements to 15 accredited investors, exclusive of the 130,876 shares repurchased by us in January 2021 at the original issue price per share, for an aggregate repurchase price of approximately \$7.5 million.
- (9) In June 2020, in connection with our entry into an agreement for use of Google LLC's, or Google's, Google Cloud Platform, we issued Google a convertible promissory note, or the Note, in the original principal amount of \$330 million. In November 2020, in connection with our Series G-2 convertible preferred stock financing, we issued Google \$80 million of our Series G-2 preferred stock in partial satisfaction of the outstanding principal amount under the Note, and we amended and restated the terms of the Note. For more information regarding the Note, see the section titled "Description of Capital Stock—Convertible Promissory Note."
- (10) In November 2021, in connection with our entry into a master services agreement, we issued a warrant to AstraZeneca to purchase \$100 million in shares of our Class A common stock at an

[Table of Contents](#)

exercise price equal to the price per share at which our common stock is valued in connection with the consummation of this offering.

- (11) In January 2022, we entered into a unit purchase agreement with Highline Consulting, LLC, a California limited liability company, or Highline, Highline Consulting Parent, LLC, and the unitholders of Highline, which collectively we refer to as the Sellers, pursuant to which we acquired all of the issued and outstanding equity interests in Highline. Following the closing, the Sellers will be entitled to receive contingent consideration from us in an aggregate amount of up to \$5.0 million, payable in a combination of cash and shares of our Class A common stock, contingent upon certain individual Sellers remaining employed by us as of the first and second anniversary of the closing.
- (12) In connection with our purchase of all of the outstanding shares of AKESOgen, Inc., we expect to issue on or around December 9, 2022 of 145,466 shares of Class A common stock to former stockholders of AKESOgen, Inc.
- (13) In April 2022, we issued and sold an aggregate of 1,483,242 shares of our Series G-3 convertible preferred stock at a price per share of \$57.3069, for an aggregate purchase price of approximately \$85.0 million, in private placements to five accredited investors.

None of the foregoing transactions involved any underwriters, underwriting discounts or commissions, or any public offering. Unless otherwise specified above, we believe these transactions were exempt from registration under the Securities Act in reliance on Section 4(a)(2) of the Securities Act (and Regulation D or Regulation S promulgated thereunder) or Rule 701 promulgated under Section 3(b) of the Securities Act as transactions by an issuer not involving any public offering or under benefit plans and contracts relating to compensation as provided under Rule 701. The recipients of the securities in each of these transactions represented their intentions to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof, and appropriate legends were placed on the share certificates issued in these transactions. All recipients had adequate access, through their relationships with us, to information about us. The sales of these securities were made without any general solicitation or advertising.

Item 16. Exhibits and Financial Statement Schedules.

- (a) Exhibits.

See the Exhibit Index on the page immediately preceding the signature page for a list of exhibits filed as part of this registration statement on Form S-1, which Exhibit Index is incorporated herein by reference.

- (b) Financial Statement Schedules.

All financial statement schedules are omitted because the information required to be set forth therein is not applicable or is shown in the consolidated financial statements or the notes thereto.

Item 17. Undertakings.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers, and controlling persons of the registrant under the foregoing provisions or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer, or controlling person of the registrant in the successful defense of any action, suit, or proceeding) is asserted by such director, officer, or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

[Table of Contents](#)

The undersigned registrant hereby undertakes that:

- (1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance on Rule 430A and contained in a form of prospectus filed by the registrant under Rule 424(b)(1) or (4) or 497(h) under the Securities Act will be deemed to be part of this registration statement as of the time it was declared effective.
- (2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus will be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time will be deemed to be the initial bona fide offering thereof.

EXHIBIT INDEX

<u>Exhibit Number</u>	<u>Description</u>
1.1*	Form of Underwriting Agreement.
3.1	Tenth Amended and Restated Certificate of Incorporation of Tempus Labs, Inc., as amended, as currently in effect.
3.2	Form of Amended and Restated Certificate of Incorporation of Tempus Labs, Inc., to be in effect on the closing of the offering.
3.3**	Amended and Restated Bylaws of Tempus Labs, Inc., as currently in effect.
3.4	Form of Amended and Restated Bylaws of Tempus Labs, Inc., to be in effect on the closing of the offering.
4.1*	Form of Class A Common Stock Certificate.
4.2**	Warrant to Purchase Class A Common Stock of Tempus Labs, Inc. dated November 17, 2021 (included in Exhibit 10.16).
5.1*	Opinion of Cooley LLP.
10.1	Tenth Amended and Restated Investor Rights Agreement, dated April 18, 2022.
10.2+	Tempus Labs, Inc. Third Amended and Restated 2015 Stock Plan, as amended.
10.3+**	Forms of Grant Notices and Award Agreements under the Tempus Labs, Inc. Third Amended and Restated 2015 Stock Plan, as amended.
10.4+	Tempus Labs, Inc. 2022 Equity Incentive Plan.
10.5+	Forms of Grant Notice, Stock Option Agreement and Notice of Exercise under the Tempus Labs, Inc. 2022 Equity Incentive Plan.
10.6+	Forms of Restricted Stock Unit Grant Notice and Award Agreement under the Tempus Labs, Inc. 2022 Equity Incentive Plan.
10.7+	Form of Indemnification Agreement entered into by and between Tempus Labs, Inc. and each director and executive officer.
10.8+	Employment Agreement, by and between Tempus Labs, Inc. and Eric Lefkofsky, dated January 1, 2022.
10.9+	Employment Agreement, by and between Tempus Labs, Inc. and Erik Phelps, dated January 1, 2022.
10.10+	Employment Agreement, by and between Tempus Labs, Inc. and Ryan Fukushima, dated January 1, 2022.
10.11+	Employment Agreement, by and between Tempus Labs, Inc. and James Rogers, dated January 1, 2022.
10.12#**	Agreement of Lease, by and between Tempus Labs, Inc. and EQC 600 West Chicago Property LLC, dated January 18, 2018, as amended.
10.13†**	Supply Agreement, by and between Tempus Labs, Inc. and Illumina, Inc., dated June 29, 2021.
10.14†**	Amended and Restated Convertible Promissory Note, by and between Tempus Labs, Inc. and Google LLC, dated November 19, 2020.
10.15†**	Master Agreement, by and between Tempus Labs, Inc. and Pathos AI, Inc., dated August 19, 2021.

Table of Contents

<u>Exhibit Number</u>	<u>Description</u>
10.16†**	Master Services Agreement, by and between Tempus Labs, Inc. and AstraZeneca AB, dated November 17, 2021.
10.17+	Tempus Labs, Inc. 2022 Employee Stock Purchase Plan.
21.1**	List of Subsidiaries of Tempus Labs, Inc.
23.1*	Consent of PricewaterhouseCoopers, LLP, independent registered public accounting firm.
23.2*	Consent of Cooley LLP (included in Exhibit 5.1).
24.1*	Power of Attorney (included on page II-7).
107*	Filing Fee Table.

* To be submitted by amendment.

** Previously submitted.

+ Indicates management contract or compensatory plan.

† Certain portions of this exhibit (indicated by asterisks) have been omitted because they are not material and are the type that the registrant treats as private or confidential.

Certain schedules and exhibits to this exhibit have been omitted pursuant to Item 601(a)(5) of Regulation S-K. A copy of any omitted schedule and/or exhibit will be furnished to the SEC upon request.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Chicago, Illinois, on _____, 2022.

TEMPUS LABS, INC.

By: _____
Name: Eric Lefkofsky
Title: Chief Executive Officer, Founder and Chairman

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Eric Lefkofsky and James Rogers, and each one of them, as his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and in their name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement, and to sign any registration statement for the same offering covered by this registration statement that is to be effective on filing pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and all post-effective amendments thereto, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
_____ Eric Lefkofsky	Chief Executive Officer, Founder and Chairman (Principal Executive Officer)	, 2022
_____ James Rogers	Chief Financial Officer (Principal Financial Officer)	, 2022
_____ Ryan Bartolucci	Chief Accounting Officer (Principal Accounting Officer)	, 2022
_____ Peter J. Barris	Director	, 2022
_____ Eric D. Belcher	Director	, 2022
_____ Jennifer A. Doudna, Ph.D.	Director	, 2022
_____ Wayne A.I. Frederick, M.D.	Director	, 2022

[Table of Contents](#)

<u>Signature</u>	<u>Title</u>	<u>Date</u>
_____ Robert Ghenchev	Director	, 2022
_____ Scott Gottlieb, M.D.	Director	, 2022
_____ Theodore J. Leonsis	Director	, 2022
_____ Nadja West, M.D.	Director	, 2022

**TENTH AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION
OF
TEMPUS LABS, INC.**

(Pursuant to Sections 242 and 245 of the
General Corporation Law of the State of Delaware)

Tempus Labs, Inc., a corporation organized and existing under and by virtue of the provisions of the General Corporation Law of the State of Delaware (the “*DGCL*”),

DOES HEREBY CERTIFY:

1. That the name of this corporation is Tempus Labs, Inc., and that this corporation was originally incorporated pursuant to the DGCL on September 21, 2015 under the name Bioin, Inc.
2. That the original Certificate of Incorporation of this corporation was amended by a Certificate of Amendment filed with the Secretary of State of the State of Delaware on September 29, 2015, and was further amended by a Certificate of Amendment filed with the Secretary of State of the State of Delaware on February 12, 2016. The Amended and Restated Certificate of Incorporation was filed on June 20, 2016 and was amended by a Certificate of Amendment filed with the Secretary of State of the State of Delaware on October 6, 2016. The Second Amended and Restated Certificate of Incorporation was filed on November 22, 2016 with the Secretary of State of the State of Delaware. The Third Amended and Restated Certificate of Incorporation was filed on April 17, 2017 with the Secretary of State of the State of Delaware. The Fourth Amended and Restated Certificate of Incorporation was filed on September 8, 2017 with the Secretary of State of the State of Delaware. The Fifth Amended and Restated Certificate of Incorporation was filed on March 16, 2018 with the Secretary of State of the State of Delaware. The Sixth Amended and Restated Certificate of Incorporation was filed on August 23, 2018 with the Secretary of State of the State of Delaware. The Seventh Amended and Restated Certificate of Incorporation was filed on April 30, 2019 with the Secretary of State of the State of Delaware. The Eighth Amended and Restated Certificate of Incorporation was filed on February 6, 2020 with the Secretary of State of the State of Delaware. The Ninth Amended and Restated Certificate of Incorporation was filed on November 19, 2020 with the Secretary of State of the State of Delaware, and was further amended by a Certificate of Amendment filed with the Secretary of State of the State of Delaware on March 15, 2021.
3. That the Board of Directors duly adopted resolutions proposing to amend and restate the Ninth Amended and Restated Certificate of Incorporation of this corporation, declaring said amendment and restatement to be advisable and in the best interests of this corporation and its stockholders, and authorizing the appropriate officers of this corporation to solicit the consent of the stockholders therefor, which resolution setting forth the proposed amendment and restatement is as follows:

RESOLVED, that the Ninth Amended and Restated Certificate of Incorporation of this corporation be amended and restated in its entirety to read as follows:

FIRST: The name of this corporation is Tempus Labs, Inc. (the “*Corporation*”).

SECOND: The address of the registered office of the Corporation in the State of Delaware is 1209 Orange Street, City of Wilmington, County of New Castle, Delaware 19801. The name of its registered agent at such address is The Corporation Trust Company.

THIRD: The purpose of the Corporation shall be to engage in any lawful act or activity for which a corporation may be organized under the DGCL.

FOURTH: The Corporation is authorized to issue four classes of stock to be designated, respectively, “Class A Common Stock,” “Class B Common Stock,” “Nonvoting Common Stock” and “Preferred Stock.” The total number of shares of all classes of stock which the Corporation is authorized to issue is 333,628,363 shares, of which (i) 195,865,548 shares shall be Class A Common Stock (the “*Class A Common Stock*”), (ii) 5,374,899 shares shall be Class B Common Stock (the “*Class B Common Stock*”), (iii) 66,946,627 shares shall be Nonvoting Common Stock (the “*Nonvoting Common Stock*”), and (iv) 65,441,289 shares shall be Preferred Stock (“*Preferred Stock*”).

FIFTH: Each share of Class A Common Stock and Class B Common Stock (referred to herein, collectively, as the “*Voting Common Stock*”) shall have a par value of \$0.0001 per share. Each share of Nonvoting Common Stock shall have a par value of \$0.0001 per share. The Voting Common Stock and Nonvoting Common Stock are referred to herein, collectively, as the “*Common Stock*”.

SIXTH: 10,000,000 of the authorized shares of Preferred Stock are hereby designated “Series A Preferred Stock” (referred to herein as the “*Series A Preferred Stock*”), 5,374,899 of the authorized shares of Preferred Stock are hereby designated “Series B Preferred Stock” (referred to herein as the “*Series B Preferred Stock*”), 2,500,000 of the authorized shares of Preferred Stock are hereby designated “Series B-1 Preferred Stock” (referred to herein as the “*Series B-1 Preferred Stock*”), 4,191,173 of the authorized shares of Preferred Stock are hereby designated “Series B-2 Preferred Stock” (referred to herein as the “*Series B-2 Preferred Stock*”), 9,779,403 of the authorized shares of Preferred Stock are hereby designated “Series C Preferred Stock” (referred to herein as the “*Series C Preferred Stock*”), 8,534,330 of the authorized shares of Preferred Stock are hereby designated “Series D Preferred Stock” (referred to herein as the “*Series D Preferred Stock*”), 6,630,905 of the authorized shares of Preferred Stock are hereby designated “Series E Preferred Stock” (referred to herein as the “*Series E Preferred Stock*”), 8,077,674 of the authorized shares of Preferred Stock are hereby designated “Series F Preferred Stock” (referred to herein as the “*Series F Preferred Stock*”), 2,537,290 of the authorized shares of Preferred Stock are hereby designated “Series G Preferred Stock” (referred to herein as the “*Series G Preferred Stock*”), 3,453,139 of the authorized shares of Preferred Stock are hereby designated “Series G-2 Preferred Stock” (referred to herein as the “*Series G-2 Preferred Stock*”) and 4,362,476 of the authorized shares of Preferred Stock are hereby designated “Series G-3 Preferred Stock” (referred to herein as the “*Series G-3 Preferred Stock*”). Each share of Series A Preferred Stock, Series B Preferred Stock, Series B-1 Preferred Stock, Series B-2 Preferred Stock, Series C Preferred Stock, Series D Preferred Stock, Series E Preferred Stock, Series F Preferred Stock, Series G Preferred Stock, Series G-2 Preferred Stock and Series G-3 Preferred Stock shall have a par value of \$0.0001 per share.

SEVENTH: The rights, preferences, privileges, restrictions and other matters relating to the Common Stock and Preferred Stock are as follows:

A. COMMON STOCK

The Common Stock shall have the following rights, preferences, powers, privileges and restrictions, qualifications and limitations.

1. General. The voting, dividend, liquidation and other rights, powers and preferences of the holders of the Class A Common Stock, Class B Common Stock and Nonvoting Common Stock are subject to and qualified by the rights, powers and preferences of the holders of the Preferred Stock set forth herein. Except as otherwise provided in this Tenth Amended and Restated Certificate of Incorporation, as amended (the “**Restated Certificate**”), or required by applicable law, shares of Class A Common Stock, Class B Common Stock and Nonvoting Common Stock shall have the same rights, privileges and powers, rank equally (including as to dividends and distributions, and upon any liquidation, dissolution, distribution of assets or winding up of the Corporation), share ratably and be identical in all respects and as to all matters.

2. Voting. Except as otherwise required by applicable law, at all meetings of stockholders and on all matters submitted to a vote of stockholders of the Corporation generally (including written actions in lieu of meetings), each holder of the Class A Common Stock shall be entitled to one (1) vote for each share of Class A Common Stock held of record by such holder, and each holder of Class B Common Stock shall be entitled to fifteen (15) votes for each share of Class B Common Stock held of record by such holder. Except as otherwise required by applicable law or provided in this Restated Certificate, the holders of shares of Class A Common Stock and Class B Common Stock, as such, shall (a) at all times vote together as a single class on all matters (including the election of directors) submitted to a vote of the stockholders of the Corporation generally, (b) be entitled to notice of any stockholders’ meeting in accordance with the Amended and Restated Bylaws of the Corporation (as the same may be amended and/or restated from time to time, the “**Bylaws**”), and (c) be entitled to vote upon such matters and in such manner as may be provided by applicable law; provided, however, that, except as otherwise required by law, holders of Voting Common Stock, as such, shall not be entitled to vote on any amendment to this Restated Certificate that relates solely to the terms of one or more outstanding series of Preferred Stock if the holders of such affected series are entitled, either separately or together with the holders of one or more other such series, to vote thereon pursuant to the Restated Certificate or pursuant to the DGCL. The holders of Nonvoting Common Stock shall have no voting rights, except as required by law. There shall be no cumulative voting. Subject to Sections 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9 and 3.10 of Part B below, the number of authorized shares of Class A Common Stock, Class B Common Stock, Nonvoting Common Stock or Preferred Stock may be increased or decreased (but not below (i) the number of shares thereof then outstanding and (ii) with respect to the Class A Common Stock, the number of shares of Class A Common Stock reserved pursuant to Section 4 of Part A of this Article Seventh) by (in addition to any vote of the holders of one or more series of Preferred Stock that may be required by the terms of this Restated Certificate) the

affirmative vote of the holders of capital stock representing a majority of the voting power of all the then-outstanding shares of capital stock of the Corporation entitled to vote thereon, irrespective of the provisions of Section 242(b)(2) of DGCL, and no vote of the holders of any shares of Nonvoting Common Stock, voting as a separate class, shall be required therefor.

3. Conversion.

3.1 Optional Conversion of Class B Common Stock. Each share of Class B Common Stock shall be convertible into one (1) fully paid and nonassessable share of Class A Common Stock at the option of the holder thereof at any time upon written notice to the Corporation. Before any holder of Class B Common Stock shall be entitled to convert any shares of Class B Common Stock into shares of Class A Common Stock, such holder shall surrender the certificate or certificates therefor (if any), duly endorsed, at the principal corporate office of the Corporation or of any transfer agent for the Class B Common Stock, and shall provide written notice to the Corporation at its principal corporate office, of such conversion election and shall state therein the name or names (i) in which the certificate or certificates representing the shares of Class A Common Stock into which the shares of Class B Common Stock are so converted are to be issued (if such shares of Class A Common Stock are certificated) or (ii) in which such shares of Class A Common Stock are to be registered in book-entry form (if such shares of Class A Common Stock are uncertificated). If the shares of Class A Common Stock into which the shares of Class B Common Stock are to be converted are to be issued in a name or names other than the name of the holder of the shares of Class B Common Stock being converted, such notice shall be accompanied by a written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the holder. The Corporation shall, as soon as practicable thereafter, issue and deliver at such office to such holder, or to the nominee or nominees of such holder, a certificate or certificates representing the number of shares of Class A Common Stock to which such holder shall be entitled upon such conversion (if such shares of Class A Common Stock are certificated) or shall register such shares of Class A Common Stock in book-entry form (if such shares of Class A Common Stock are uncertificated). Such conversion shall be deemed to be effective immediately prior to the close of business on the date of such surrender of the shares of Class B Common Stock to be converted following or contemporaneously with the provision of written notice of such conversion election as required by this Section 3.1, the shares of Class A Common Stock issuable upon such conversion shall be deemed to be outstanding as of such time, and the Person or Persons entitled to receive the shares of Class A Common Stock issuable upon such conversion shall be deemed to be the record holder or holders of such shares of Class A Common Stock as of such time.

3.2 Automatic Conversion of Class B Common Stock. Each share of Class B Common Stock shall automatically, without further action by the Corporation or the holder thereof, convert into one (1) fully paid and nonassessable share of Class A Common Stock upon the occurrence of any event described below:

3.2.1 the date that is twenty (20) years from the Effective Time;

3.2.2 the first date on which Eric P. Lefkofsky and his Controlled Affiliates (as defined in Section 5.1.1(g) below) collectively own less than 10,000,000 shares of capital stock of the Corporation, as adjusted for any stock splits, stock dividends, combinations, subdivisions, recapitalizations or the like;

3.2.3 the date on which Eric P. Lefkofsky is no longer providing services to the Company as an executive officer or member of the Board of Directors (the “**Board**”); or

3.2.4 any sale, assignment, transfer, conveyance, hypothecation or other disposition of any legal or beneficial interest in such share, whether or not for value and whether voluntary or involuntary or by operation of law (a “**Transfer**”), other than a Transfer by a holder of Class B Common Stock to any of its Controlled Affiliates.

3.3 Mandatory Conversion of Nonvoting Common Stock. All outstanding shares of Nonvoting Common Stock shall automatically be converted into shares of Class A Common Stock at the Nonvoting Mandatory Conversion Time (as defined below). Section 5 of Part B of this Article Seventh states the mandatory conversion conditions and mechanics.

4. Reservation of Stock. The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Class A Common Stock, solely for the purpose of effecting the conversion of the shares of Class B Common Stock, such number of shares of Class A Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of Class B Common Stock into shares of Class A Common Stock.

B. PREFERRED STOCK

The Preferred Stock shall have the following rights, preferences, powers, privileges and restrictions, qualifications and limitations. Unless otherwise indicated, references to “Sections” in this Part B of this Article Seventh refer to sections of Part B of this Article Seventh.

1. Dividends.

1.1 Series G-3 PIK Dividends. From and after the date of the issuance of any share of Series G-3 Preferred Stock, dividends shall accrue on such share of Series G-3 Preferred Stock, at the rate of four percent (4.0%) per annum on the sum of (i) the Series G-3 Original Issue Price (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such class or series) plus (ii) all accrued but unpaid dividends thereon. Such dividends on the shares of Series G-3 Preferred Stock shall accrue from day to day, whether or not declared and whether or not there are any funds of the Corporation legally available for the payment of dividends, and shall be cumulative. To the extent permitted by applicable law, the Corporation shall pay all of the accrued dividends on shares of Series G-3 Preferred Stock in fully paid and non-assessable shares of Series G-3 Preferred Stock (such dividends being the “**Series G-3 PIK Dividends**”). The Series G-3 PIK Dividends shall be paid by delivering to each record holder of shares of Series G-3 Preferred Stock a number of whole shares of Series G-3 Preferred Stock determined by dividing (x) the accrued and unpaid dividends on the Series G-3 Preferred Stock on the applicable Series G-3 Dividend Payment Date by (y) the Series G-3 Original Issue Price (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such class or

series), on January 15 of each year (or the following business day, each such date, a “**Series G-3 Dividend Payment Date**”). If and to the extent that any portion of the accrued but unpaid dividends required to be paid on a Series G-3 Dividend Payment Date are not paid on such Series G-3 Dividend Payment Date, such unpaid portion of the dividends on the Series G-3 Preferred Stock shall accumulate and compound on the applicable Series G-3 Dividend Payment Date and subject to the provisions of this Subsection 1.1 shall be payable on the following Series G-3 Dividend Payment Date, in each case whether or not declared by the Board. All Series G-3 PIK Dividends on the shares of Series G-3 Preferred Stock shall be prior to and in preference to any dividend paid with respect to shares of Series G Preferred Stock, Series F Preferred Stock, Series E Preferred Stock, Series D Preferred Stock, Series C Preferred Stock, Series B-2 Preferred Stock, Series B-1 Preferred Stock and Series B Preferred Stock, Series A Preferred Stock, Common Stock or any other class or series of capital stock of the Corporation ranking junior to shares of Series G-3 Preferred Stock in respect of payment of dividends, and except as provided herein, shall be paid before any dividends are declared and paid, or any other distributions or redemptions are made, with respect to shares of Series A Preferred Stock, Common Stock (other than dividends on shares of Common Stock payable in shares of Common Stock) or other classes or series of capital stock of the Corporation ranking junior to shares of Series G-3 Preferred Stock in respect of payment of dividends; provided, however, that for clarity, Series F Accruing Dividends, Series E Accruing Dividends, Series D Accruing Dividends, Series C Accruing Dividends, Series B-2 Accruing Dividends, Series B-1 Accruing Dividends, Series B Accruing Dividends, and Series A Accruing Dividends may be paid in respect of shares of Series F Preferred Stock, Series E Preferred Stock, Series D Preferred Stock, Series C Preferred Stock, Series B-2 Preferred Stock, Series B-1 Preferred Stock, Series B Preferred Stock, and Series A Preferred Stock to the extent holders of such shares have so elected to receive current cash payments (or to continue to receive current cash payments) as provided in the applicable subsections of this Section 1.

1.2 Accruing Series G Dividends. From and after the date of the issuance of any share of Series G Preferred Stock, dividends shall accrue on such share of Series G Preferred Stock, at the rate of six percent (6.0%) per annum on the sum of (i) the Series G Original Issue Price (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such class or series) plus (ii) all accrued but unpaid dividends thereon (the “**Series G Accruing Dividends**”). Series G Accruing Dividends shall accrue from day to day, whether or not declared and whether or not there are any funds of the Corporation legally available for the payment of dividends, and shall be cumulative; provided, however, that except as set forth in Subsection 2.3, Subsection 2.4, Subsection 2.5, Subsection 2.6, Subsection 2.7, Subsection 2.8, Subsection 2.9, Subsection 2.10, Subsection 4.3.1, Subsection 5.2 and Section 6, such Series G Accruing Dividends shall be payable only when, as and if declared by the Board of Directors of the Corporation. All Series G Accruing Dividends on the shares of Series G Preferred Stock shall be *pari passu* to any dividend paid with respect to shares of Series F Preferred Stock, Series E Preferred Stock, Series D Preferred Stock, Series C Preferred Stock, Series B-2 Preferred Stock, Series B-1 Preferred Stock and Series B Preferred Stock and prior to and in preference to any dividend on any shares of Series A Preferred Stock, Common Stock or any other class or series of capital stock of the Corporation ranking junior to shares of Series G Preferred Stock in respect of payment of dividends, and except as provided herein, shall be paid before any dividends are declared and paid, or any other distributions or redemptions are made, with respect to shares of Series A Preferred Stock, Common Stock (other than dividends on shares of Common Stock payable in shares of Common Stock) or other classes

or series of capital stock of the Corporation ranking junior to shares of Series G Preferred Stock in respect of payment of dividends; provided, however, that for clarity, Series F Accruing Dividends, Series E Accruing Dividends, Series D Accruing Dividends, Series C Accruing Dividends, Series B-2 Accruing Dividends, Series B-1 Accruing Dividends, Series B Accruing Dividends, and Series A Accruing Dividends may be paid in respect of shares of Series F Preferred Stock, Series E Preferred Stock, Series D Preferred Stock, Series C Preferred Stock, Series B-2 Preferred Stock, Series B-1 Preferred Stock, Series B Preferred Stock, and Series A Preferred Stock to the extent holders of such shares have so elected to receive current cash payments (or to continue to receive current cash payments) as provided in the applicable subsections of this Section 1.

1.3 Accruing Series F Dividends, Accruing Series E Dividends, Accruing Series D Dividends and Accruing Series C Dividends.

From and after the date of the issuance of any share of Series F Preferred Stock, any share of Series E Preferred Stock, any share of Series D Preferred Stock and any share of Series C Preferred Stock, dividends shall accrue on such share of Series F Preferred Stock, Series E Preferred Stock, Series D Preferred Stock or Series C Preferred Stock, as applicable, at the rate of six percent (6.0%) per annum on the sum of (i) the Series F Original Issue Price (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such class or series), the Series E Original Issue Price (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such class or series), the Series D Original Issue Price (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such class or series), or the Series C Original Issue Price (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such class or series), as applicable, plus (ii) all accrued but unpaid dividends thereon (as applicable, the “**Series F Accruing Dividends**,” “**Series E Accruing Dividends**,” “**Series D Accruing Dividends**” or the “**Series C Accruing Dividends**”). Series F Accruing Dividends, Series E Accruing Dividends, Series D Accruing Dividends and Series C Accruing Dividends shall accrue from day to day, whether or not declared and whether or not there are any funds of the Corporation legally available for the payment of dividends, and shall be cumulative; provided, however, that except as set forth in Subsection 2.4, Subsection 2.5, Subsection 2.6, Subsection 2.7, Subsection 2.8, Subsection 2.9, Subsection 2.10, Subsection 4.3.1, Subsection 5.2 and Section 6, or unless a holder of shares of Preferred Stock has made a prior written election delivered to the Corporation to receive payment of such accrued dividends in cash, such Series F Accruing Dividends, Series E Accruing Dividends, Series D Accruing Dividends and Series C Accruing Dividends shall be payable only when, as and if declared by the Board of Directors of the Corporation. If and to the extent that a holder has made such election, the Corporation shall pay all of the Series F Accruing Dividends, the Series E Accruing Dividends, the Series D Accruing Dividends and the Series C Accruing Dividends on the applicable shares of Preferred Stock held by such holder in cash on January 15 of each year (or the following business day, each such date, a “**Dividend Payment Date**”), but only to the extent out of funds legally available therefor; provided, that in the event any such holder makes such election, the Series F Accruing Dividends, the Series E Accruing Dividends, the Series D Accruing Dividends and the Series C Accruing Dividends with respect to the applicable shares of Preferred Stock held by such holder shall accrue on such shares at the rate of five percent (5.0%) per annum rather than six percent (6.0%) per annum. If and to the extent that any portion of the accrued but unpaid dividends required to be paid on a Dividend Payment Date are not paid on such Dividend Payment Date, such unpaid portion of the Series F Accruing Dividends, Series E

Accruing Dividends, Series D Accruing Dividends or Series C Accruing Dividends shall accumulate and compound on the applicable Dividend Payment Date and subject to the provisions of this Subsection 1.2 shall be payable on the following Dividend Payment Date, in each case whether or not declared by the Board of Directors of the Corporation. All Series F Accruing Dividends on the shares of Series F Preferred Stock, Series E Accruing Dividends on the shares of Series E Preferred Stock, Series D Accruing Dividends on the shares of Series D Preferred Stock and Series C Accruing Dividends on the shares of Series C Preferred Stock shall be *pari passu* to any dividend paid with respect to each other and with respect to shares of Series G Preferred Stock, Series B-2 Preferred Stock, Series B-1 Preferred Stock and Series B Preferred Stock and prior to and in preference to any dividend on any shares of Series A Preferred Stock, Common Stock or any other class or series of capital stock of the Corporation ranking junior to shares of Series F Preferred Stock, Series E Preferred Stock, Series D Preferred Stock and Series C Preferred Stock in respect of payment of dividends, and except as provided herein, shall be paid before any dividends are declared and paid, or any other distributions or redemptions are made, with respect to shares of Series A Preferred Stock, Common Stock (other than dividends on shares of Common Stock payable in shares of Common Stock) or other classes or series of capital stock of the Corporation ranking junior to shares of Series F Preferred Stock, Series E Preferred Stock, Series D Preferred Stock and Series C Preferred Stock in respect of payment of dividends; provided, however, that for clarity, Series B-2 Accruing Dividends, Series B-1 Accruing Dividends, Series B Accruing Dividends, and Series A Accruing Dividends may be paid in respect of shares of Series B-2 Preferred Stock, Series B-1 Preferred Stock, Series B Preferred Stock, and Series A Preferred Stock to the extent holders of such shares have so elected to receive current cash payments (or to continue to receive current cash payments) as provided in the applicable subsections of this Section 1.

1.4 Accruing Series B-2 Dividends. From and after the date of the issuance of any share of Series B-2 Preferred Stock, dividends shall accrue on such share of Series B-2 Preferred Stock at the rate of five percent (5.0%) per annum on the sum of (i) the Series B-2 Original Issue Price (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such class or series) plus (ii) all accrued but unpaid dividends thereon (the “**Series B-2 Accruing Dividends**”). Series B-2 Accruing Dividends shall accrue from day to day, whether or not declared and whether or not there are any funds of the Corporation legally available for the payment of dividends, and shall be cumulative. All Series B-2 Accruing Dividends shall be paid in cash on each Dividend Payment Date, but only to the extent out of funds legally available therefor, or upon a Liquidation Event, Deemed Liquidation Event or conversion, as set forth herein; provided, however, that the holders of a majority of the outstanding shares of Series B-2 Preferred Stock may elect, in their sole discretion and on behalf of all of the holders of shares of Series B-2 Preferred Stock, for the Corporation to not pay all or any portion of the Series B-2 Accruing Dividends upon ten (10) days’ advance notice to the Board of Directors of the Corporation. If and to the extent that any portion of the Series B-2 Accruing Dividends are not paid on a Dividend Payment Date by reason of such election or otherwise, such unpaid portion of the Series B-2 Accruing Dividends shall accumulate and compound on the applicable Dividend Payment Date whether or not declared by the Board of Directors of the Corporation. All Series B-2 Accruing Dividends on the shares of Series B-2 Preferred Stock shall be *pari passu* to any dividend paid with respect to shares of Series G Preferred Stock, Series F Preferred Stock, Series E Preferred Stock, Series D Preferred Stock, Series C Preferred Stock, Series B-1 Preferred Stock and Series B Preferred Stock and prior to and

in preference to any dividend on any shares of Series A Preferred Stock, Common Stock or any other class or series of capital stock of the Corporation ranking junior to shares of Series B-2 Preferred Stock in respect of payment of dividends, and except as provided herein, shall be paid before any dividends are declared and paid, or any other distributions or redemptions are made, with respect to shares of Series A Preferred Stock or Common Stock (other than dividends on shares of Common Stock payable in shares of Common Stock) or other classes or series of capital stock of the Corporation ranking junior to shares of Series B-2 Preferred Stock in respect of payment of dividends; provided, however, that for clarity, Series B-1 Accruing Dividends, Series B Accruing Dividends, and Series A Accruing Dividends may be paid in respect of shares of Series B-1 Preferred Stock, Series B Preferred Stock, and Series A Preferred Stock to the extent holders of such shares have so elected to receive current cash payments (or to continue to receive current cash payments) as provided in the applicable subsections of this Section 1.

1.5 Accruing Series B-1 Dividends. From and after the date of the issuance of any share of Series B-1 Preferred Stock, dividends shall accrue on such share of Series B-1 Preferred Stock at the rate of five percent (5.0%) per annum on the sum of (i) the Series B-1 Original Issue Price (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such class or series) plus (ii) all accrued but unpaid dividends thereon (the "**Series B-1 Accruing Dividends**"). Series B-1 Accruing Dividends shall accrue from day to day, whether or not declared and whether or not there are any funds of the Corporation legally available for the payment of dividends, and shall be cumulative. All Series B-1 Accruing Dividends shall be paid in cash on each Dividend Payment Date, but only to the extent out of funds legally available therefor, or upon a Liquidation Event, Deemed Liquidation Event or conversion, as set forth herein; provided, however, that the holders of a majority of the outstanding shares of Series B-1 Preferred Stock may elect, in their sole discretion and on behalf of all of the holders of shares of Series B-1 Preferred Stock, for the Corporation to not pay all or any portion of the Series B-1 Accruing Dividends upon ten (10) days' advance notice to the Board of Directors of the Corporation. If and to the extent that any portion of the Series B-1 Accruing Dividends are not paid on a Dividend Payment Date by reason of such election or otherwise, such unpaid portion of the Series B-1 Accruing Dividends shall accumulate and compound on the applicable Dividend Payment Date whether or not declared by the Board of Directors of the Corporation. All Series B-1 Accruing Dividends on the shares of Series B-1 Preferred Stock shall be *pari passu* to any dividend paid with respect to shares of Series G Preferred Stock, Series F Preferred Stock, Series E Preferred Stock, Series D Preferred Stock, Series C Preferred Stock, Series B-2 Preferred Stock and Series B Preferred Stock and prior to and in preference to any dividend on any shares of Series A Preferred Stock, Common Stock or any other class or series of capital stock of the Corporation ranking junior to shares of Series B-1 Preferred Stock in respect of payment of dividends, and except as provided, herein, shall be paid before any dividends are declared and paid, or any other distributions or redemptions are made, with respect to shares of Series A Preferred Stock or Common Stock (other than dividends on shares of Common Stock payable in shares of Common Stock) or other classes or series of capital stock of the Corporation ranking junior to shares of Series B-1 Preferred Stock in respect of payment of dividends; provided, however, that for clarity, Series B Accruing Dividends and Series A Accruing Dividends may be paid in respect of shares of Series B Preferred Stock and Series A Preferred Stock to the extent holders of such shares have so elected to receive current cash payments (or to continue to receive current cash payments) as provided in the applicable subsections of this Section 1.

1.6 Accruing Series B Dividends. From and after the date of the issuance of any share of Series B Preferred Stock, dividends shall accrue on such share of Series B Preferred Stock at the rate of five percent (5.0%) per annum on the sum of (i) the Series B Original Issue Price (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such class or series) plus (ii) all accrued but unpaid dividends thereon (the “**Series B Accruing Dividends**”). Series B Accruing Dividends shall accrue from day to day, whether or not declared and whether or not there are any funds of the Corporation legally available for the payment of dividends, and shall be cumulative. All Series B Accruing Dividends shall be paid in cash on each Dividend Payment Date, but only to the extent out of funds legally available therefor, or upon a Liquidation Event, Deemed Liquidation Event or conversion, as set forth herein; provided, however, that the holders of a majority of the outstanding shares of Series B Preferred Stock may elect, in their sole discretion and on behalf of all of the holders of shares of Series B Preferred Stock, for the Corporation to not pay all or any portion of the Series B Accruing Dividends upon ten (10) days’ advance notice to the Board of Directors of the Corporation. If and to the extent that any portion of the Series B Accruing Dividends are not paid on a Dividend Payment Date by reason of such election or otherwise, such unpaid portion of the Series B Accruing Dividends shall accumulate and compound on the applicable Dividend Payment Date whether or not declared by the Board of Directors of the Corporation. All Series B Accruing Dividends on the shares of Series B Preferred Stock shall be *pari passu* to any dividend paid with respect to shares of Series G Preferred Stock, Series F Preferred Stock, Series E Preferred Stock, Series D Preferred Stock, Series C Preferred Stock, Series B-2 Preferred Stock and Series B-1 Preferred Stock and prior to and in preference to any dividend on any shares of Series A Preferred Stock, Common Stock or any other class or series of capital stock of the Corporation ranking junior to shares of Series B Preferred Stock in respect of payment of dividends, and except as provided herein, shall be paid before any dividends are declared and paid, or any other distributions or redemptions are made, with respect to shares of Series A Preferred Stock or Common Stock (other than dividends on shares of Common Stock payable in shares of Common Stock) or other classes or series of capital stock of the Corporation ranking junior to shares of Series B Preferred Stock in respect of payment of dividends; provided, however, that for clarity, Series A Accruing Dividends may be paid in respect of shares of Series A Preferred Stock to the extent holders of such shares have so elected to receive current cash payments (or to continue to receive current cash payments) as provided in the applicable subsections of this Section 1.

1.7 Accruing Series A Dividends. From and after the date of the issuance of any share of Series A Preferred Stock, dividends shall accrue on such share of Series A Preferred Stock at the rate of five percent (5.0%) per annum on the sum of (i) the Series A Original Issue Price (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such class or series) plus (ii) all accrued but unpaid dividends thereon (the “**Series A Accruing Dividends**”). Series A Accruing Dividends shall accrue from day to day, whether or not declared and whether or not there are any funds of the Corporation legally available for the payment of dividends, and shall be cumulative. All Series A Accruing Dividends shall be paid in cash on each Dividend Payment Date, but only (i) after the payment of all Series G Accruing Dividends, Series F Accruing Dividends, Series E Accruing Dividends, Series D Accruing Dividends, Series C Accruing Dividends, Series B-2 Accruing Dividends, Series B-1 Accruing Dividends and Series B Accruing Dividends, in each case, to the extent required to be paid on such Dividend Payment Date and (ii) to the extent out of

funds legally available therefor, or upon a Liquidation Event, Deemed Liquidation Event or conversion, as set forth herein; provided, however, that the holders of a majority of the outstanding shares of Series A Preferred Stock may elect, in their sole discretion and on behalf of all of the holders of shares of Series A Preferred Stock, for the Corporation to not pay all or any portion of the Series A Accruing Dividends upon ten (10) days' advance notice to the Board of Directors of the Corporation. If and to the extent that any portion of the Series A Accruing Dividends are not paid on a Dividend Payment Date by reason of such election or otherwise, such unpaid portion of the Series A Accruing Dividends shall accumulate and compound on the applicable Dividend Payment Date whether or not declared by the Board of Directors of the Corporation. All Series A Accruing Dividends on the shares of Series A Preferred Stock shall be prior to and in preference to any dividend on any shares of Common Stock or any other class or series of capital stock of the Corporation ranking junior to shares of Series A Preferred Stock in respect of payment of dividends and except as provided herein, shall be paid before any dividends are declared and paid, or any other distributions or redemptions are made, with respect to shares of Common Stock (other than dividends on shares of Common Stock payable in shares of Common Stock) or other classes or series of capital stock of the Corporation ranking junior to shares of Series A Preferred Stock in respect of payment of dividends.

1.8 Preferred Stock Dividends. The Corporation shall not declare, pay or set aside any dividends on shares of any other class or series of capital stock of the Corporation (other than as set forth in Section 1.1, Section 1.2, Section 1.3, Section 1.4, Section 1.5, Section 1.6, or Section 1.7 or dividends on shares of Common Stock payable in shares of Common Stock) unless (in addition to the obtaining of any consents required elsewhere in this Restated Certificate) the holders of the Preferred Stock then outstanding shall first receive, or simultaneously receive, a dividend on each outstanding share of Preferred Stock in an amount at least equal to (i) in the case of a dividend on Common Stock or any class or series that is convertible into Common Stock, that dividend per share of Preferred Stock as would equal the product of (A) the dividend payable on each share of such class or series determined, if applicable, as if all shares of such class or series had been converted into Common Stock and (B) the number of shares of Common Stock issuable upon conversion of a share of Preferred Stock, in each case calculated on the record date for determination of holders entitled to receive such dividend or (ii) in the case of a dividend on any class or series that is not convertible into Common Stock, at a rate per share of Preferred Stock determined by (A) dividing the amount of the dividend payable on each share of such class or series of capital stock by the original issuance price of such class or series of capital stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such class or series) and (B) multiplying such fraction by an amount equal to the Series A Original Issue Price, the Series B Original Issue Price, the Series B-1 Original Issue Price, the Series B-2 Original Issue Price, the Series C Original Issue Price, the Series D Original Issue Price, the Series E Original Issue Price, the Series F Original Issue Price, the Series G Original Issue Price, the Series G-2 Original Issue Price or the Series G-3 Original Issue Price, as the case may be; provided that, if the Corporation declares, pays or sets aside, on the same date, a dividend on shares of more than one class or series of capital stock of the Corporation, the dividend payable to the holders of Preferred Stock pursuant to this Section 1.7 shall be calculated based upon the dividend on the class or series of capital stock that would result in the highest Preferred Stock dividend.

1.9 Original Issue Price. For purposes of this Restated Certificate, (i) the “*Series A Original Issue Price*” means \$1.00 per share of Series A Preferred Stock, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series A Preferred Stock after the filing date hereof, (ii) the “*Series B Original Issue Price*” means \$1.8605 per share of Series B Preferred Stock, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series B Preferred Stock after the filing date hereof, (iii) the “*Series B-1 Original Issue Price*” means \$4.00 per share of Series B-1 Preferred Stock, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series B-1 Preferred Stock after the filing date hereof, (iv) the “*Series B-2 Original Issue Price*” means \$7.1579 per share of Series B-2 Preferred Stock, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series B-2 Preferred Stock after the filing date hereof, (v) the “*Series C Original Issue Price*” means \$7.1579 per share of Series C Preferred Stock, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series C Preferred Stock after the filing date hereof, (vi) the “*Series D Original Issue Price*” means \$9.3739 per share of Series D Preferred Stock, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series D Preferred Stock after the filing date hereof, (vii) the “*Series E Original Issue Price*” means \$16.7428 per share of Series E Preferred Stock, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series E Preferred Stock after the filing date hereof, (viii) the “*Series F Original Issue Price*” means \$24.7596 per share of Series F Preferred Stock, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series F Preferred Stock after the filing date hereof, (ix) the “*Series G Original Issue Price*” means \$38.3524 per share of Series G Preferred Stock, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series G Preferred Stock after the filing date hereof, (x) the “*Series G-2 Original Issue Price*” means \$57.3069 per share of Series G-2 Preferred Stock, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series G-2 Preferred Stock after the filing date hereof and (xi) the “*Series G-3 Original Issue Price*” means \$57.3069 per share of Series G-3 Preferred Stock, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series G-3 Preferred Stock after the filing date hereof.

2. Liquidation, Dissolution or Winding Up; Certain Mergers, Consolidations and Asset Sales.

In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event (as defined below), the proceeds or assets of the Corporation available for distribution to stockholders shall be distributed as follows:

2.1 Preferential Payments to Holders of Series G-3 Preferred Stock. The holders of shares of Series G-3 Preferred Stock then outstanding shall be entitled to be paid out of the proceeds or assets of the Corporation available for distribution to its stockholders, before any payment shall be made to the holders of Series G-2 Preferred Stock, Series G Preferred Stock,

Series F Preferred Stock, Series E Preferred Stock, Series D Preferred Stock, Series C Preferred Stock, Series B-2 Preferred Stock, Series B-1 Preferred Stock, Series B Preferred Stock, Series A Preferred Stock or Common Stock by reason of their ownership thereof, an amount per share equal to the greater of (i) 1.0 times the Series G-3 Original Issue Price, plus any accrued but unpaid Series G-3 PIK Dividends, together with any other declared but unpaid dividends thereon, or (ii) such amount per share as would have been payable had all shares of Series G-3 Preferred Stock been converted into Voting Common Stock pursuant to Section 4 immediately prior to such liquidation, dissolution, winding up or Deemed Liquidation Event (the amount payable pursuant to this sentence with respect to the Series G-3 Preferred Stock is hereinafter referred to as the “**Series G-3 Liquidation Amount**”). If upon any such liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, the proceeds and assets of the Corporation available for distribution to its stockholders shall be insufficient to pay the holders of shares of Series G-3 Preferred Stock the full amount to which they shall be entitled under this Section 2.1, the holders of shares of Series G-3 Preferred Stock shall share ratably in any distribution of the proceeds and assets available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full.

2.2 Preferential Payments to Holders of Series G-2 Preferred Stock. After the payment of all preferential amounts required to be paid to the holders of Series G-3 Preferred Stock pursuant to Section 2.1, the holders of shares of Series G-2 Preferred Stock then outstanding shall be entitled to be paid out of the proceeds or assets of the Corporation available for distribution to its stockholders, before any payment shall be made to the holders of Series G Preferred Stock, Series F Preferred Stock, Series E Preferred Stock, Series D Preferred Stock, Series C Preferred Stock, Series B-2 Preferred Stock, Series B-1 Preferred Stock, Series B Preferred Stock, Series A Preferred Stock or Common Stock by reason of their ownership thereof, an amount per share equal to the greater of (i) 1.0 times the Series G-2 Original Issue Price, plus any declared but unpaid dividends thereon, or (ii) such amount per share as would have been payable had all shares of Series G-2 Preferred Stock been converted into Voting Common Stock pursuant to Section 4 immediately prior to such liquidation, dissolution, winding up or Deemed Liquidation Event (the amount payable pursuant to this sentence with respect to the Series G-2 Preferred Stock is hereinafter referred to as the “**Series G-2 Liquidation Amount**”). If upon any such liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, the proceeds and assets of the Corporation available for distribution to its stockholders shall be insufficient to pay the holders of shares of Series G-2 Preferred Stock the full amount to which they shall be entitled under this Section 2.2, the holders of shares of Series G-2 Preferred Stock shall share ratably in any distribution of the proceeds and assets available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full.

2.3 Preferential Payments to Holders of Series G Preferred Stock. After the payment of all preferential amounts required to be paid to the holders of Series G-3 Preferred Stock and Series G-2 Preferred Stock pursuant to Sections 2.1 and 2.2, the holders of shares of Series G Preferred Stock then outstanding shall be entitled to be paid out of the proceeds or assets of the Corporation available for distribution to its stockholders, before any payment shall be made to the holders of Series F Preferred Stock, Series E Preferred Stock, Series D Preferred Stock,

Series C Preferred Stock, Series B-2 Preferred Stock, Series B-1 Preferred Stock, Series B Preferred Stock, Series A Preferred Stock or Common Stock by reason of their ownership thereof, an amount per share equal to the greater of (i) 1.0 times the Series G Original Issue Price, plus any Series G Accruing Dividends accrued but unpaid thereon, together with any other dividends declared but unpaid thereon, or (ii) such amount per share as would have been payable had all shares of Series G Preferred Stock been converted into Voting Common Stock pursuant to Section 4 immediately prior to such liquidation, dissolution, winding up or Deemed Liquidation Event (the amount payable pursuant to this sentence with respect to the Series G Preferred Stock is hereinafter referred to as the “**Series G Liquidation Amount**”). If upon any such liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, the proceeds and assets of the Corporation available for distribution to its stockholders shall be insufficient to pay the holders of shares of Series G Preferred Stock the full amount to which they shall be entitled under this Section 2.3, the holders of shares of Series G Preferred Stock shall share ratably in any distribution of the proceeds and assets available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full.

2.4 Preferential Payments to Holders of Series F Preferred Stock. After the payment of all preferential amounts required to be paid to the holders of Series G-3 Preferred Stock, Series G-2 Preferred Stock and Series G Preferred Stock pursuant to Sections 2.1, 2.2 and 2.3, the holders of shares of Series F Preferred Stock then outstanding shall be entitled to be paid out of the proceeds or assets of the Corporation available for distribution to its stockholders, before any payment shall be made to the holders of Series E Preferred Stock, Series D Preferred Stock, Series C Preferred Stock, Series B-2 Preferred Stock, Series B-1 Preferred Stock, Series B Preferred Stock, Series A Preferred Stock or Common Stock by reason of their ownership thereof, an amount per share equal to the greater of (i) 1.0 times the Series F Original Issue Price, plus any Series F Accruing Dividends accrued but unpaid thereon, together with any other dividends declared but unpaid thereon, or (ii) such amount per share as would have been payable had all shares of Series F Preferred Stock been converted into Voting Common Stock pursuant to Section 4 immediately prior to such liquidation, dissolution, winding up or Deemed Liquidation Event (the amount payable pursuant to this sentence with respect to the Series F Preferred Stock is hereinafter referred to as the “**Series F Liquidation Amount**”). If upon any such liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, the proceeds and assets of the Corporation available for distribution to its stockholders shall be insufficient to pay the holders of shares of Series F Preferred Stock the full amount to which they shall be entitled under this Section 2.4, the holders of shares of Series F Preferred Stock shall share ratably in any distribution of the proceeds and assets available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full.

2.5 Preferential Payments to Holders of Series E Preferred Stock. After the payment of all preferential amounts required to be paid to the holders of Series G-3 Preferred Stock, Series G-2 Preferred Stock, Series G Preferred Stock and Series F Preferred Stock pursuant to Sections 2.1, 2.2, 2.3 and 2.4, the holders of shares of Series E Preferred Stock then outstanding shall be entitled to be paid out of the proceeds or assets of the Corporation available for distribution to its stockholders, before any payment shall be made to the holders of Series D Preferred Stock, Series C Preferred Stock, Series B-2 Preferred Stock, Series B-1 Preferred Stock, Series B

Preferred Stock, Series A Preferred Stock or Common Stock by reason of their ownership thereof, an amount per share equal to the greater of (i) 1.0 times the Series E Original Issue Price, plus any Series E Accruing Dividends accrued but unpaid thereon, together with any other dividends declared but unpaid thereon, or (ii) such amount per share as would have been payable had all shares of Series E Preferred Stock been converted into Voting Common Stock pursuant to Section 4 immediately prior to such liquidation, dissolution, winding up or Deemed Liquidation Event (the amount payable pursuant to this sentence with respect to the Series E Preferred Stock is hereinafter referred to as the “**Series E Liquidation Amount**”). If upon any such liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, the proceeds and assets of the Corporation available for distribution to its stockholders shall be insufficient to pay the holders of shares of Series E Preferred Stock the full amount to which they shall be entitled under this Section 2.5, the holders of shares of Series E Preferred Stock shall share ratably in any distribution of the proceeds and assets available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full.

2.6 Preferential Payments to Holders of Series D Preferred Stock. After the payment of all preferential amounts required to be paid to the holders of Series G-3 Preferred Stock, Series G-2 Preferred Stock, Series G Preferred Stock, Series F Preferred Stock and Series E Preferred Stock pursuant to Sections 2.1, 2.2, 2.3, 2.4 and 2.5, the holders of shares of Series D Preferred Stock then outstanding shall be entitled to be paid out of the proceeds or assets of the Corporation available for distribution to its stockholders, before any payment shall be made to the holders of Series C Preferred Stock, Series B-2 Preferred Stock, Series B-1 Preferred Stock, Series B Preferred Stock, Series A Preferred Stock or Common Stock by reason of their ownership thereof, an amount per share equal to the greater of (i) 1.0 times the Series D Original Issue Price, plus any Series D Accruing Dividends accrued but unpaid thereon, together with any other dividends declared but unpaid thereon, or (ii) such amount per share as would have been payable had all shares of Series D Preferred Stock been converted into Voting Common Stock pursuant to Section 4 immediately prior to such liquidation, dissolution, winding up or Deemed Liquidation Event (the amount payable pursuant to this sentence with respect to the Series D Preferred Stock is hereinafter referred to as the “**Series D Liquidation Amount**”). If upon any such liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, the proceeds and assets of the Corporation available for distribution to its stockholders shall be insufficient to pay the holders of shares of Series D Preferred Stock the full amount to which they shall be entitled under this Section 2.6, the holders of shares of Series D Preferred Stock shall share ratably in any distribution of the proceeds and assets available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full.

2.7 Preferential Payments to Holders of Series C Preferred Stock. After the payment of all preferential amounts required to be paid to the holders of Series G-3 Preferred Stock, Series G-2 Preferred Stock, Series G Preferred Stock, Series F Preferred Stock, Series E Preferred Stock and Series D Preferred Stock pursuant to Sections 2.1, 2.2, 2.3, 2.4, 2.5 and 2.6, the holders of shares of Series C Preferred Stock then outstanding shall be entitled to be paid out of the proceeds or assets of the Corporation available for distribution to its stockholders, before any payment shall be made to the holders of Series B-2 Preferred Stock, Series B-1 Preferred Stock, Series B Preferred Stock, Series A Preferred Stock or Common Stock by reason of their

ownership thereof, an amount per share equal to 1.0 times the Series C Original Issue Price, plus any Series C Accruing Dividends accrued but unpaid thereon, together with any other dividends declared but unpaid thereon (the amount payable pursuant to this sentence with respect to the Series C Preferred Stock is hereinafter referred to as the “**Series C Liquidation Amount**”). If upon any such liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, the proceeds and assets of the Corporation available for distribution to its stockholders shall be insufficient to pay the holders of shares of Series C Preferred Stock the full amount to which they shall be entitled under this [Section 2.7](#), the holders of shares of Series C Preferred Stock shall share ratably in any distribution of the proceeds and assets available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full.

[2.8 Preferential Payments to Holders of Series B-2 Preferred Stock, Series B-1 Preferred Stock and Series B Preferred Stock](#). After the payment of all preferential amounts required to be paid to the holders of Series G-3 Preferred Stock, Series G-2 Preferred Stock, Series G Preferred Stock, Series F Preferred Stock, Series E Preferred Stock, Series D Preferred Stock and Series C Preferred Stock pursuant to [Sections 2.1, 2.2, 2.3, 2.4, 2.5, 2.6](#) and [2.7](#), the holders of shares of Series B-2 Preferred Stock, Series B-1 Preferred Stock and Series B Preferred Stock then outstanding shall be entitled to be paid out of the proceeds or assets of the Corporation available for distribution to its stockholders, before any payment shall be made to the holders of Series A Preferred Stock or Common Stock by reason of their ownership thereof, an amount per share equal to (i) with respect to each share of Series B-2 Preferred Stock, the greater of (A) 1.0 times the Series B-2 Original Issue Price, plus any Series B-2 Accruing Dividends accrued but unpaid thereon, together with any other dividends declared but unpaid thereon, or (B) such amount per share as would have been payable had all shares of Series B-2 Preferred Stock been converted into Voting Common Stock pursuant to [Section 4](#) immediately prior to such liquidation, dissolution, winding up or Deemed Liquidation Event (the amount payable pursuant to this sentence with respect to the Series B-2 Preferred Stock is hereinafter referred to as the “**Series B-2 Liquidation Amount**”), (ii) with respect to each share of Series B-1 Preferred Stock, the greater of (A) 1.0 times the Series B-1 Original Issue Price, plus any Series B-1 Accruing Dividends accrued but unpaid thereon, together with any other dividends declared but unpaid thereon, or (B) such amount per share as would have been payable had all shares of Series B-1 Preferred Stock been converted into Voting Common Stock pursuant to [Section 4](#) immediately prior to such liquidation, dissolution, winding up or Deemed Liquidation Event (the amount payable pursuant to this sentence with respect to the Series B-1 Preferred Stock is hereinafter referred to as the “**Series B-1 Liquidation Amount**”), and (iii) with respect to Series B Preferred Stock, the greater of (A) 1.0 times the Series B Original Issue Price, plus any Series B Accruing Dividends accrued but unpaid thereon, together with any other dividends declared but unpaid thereon, or (B) such amount per share as would have been payable had all shares of Series B Preferred Stock been converted into Voting Common Stock pursuant to [Section 4](#) immediately prior to such liquidation, dissolution, winding up or Deemed Liquidation Event (the amount payable pursuant to this sentence with respect to the Series B Preferred Stock is hereinafter referred to as the “**Series B Liquidation Amount**”). If upon any such liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, the proceeds and assets of the Corporation available for distribution to its stockholders shall be insufficient to pay the holders of shares of Series B-2 Preferred Stock, Series B-1 Preferred Stock and Series B Preferred Stock the full amount to which they shall be entitled under this [Section 2.8](#), the holders of shares of Series B-2

Preferred Stock, Series B-1 Preferred Stock and Series B Preferred Stock shall share ratably in any distribution of the proceeds and assets available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full.

2.9 Preferential Payments to Holders of Series A Preferred Stock. After the payment of all preferential amounts required to be paid to the holders of Series G-3 Preferred Stock, Series G-2 Preferred Stock, Series G Preferred Stock, Series F Preferred Stock, Series E Preferred Stock, Series D Preferred Stock, Series C Preferred Stock, Series B-2 Preferred Stock, Series B-1 Preferred Stock and Series B Preferred Stock pursuant to Sections 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7 and 2.8, the holders of shares of Series A Preferred Stock then outstanding shall be entitled to be paid out of the proceeds or assets of the Corporation available for distribution to its stockholders, before any payment shall be made to the holders of Common Stock by reason of their ownership thereof, an amount per share equal to the greater of (i) 1.0 times the Series A Original Issue Price, plus any Series A Accruing Dividends accrued but unpaid thereon, together with any other dividends declared but unpaid thereon, or (ii) such amount per share as would have been payable had all shares of Series A Preferred Stock been converted into Voting Common Stock pursuant to Section 4 immediately prior to such liquidation, dissolution, winding up or Deemed Liquidation Event (the amount payable pursuant to this sentence with respect to the Series A Preferred Stock is hereinafter referred to as the “*Series A Liquidation Amount*”). If upon any such liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, the proceeds and assets of the Corporation available for distribution to its stockholders shall be insufficient to pay the holders of shares of Series A Preferred Stock the full amount to which they shall be entitled under this Section 2.9, the holders of shares of Series A Preferred Stock shall share ratably in any distribution of the proceeds and assets available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full.

2.10 Distribution of Remaining Assets. After the payment of all preferential amounts required to be paid to the holders of Series G-3 Preferred Stock pursuant to Section 2.1, the payment of all preferential amounts required to be paid to the holders of Series G-2 Preferred Stock pursuant to Section 2.2, the payment of all preferential amounts required to be paid to the holders of Series G Preferred Stock pursuant to Section 2.3, the payment of all preferential amounts required to be paid to the holders of Series F Preferred Stock pursuant to Section 2.4, the payment of all preferential amounts required to be paid to the holders of Series E Preferred Stock pursuant to Section 2.5, the payment of all preferential amounts required to be paid to the holders of Series D Preferred Stock pursuant to Section 2.6, the payment of all preferential amounts required to be paid to the holders of Series C Preferred Stock pursuant to Section 2.7, the payment of all preferential amounts required to be paid to the holders of Series B-2 Preferred Stock, Series B-1 Preferred Stock and Series B Preferred Stock pursuant to Section 2.8, and the payment of all preferential amounts required to be paid to the holders of Series A Preferred Stock pursuant to Section 2.9, the remaining assets of the Corporation available for distribution to its stockholders, if any, shall be distributed among the holders of shares of Series C Preferred Stock and Common Stock, *pro rata* based on the number of shares then held by each such holder, treating for this purpose all such shares of Series C Preferred Stock as if they had been converted into Common Stock pursuant to this Restated Certificate immediately prior to such Liquidation Event or Deemed Liquidation Event; provided, however, that if the aggregate amount

which the holders of Series D Preferred Stock would otherwise be entitled to receive is less than \$18.7478 per share (as adjusted for any stock splits, stock dividends, combinations, subdivisions, recapitalizations or the like), then the remaining assets of the Corporation available for distribution to its stockholders, if any, shall be distributed among the holders of shares of Series C Preferred Stock (excluding, for this purpose, any shares of Series C Preferred Stock held at any time by Eric P. Lefkofsky or any entity in which Eric P. Lefkofsky owned or held, directly or indirectly, the power to direct the management and policies of such entity whether through the ownership of voting securities, contract or otherwise ("*Lefkofsky Shares*"), regardless of whether or not any of the Lefkofsky Shares were subsequently transferred and regardless of the subsequent holders of the Lefkofsky Shares) and Common Stock, *pro rata* based on the number of shares then held by each such holder, treating for this purpose all such shares of Series C Preferred Stock as if they had been converted into Common Stock pursuant to this Restated Certificate immediately prior to such Liquidation Event or Deemed Liquidation Event.

2.11 Deemed Liquidation Events.

2.11.1 Definition. Each of the following events shall be considered a "*Deemed Liquidation Event*" unless the Requisite Preferred Holders (as defined below) elect otherwise by written notice sent to the Corporation at least 10 days prior to the effective date of any such event:

(a) a merger or consolidation in which the Corporation is a constituent party (or a subsidiary of the Corporation is a constituent party and the Corporation issues shares of its capital stock pursuant to such merger or consolidation) or (ii) a sale or issuance of shares by the Corporation of its voting stock (other than pursuant to a customary venture capital financing of the Corporation where the holder(s) of shares of capital stock of the Corporation outstanding immediately prior to such venture capital financing continue to hold shares which represent, immediately following such venture capital financing, at least a majority, by voting power, of the outstanding shares of capital stock), except in the case of clause (i) or (ii), any such merger or consolidation involving the Corporation or a subsidiary or any such sale or issuance by the Corporation in which the holder(s) of shares of capital stock of the Corporation outstanding immediately prior to such merger or consolidation continue to hold shares which represent, or are converted into or exchanged for shares of capital stock that represent, immediately following such merger or consolidation, at least a majority, by voting power, of the outstanding shares of capital stock of (1) the surviving or resulting corporation or (2) if the surviving or resulting corporation is a wholly owned subsidiary of another corporation immediately following such merger or consolidation, the parent corporation of such surviving or resulting corporation, in substantially the same proportions and with substantially the same terms as held immediately prior to such merger or consolidation; or

(b) the sale, lease, transfer, exclusive license or other disposition, in a single transaction or series of related transactions, by the Corporation or any subsidiary of the Corporation of all or substantially all the assets or intellectual property of the Corporation and its subsidiaries taken as a whole or the sale or disposition (whether by merger or otherwise) of one or more subsidiaries of the Corporation if substantially all of the assets or intellectual property of the Corporation and its subsidiaries taken as a whole are held by such subsidiary or subsidiaries, except where such sale, lease, transfer, exclusive license or other disposition is to a wholly owned subsidiary of the Corporation.

(c) Notwithstanding the foregoing Subsections 2.11.1(a) and 2.11.1(b), (i) no such transaction or series of related transactions (including by way of merger, consolidation, recapitalization, reorganization, sale of securities or otherwise) solely effecting a “Public Offering” shall be deemed a Deemed Liquidation Event, and (ii) a Deemed Liquidation Event shall not include any such transaction effected solely by the issuance of voting securities by the Corporation or any of its Subsidiaries in a bona fide transaction for the purpose of raising capital for the Corporation or its Subsidiary where the holder(s) of shares of capital stock of the Corporation outstanding immediately prior to such transaction continue to hold shares which represent, immediately following such transaction, at least a majority, by voting power, of the outstanding shares of capital stock. “**Public Offering**” means any firm commitment underwritten sale of common equity securities of the Corporation (or any successor thereto, whether by merger, conversion, consolidation, recapitalization, reorganization or otherwise) pursuant to an effective registration statement under the “**Securities Act**” (defined as Securities Act of 1933, as amended, and applicable rules and regulations thereunder, and any successor to such statute, rules, or regulations; any reference herein to a specific section, rule, or regulation of the Securities Act shall be deemed to include any corresponding provisions of future law) filed with the Securities and Exchange Commission on Forms S-1 or S-3 (or any successor forms adopted by the Securities and Exchange Commission); provided, that the following shall not be considered a Public Offering: (i) any issuance of common equity securities in connection with and as consideration for a merger or acquisition, and (ii) any issuance of common equity securities or rights to acquire common equity securities to employees, officers, directors, consultants or other service providers of the Corporation or any of its Subsidiaries or others as part of an incentive or compensation plan, agreement or arrangement.

For the avoidance of doubt, nothing contained in this Section 2.11.1 or elsewhere in this Restated Certificate (other than the terms and conditions of Sections 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9 or 3.10, if applicable) shall require the consent or approval of holders of the outstanding shares of Series G-3 Preferred Stock, voting as a separate class, Series G-2 Preferred Stock, voting as a separate class, Series G Preferred Stock, voting as a separate class, Series F Preferred Stock, voting as a separate class, Series E Preferred Stock, voting as a separate class, shares of Series D Preferred Stock, voting as a separate class, or shares of Series C Preferred Stock, voting as a separate class, to effect a Deemed Liquidation Event.

2.11.2 Effecting a Deemed Liquidation Event.

(a) The Corporation shall not have the power to effect a Deemed Liquidation Event referred to in Section 2.11.1(a) unless the agreement or plan of merger or consolidation for such transaction (the “**Merger Agreement**”) provides that the consideration payable to the stockholders of the Corporation shall be allocated among the holders of capital stock of the Corporation in accordance with Sections 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9 and 2.10.

(b) In the event of a Deemed Liquidation Event referred to in Section 2.11.1(a) or 2.11.1(b), if the Corporation does not effect a dissolution of the Corporation under the DGCL within 90 days after such Deemed Liquidation Event, then (i) the Corporation shall send a written notice to each holder of Preferred Stock no later than the 90th day after the Deemed Liquidation Event advising such holders of their right (and the requirements to be met to secure such right) pursuant to the terms of the following clause (ii), and (ii) unless (A) the holders of a majority of the outstanding shares of Series G-3 Preferred Stock, voting as a separate class, (B) the holders of a majority of the outstanding shares of Series G-2 Preferred Stock, voting as a separate class, (C) the holders of a majority of the outstanding shares of Series G Preferred Stock, voting as a separate class, (D) the holders of a majority of the outstanding shares of Series F Preferred Stock, voting as a separate class, (E) the holders of a majority of the outstanding shares of Series E Preferred Stock, voting as a separate class, (F) the holders of at least sixty percent (60%) of the outstanding shares of Series D Preferred Stock, voting as a separate class, (G) the holders of at least sixty percent (60%) of the outstanding shares of Series C Preferred Stock, voting as a separate class, and (H) the holders of a majority of the outstanding shares of Series B-2 Preferred Stock, Series B-1 Preferred Stock, Series B Preferred Stock and Series A Preferred Stock, voting together as a separate class as measured on the basis of voting power set forth in this Restated Certificate, so request otherwise in a written instrument delivered to the Corporation not later than 120 days after such Deemed Liquidation Event, the Corporation shall use the consideration received by the Corporation for such Deemed Liquidation Event (net of any retained liabilities associated with the assets sold or technology licensed, as determined in good faith by the Board), together with any other assets of the Corporation available for distribution to its stockholders, all to the extent permitted by Delaware law governing distributions to stockholders (the “**Available Proceeds**”), on the 150th day after such Deemed Liquidation Event, to redeem all outstanding shares of Preferred Stock at a price per share equal to the Series G-3 Liquidation Amount, Series G-2 Liquidation Amount, Series G Liquidation Amount, Series F Liquidation Amount, Series E Liquidation Amount, Series D Liquidation Amount, Series C Liquidation Amount, Series B-2 Liquidation Amount, Series B-1 Liquidation Amount, Series B Liquidation Amount or Series A Liquidation Amount, as applicable. Notwithstanding the foregoing, in the event of a redemption pursuant to the preceding sentence, if the Available Proceeds are not sufficient to redeem all outstanding shares of Preferred Stock, the Corporation shall redeem each holder’s shares of Preferred Stock in the same order of priority as the payment of the Series G-3 Liquidation Amount, Series G-2 Liquidation Amount, Series G Liquidation Amount, Series F Liquidation Amount, Series E Liquidation Amount, Series D Liquidation Amount, Series C Liquidation Amount, Series B-2 Liquidation Amount, Series B-1 Liquidation Amount, Series B Liquidation Amount or Series A Liquidation Amount pursuant to Section 2, and shall redeem the remaining shares as soon as it may lawfully do so under Delaware law governing distributions to stockholders. The provisions of Sections 2.11.2(c), 2.11.2(d) and 2.11.2(e) shall apply to the redemption of the Preferred Stock pursuant to this Section 2.11.2(b). Prior to the distribution or redemption provided for in this Section 2.11.2(b), the Corporation shall not expend or dissipate the consideration received for such Deemed Liquidation Event, except to discharge expenses incurred in connection with such Deemed Liquidation Event or in the ordinary course of business. For the avoidance of doubt, to the extent any additional Available Proceeds related to such Deemed Liquidation Event become available for distribution to the Corporation’s stockholders pursuant to Delaware law after the date of redemption of the Preferred Stock, such amounts shall be allocated among the holders of such Preferred Stock and Common Stock in accordance with Sections 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9 and 2.10 as if the redemption had not occurred, and the price per share of the Preferred Stock shall be increased to an amount equal to the price per share that would have been paid to such holders if such additional Available Proceeds were available for

distribution to stockholders of the Corporation as of the date of the redemption of such shares of Preferred Stock (the “*Additional Redemption Price*”). The Corporation shall promptly pay any Additional Redemption Price to the former holders of Preferred Stock as such amounts become available for distribution to the Corporation’s stockholders pursuant to Delaware law.

(c) To effect the redemption contemplated by Section 2.11.2(b), the Corporation shall send written notice of the mandatory redemption (the “*Redemption Notice*”) to each holder of record of Preferred Stock not less than 40 days prior to such redemption date. Each Redemption Notice shall state:

(i) the number of shares of Series G-3 Preferred Stock, Series G-2 Preferred Stock, Series G Preferred Stock, Series F Preferred Stock, Series E Preferred Stock, Series D Preferred Stock, Series C Preferred Stock, Series B-2 Preferred Stock, Series B-1 Preferred Stock, Series B Preferred Stock and Series A Preferred Stock held by the holder that the Corporation shall redeem on the redemption date specified in the Redemption Notice;

(ii) the redemption date and the redemption price;

(iii) the date upon which the holder’s right to convert such shares terminates (as determined in accordance with Section 4.1); and

(iv) that the holder is to surrender to the Corporation, in the manner and at the place designated, his, her or its certificate or certificates representing the shares of Preferred Stock to be redeemed.

If the Corporation receives, on or prior to the 20th day after the date of delivery of the Redemption Notice to a holder of Preferred Stock, written notice from such holder that such holder elects to be excluded from the redemption of the Preferred Stock provided in this Section 2.11.2, then the shares of Preferred Stock registered on the books of the Corporation in the name of such holder at the time of the Corporation’s receipt of such notice shall thereafter be “*Excluded Shares*.” Excluded Shares shall not be redeemed or redeemable pursuant to this Section 2.11.2, whether on such redemption date or thereafter.

(d) On or before the applicable redemption date, each holder of shares of Preferred Stock to be redeemed on such redemption date, unless such holder has exercised his, her or its right to convert such shares as provided in Section 4, shall surrender the certificate or certificates representing such shares (or, if such registered holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation, in the manner and at the place designated in the Redemption Notice, and thereupon the redemption price for such shares shall be payable to the order of the person whose name appears on such certificate or certificates as the owner thereof. In the event less than all of the shares of Preferred Stock represented by a certificate are redeemed, a new certificate representing the unredeemed shares of Preferred Stock shall promptly be issued to such holder.

(e) If the Redemption Notice shall have been duly given, and if on the applicable redemption date the redemption price payable upon redemption of the shares of Preferred Stock to be redeemed on such redemption date is paid or tendered for payment or deposited with an independent payment agent so as to be available therefor in a timely manner, then notwithstanding that the certificates evidencing any of the shares of Preferred Stock so called for redemption shall not have been surrendered, dividends with respect to such shares of Preferred Stock shall cease to accrue after such redemption date and all rights with respect to such shares shall forthwith after the redemption date terminate, except only the right of the holders to receive the redemption price (including the Additional Redemption Price from time to time, if any) without interest upon surrender of their certificate or certificates therefor.

2.11.3 Amount Deemed Paid or Distributed. If the amount deemed paid or distributed in a Deemed Liquidation Event under Section 2 is made in property other than in cash, the fair market value of such property, determined as follows:

(a) For securities not subject to investment letters or other similar restrictions on free marketability,

(i) if traded on a securities exchange, the value shall be deemed to be the average of the closing prices of the securities on such exchange or market over the 30-period ending three days prior to the closing of such transaction;

(ii) if actively traded over-the-counter, the value shall be deemed to be the average of the closing bid prices over the 30-day period ending three days prior to the closing of such transaction; or

(iii) if there is no active public market, the value shall be the fair market value thereof, as determined in good faith by the Board.

(b) The method of valuation of securities subject to investment letters or other similar restrictions on free marketability (other than restrictions arising solely by virtue of a stockholder's status as an affiliate or former affiliate) shall take into account an appropriate discount (as determined in good faith by the Board) from the market value as determined pursuant to clause (a) above so as to reflect the approximate fair market value thereof.

2.12 Contingent Consideration and Indemnification. In the event of a Deemed Liquidation Event, unless (A) the holders of a majority of the outstanding shares of Series G-3 Preferred Stock, voting as a separate class, (B) the holders of a majority of the outstanding shares of Series G-2 Preferred Stock, voting as a separate class, (C) the holders of a majority of the outstanding shares of Series G Preferred Stock, voting as a separate class, (D) the holders of a majority of the outstanding shares of Series F Preferred Stock, voting as a separate class, (E) the holders of a majority of the outstanding shares of Series E Preferred Stock, voting as a separate class, (F) the holders of at least sixty percent (60%) of the outstanding shares of Series D Preferred Stock, voting as a separate class, (G) the holders of at least sixty percent (60%) of the outstanding shares of Series C Preferred Stock, voting as a separate class, and (H) the holders of a majority of the outstanding shares of Series B-2 Preferred Stock, Series B-1 Preferred Stock, Series B Preferred Stock and Series A Preferred Stock, voting together as a single class as measured on the basis of voting power set forth in this Restated Certificate (the holders described in clauses (A), (B), (C), (D), (E), (F), (G) and (H) referred to herein, collectively, as the "**Requisite Preferred**

Holders”), otherwise approve in writing, if any portion of the consideration payable to the stockholders of the Corporation in connection with a Deemed Liquidation Event is payable only upon the satisfaction of contingencies or is placed in escrow, a “holdback” or other similar account to secure the indemnity obligations of the stockholders (such consideration, the “**Additional Consideration**”), the definitive agreement with respect to such Deemed Liquidation Event shall provide that (a) the portion of the consideration that is not Additional Consideration (the “**Initial Consideration**”) shall be allocated among the holders of capital stock of the Corporation in accordance with Sections 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9 and 2.10 hereof as if the Initial Consideration were the only consideration payable in connection with such Deemed Liquidation Event, and (b) any Additional Consideration which becomes payable or distributable to the stockholders of the Corporation after the initial closing of such Deemed Liquidation Event shall be allocated among the holders of capital stock of the Corporation in strict accordance with Sections 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9 and 2.10 hereof after taking into account any previous payments of the Initial Consideration made to the stockholders of the Corporation pursuant to Sections 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9 and 2.10 hereof. In connection with the payment of such Additional Consideration, if the Series G-3 Preferred Stock, Series G-2 Preferred Stock, Series G Preferred Stock, Series F Preferred Stock, the Series E Preferred Stock, Series D Preferred Stock, Series C Preferred Stock, Series B-2 Preferred Stock, Series B-1 Preferred Stock, Series B Preferred Stock or Series A Preferred Stock did not convert to Common Stock immediately before the initial closing of the Deemed Liquidation Event and if the Series G-3 Preferred Stock, Series G-2 Preferred Stock, Series G Preferred Stock, Series F Preferred Stock, the Series E Preferred Stock, Series D Preferred Stock, Series C Preferred Stock, Series B-2 Preferred Stock, Series B-1 Preferred Stock, Series B Preferred Stock or Series A Preferred Stock had converted to Common Stock immediately before the initial closing of the Deemed Liquidation Event and the Series G-3 Preferred Stock, Series G-2 Preferred Stock, Series G Preferred Stock, Series F Preferred Stock, the Series E Preferred Stock, Series D Preferred Stock, Series C Preferred Stock, Series B-2 Preferred Stock, Series B-1 Preferred Stock, Series B Preferred Stock or Series A Preferred Stock would have received greater total consideration from the Deemed Liquidation Event after the payments of the Additional Consideration are made, then the Additional Consideration shall be paid to the holders of the Series G-3 Preferred Stock, Series G-2 Preferred Stock, Series G Preferred Stock, Series F Preferred Stock, Series E Preferred Stock, Series D Preferred Stock, Series C Preferred Stock, Series B-2 Preferred Stock, Series B-1 Preferred Stock, Series B Preferred Stock, Series A Preferred Stock or Common Stock pursuant to Sections 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9 and 2.10 hereof taking into account such deemed conversion, as applicable, and after taking into account any previous payments of the Initial Consideration made to the holders of Preferred Stock pursuant to Sections 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9 and 2.10 hereof.

3. Voting.

3.1 General. On any matter presented to the stockholders of the Corporation for their action or consideration at any meeting of stockholders of the Corporation (or by written consent of stockholders in lieu of meeting), (a) each holder of outstanding shares of Series G-3 Preferred Stock, Series G-2 Preferred Stock, Series G Preferred Stock, Series F Preferred Stock, Series E Preferred Stock, Series D Preferred Stock, Series C Preferred Stock, Series B-2 Preferred Stock, Series B-1 Preferred Stock, and Series A Preferred Stock shall be entitled to cast the number of votes equal to the number of whole shares of Class A Common Stock

into which such shares of Preferred Stock held by such holder are convertible, based on the then-current Conversion Price (as defined below) for such shares, as of the record date for determining stockholders entitled to vote on such matter, and (b) each holder of outstanding shares of Series B Preferred Stock shall be entitled to cast the number of votes equal to the voting power of the number of whole shares of Class B Common Stock into which the shares of Series B Preferred Stock held by such holder are convertible as of the record date for determining stockholders entitled to vote on such matter. Except as provided by applicable law or by the other provisions of this Restated Certificate, holders of Preferred Stock shall vote together with the holders of Voting Common Stock as a single class on all matters (including the election of directors) submitted to a vote of the stockholders of the Corporation.

3.2 Election of Directors.

3.2.1 The holders of record of the shares of Series C Preferred Stock, voting as a separate class, shall be entitled to elect one (1) director of the Corporation. The holders of record of the shares of Series B-2 Preferred Stock, Series B-1 Preferred Stock, Series B Preferred Stock, Series A Preferred Stock and Voting Common Stock, voting together as a single class as measured on the basis of voting power set forth in this Restated Certificate, shall be entitled to elect six (6) directors of the Corporation. The holders of record of the shares of Series B-2 Preferred Stock, Series B-1 Preferred Stock, Series B Preferred Stock, Series A Preferred Stock and Voting Common Stock, voting together as a single class as measured on the basis of voting power set forth in this Restated Certificate, shall be entitled to elect two (2) directors of the Corporation who are not employed by the Corporation. The holders of record of the shares of Voting Common Stock and Preferred Stock (voting together as a single class as measured on the basis of voting power set forth in this Restated Certificate) shall be entitled to elect each of the remaining directors of the Corporation. Vacancies and newly created positions on the Board of Directors of the Corporation resulting from any increase in the authorized number of Directors may be filled by approval by the holders of at least a majority of the shares of Voting Common Stock.

3.2.2 Any director elected as provided in Section 3.2.1 may be removed without cause by, and only by, the affirmative vote of the holders of the shares of the class or series of capital stock entitled to elect such director or directors, given either at a special meeting of such stockholders duly called for that purpose or pursuant to a written consent of stockholders. If the holders of shares of capital stock fail to elect a sufficient number of directors to fill all directorships for which they are entitled to elect directors, voting exclusively and as a separate class, pursuant to this Section 3.2, then any directorship not so filled shall remain vacant until such time as the holders entitled to such director elect a person to fill such directorship by vote or written consent in lieu of a meeting; and no such directorship may be filled by stockholders of the Corporation other than by the stockholders of the Corporation that are entitled to elect a person to fill such directorship, voting exclusively and as a separate class and series. At any meeting held for the purpose of electing or removing a director, the presence in person or by proxy of the holders of a majority of the outstanding shares of the class or series entitled to elect such director shall constitute a quorum for the purpose of electing such director. Except as otherwise provided in this Section 3.2, a vacancy in any directorship filled by the holders of such class or series shall be filled only by the vote or written consent in lieu of a meeting of the holders of such class or series entitled to elect such director.

3.3 Series G-3 Preferred Stock Protective Provisions. So long as any shares of Series G-3 Preferred Stock remain outstanding, the Corporation shall not, either directly or indirectly, by amendment, merger, consolidation or otherwise, do any of the following without (in addition to any other vote required by law or this Restated Certificate) the written consent or affirmative vote of the holders of a majority of the then-outstanding shares of Series G-3 Preferred Stock given in writing or by vote at a meeting, consenting or voting (as the case may be) as a single class, and any such act or transaction entered into without such consent or vote shall be null and void *ab initio*, and of no force or effect:

3.3.1 amend, alter or repeal any provision of the Certificate of Incorporation, as amended, or the Bylaws of the Corporation in a manner that adversely affects the rights, preferences, privileges and restrictions, qualifications or limitations of the Series G-3 Preferred Stock or the holders thereof with respect to the ownership thereof (provided, that for the avoidance of doubt, the creation, authorization or issuance of any shares of Preferred Stock with rights senior to or *pari passu* with the rights, preferences, privileges and restrictions, qualifications or limitations of the Series G-3 Preferred Stock shall not be deemed to constitute an amendment that adversely affects the rights, preferences, privileges and restrictions, qualifications or limitations of the Series G-3 Preferred Stock); or

3.3.2 increase the authorized number of shares of Series G-3 Preferred Stock or issue additional shares of Series G-3 Preferred Stock (or any securities or rights exercisable, convertible or exchangeable for any shares of Series G-3 Preferred Stock) (provided, that for the avoidance of doubt, the Corporation may create, authorize or issue (i) shares of Series G-3 Preferred Stock in order to pay any Series G-3 PIK Dividends, and (ii) any shares of Preferred Stock except the Series G-3 Preferred Stock other than the Series G-3 PIK Dividends).

3.4 Series G-2 Preferred Stock Protective Provisions. So long as any shares of Series G-2 Preferred Stock remain outstanding, the Corporation shall not, either directly or indirectly, by amendment, merger, consolidation or otherwise, do any of the following without (in addition to any other vote required by law or this Restated Certificate) the written consent or affirmative vote of the holders of a majority of the then-outstanding shares of Series G-2 Preferred Stock given in writing or by vote at a meeting, consenting or voting (as the case may be) as a single class, and any such act or transaction entered into without such consent or vote shall be null and void *ab initio*, and of no force or effect:

3.4.1 amend, alter or repeal any provision of the Certificate of Incorporation, as amended, or the Bylaws of the Corporation in a manner that adversely affects the rights, preferences, privileges and restrictions, qualifications or limitations of the Series G-2 Preferred Stock or the holders thereof with respect to the ownership thereof (provided, that for the avoidance of doubt, the creation, authorization or issuance of any shares of Preferred Stock with rights senior to or *pari passu* with the rights, preferences, privileges and restrictions, qualifications or limitations of the Series G-2 Preferred Stock shall not be deemed to constitute an amendment that adversely affects the rights, preferences, privileges and restrictions, qualifications or limitations of the Series G-2 Preferred Stock); or

3.4.2 increase the authorized number of shares of Series G-2 Preferred Stock or issue additional shares of Series G-2 Preferred Stock (or any securities or rights exercisable, convertible or exchangeable for any shares of Series G-2 Preferred Stock) (provided, that for the avoidance of doubt, the Corporation may create, authorize or issue any shares of Preferred Stock except the Series G-2 Preferred Stock).

3.5 Series G Preferred Stock Protective Provisions. So long as any shares of Series G Preferred Stock remain outstanding, the Corporation shall not, either directly or indirectly, by amendment, merger, consolidation or otherwise, do any of the following without (in addition to any other vote required by law or this Restated Certificate) the written consent or affirmative vote of the holders of a majority of the then-outstanding shares of Series G Preferred Stock given in writing or by vote at a meeting, consenting or voting (as the case may be) as a single class, and any such act or transaction entered into without such consent or vote shall be null and void *ab initio*, and of no force or effect:

3.5.1 amend, alter or repeal any provision of the Certificate of Incorporation, as amended, or the Bylaws of the Corporation in a manner that adversely affects the rights, preferences, privileges and restrictions, qualifications or limitations of the Series G Preferred Stock or the holders thereof with respect to the ownership thereof (provided, that for the avoidance of doubt, the creation, authorization or issuance of any shares of Preferred Stock with rights senior to or *pari passu* with the rights, preferences, privileges and restrictions, qualifications or limitations of the Series G Preferred Stock shall not be deemed to constitute an amendment that adversely affects the rights, preferences, privileges and restrictions, qualifications or limitations of the Series G Preferred Stock); or

3.5.2 increase the authorized number of shares of Series G Preferred Stock or issue additional shares of Series G Preferred Stock (or any securities or rights exercisable, convertible or exchangeable for any shares of Series G Preferred Stock) (provided, that for the avoidance of doubt, the Corporation may create, authorize or issue any shares of Preferred Stock except the Series G Preferred Stock).

3.6 Series F Preferred Stock Protective Provisions. So long as any shares of Series F Preferred Stock remain outstanding, the Corporation shall not, either directly or indirectly, by amendment, merger, consolidation or otherwise, do any of the following without (in addition to any other vote required by law or this Restated Certificate) the written consent or affirmative vote of the holders of a majority of the then-outstanding shares of Series F Preferred Stock given in writing or by vote at a meeting, consenting or voting (as the case may be) as a single class, and any such act or transaction entered into without such consent or vote shall be null and void *ab initio*, and of no force or effect:

3.6.1 amend, alter or repeal any provision of the Certificate of Incorporation, as amended, or the Bylaws of the Corporation in a manner that adversely affects the rights, preferences, privileges and restrictions, qualifications or limitations of the Series F Preferred Stock or the holders thereof with respect to the ownership thereof (provided, that for the avoidance of doubt, the creation, authorization or issuance of any shares of Preferred Stock with rights senior to or *pari passu* with the rights, preferences, privileges and restrictions, qualifications or limitations of the Series F Preferred Stock shall not be deemed to constitute an amendment that adversely affects the rights, preferences, privileges and restrictions, qualifications or limitations of the Series F Preferred Stock); or

3.6.2 increase the authorized number of shares of Series F Preferred Stock or issue additional shares of Series F Preferred Stock (or any securities or rights exercisable, convertible or exchangeable for any shares of Series F Preferred Stock) (provided, that for the avoidance of doubt, the Corporation may create, authorize or issue any shares of Preferred Stock except the Series F Preferred Stock).

3.7 Series E Preferred Stock Protective Provisions. So long as any shares of Series E Preferred Stock remain outstanding, the Corporation shall not, either directly or indirectly, by amendment, merger, consolidation or otherwise, do any of the following without (in addition to any other vote required by law or this Restated Certificate) the written consent or affirmative vote of the holders of a majority of the then-outstanding shares of Series E Preferred Stock given in writing or by vote at a meeting, consenting or voting (as the case may be) as a single class, and any such act or transaction entered into without such consent or vote shall be null and void *ab initio*, and of no force or effect:

3.7.1 amend, alter or repeal any provision of the Certificate of Incorporation, as amended, or the Bylaws of the Corporation in a manner that adversely affects the rights, preferences, privileges and restrictions, qualifications or limitations of the Series E Preferred Stock or the holders thereof with respect to the ownership thereof (provided, that for the avoidance of doubt, the creation, authorization or issuance of any shares of Preferred Stock with rights senior to or *pari passu* with the rights, preferences, privileges and restrictions, qualifications or limitations of the Series E Preferred Stock shall not be deemed to constitute an amendment that adversely affects the rights, preferences, privileges and restrictions, qualifications or limitations of the Series E Preferred Stock); or

3.7.2 increase the authorized number of shares of Series E Preferred Stock or issue additional shares of Series E Preferred Stock (or any securities or rights exercisable, convertible or exchangeable for any shares of Series E Preferred Stock) (provided, that for the avoidance of doubt, the Corporation may create, authorize or issue any shares of Preferred Stock except the Series E Preferred Stock).

3.8 Series D Preferred Stock Protective Provisions. So long as any shares of Series D Preferred Stock remain outstanding, the Corporation shall not, either directly or indirectly, by amendment, merger, consolidation or otherwise, do any of the following without (in addition to any other vote required by law or this Restated Certificate) the written consent or affirmative vote of the holders of at least sixty percent (60%) of the then-outstanding shares of Series D Preferred Stock given in writing or by vote at a meeting, consenting or voting (as the case may be) as a single class, and any such act or transaction entered into without such consent or vote shall be null and void *ab initio*, and of no force or effect:

3.8.1 amend, alter or repeal any provision of the Certificate of Incorporation, as amended, or the Bylaws of the Corporation in a manner that adversely affects the rights, preferences, privileges and restrictions, qualifications or limitations of the Series D Preferred Stock or the holders thereof with respect to the ownership thereof (provided, that for the avoidance of doubt, the creation, authorization or issuance of any shares of Preferred Stock with rights senior to or *pari passu* with the rights, preferences, privileges and restrictions, qualifications or limitations of the Series D Preferred Stock shall not be deemed to constitute an amendment that adversely affects the rights, preferences, privileges and restrictions, qualifications or limitations of the Series D Preferred Stock);

3.8.2 increase the authorized number of shares of Series D Preferred Stock or issue additional shares of Series D Preferred Stock (or any securities or rights exercisable, convertible or exchangeable for any shares of Series D Preferred Stock) (provided, that for the avoidance of doubt, the Corporation may create, authorize or issue any shares of Preferred Stock except the Series D Preferred Stock); or

3.8.3 approve or enter into any agreement with respect to a Deemed Liquidation Event, or consummate a Deemed Liquidation Event, in which the per share amount paid with respect to each share of Series D Preferred Stock is less than \$9.3739 (as adjusted for any stock splits, stock dividends, combinations, subdivisions, recapitalizations or the like).

3.9 Series C Preferred Stock Protective Provisions. So long as any shares of Series C Preferred Stock remain outstanding, the Corporation shall not, either directly or indirectly, by amendment, merger, consolidation or otherwise, do any of the following without (in addition to any other vote required by law or this Restated Certificate) the written consent or affirmative vote of the holders of at least sixty percent (60%) of the then-outstanding shares of Series C Preferred Stock given in writing or by vote at a meeting, consenting or voting (as the case may be) as a single class, and any such act or transaction entered into without such consent or vote shall be null and void *ab initio*, and of no force or effect:

3.9.1 amend, alter or repeal any provision of the Certificate of Incorporation, as amended, or the Bylaws of the Corporation in a manner that adversely affects the rights, preferences, privileges and restrictions, qualifications or limitations of the Series C Preferred Stock or the holders thereof with respect to the ownership thereof (provided, that for the avoidance of doubt, the creation, authorization or issuance of any shares of Preferred Stock with rights senior to or *pari passu* with the rights, preferences, privileges and restrictions, qualifications or limitations of the Series C Preferred Stock shall not be deemed to constitute an amendment that adversely affects the rights, preferences, privileges and restrictions, qualifications or limitations of the Series C Preferred Stock); or

3.9.2 increase the authorized number of shares of Series C Preferred Stock or issue additional shares of Series C Preferred Stock (or any securities or rights exercisable, convertible or exchangeable for any shares of Series C Preferred Stock) (provided, that for the avoidance of doubt, the Corporation may create, authorize or issue any shares of Preferred Stock except the Series C Preferred Stock).

3.10 Other Preferred Stock Protective Provisions. So long as any shares of Series B-2 Preferred Stock, Series B-1 Preferred Stock, Series B Preferred Stock and Series A Preferred Stock remain outstanding, the Corporation shall not, either directly or indirectly, by amendment, merger, consolidation or otherwise, do any of the following without (in addition to any other vote required by law or this Restated Certificate) the written consent or affirmative vote of the holders of at least a majority of the then-outstanding shares of Series B-2 Preferred Stock, Series B-1 Preferred Stock, Series B Preferred Stock and Series A Preferred Stock given in writing or by vote at a meeting, consenting or voting (as the case may be) together as a single class as measured on the basis of voting power set forth in this Restated Certificate, and any such act or transaction entered into without such consent or vote shall be null and void *ab initio*, and of no force or effect:

3.10.1 amend, alter or repeal any provision of the Certificate of Incorporation, as amended, or the Bylaws of the Corporation in a manner that adversely affects the rights, preferences, privileges and restrictions, qualifications or limitations of the Series B-2 Preferred Stock, Series B-1 Preferred Stock, Series B Preferred Stock and Series A Preferred Stock or the holders thereof with respect to the ownership thereof (provided, that for the avoidance of doubt, the creation, authorization or issuance of any shares of Preferred Stock with rights senior to or *pari passu* with the rights, preferences, privileges and restrictions, qualifications or limitations of the Series B-2 Preferred Stock, Series B-1 Preferred Stock, Series B Preferred Stock or Series A Preferred Stock shall not be deemed to constitute an amendment that adversely affects the rights, preferences, privileges and restrictions, qualifications or limitations of the Series B-2 Preferred Stock, Series B-1 Preferred Stock, Series B Preferred Stock and Series A Preferred Stock; or

3.10.2 increase the authorized number of shares of Series B-2 Preferred Stock, Series B-1 Preferred Stock, Series B Preferred Stock or Series A Preferred Stock or issue additional shares of Series B-2 Preferred Stock, Series B-1 Preferred Stock, Series B Preferred Stock or Series A Preferred Stock (or any securities or rights exercisable, convertible or exchangeable for any shares of Series B-2 Preferred Stock, Series B-1 Preferred Stock, Series B Preferred Stock or Series A Preferred Stock) (provided, that for the avoidance of doubt, the Corporation may create, authorize or issue any shares of Preferred Stock except the Series B-2 Preferred Stock, Series B-1 Preferred Stock, Series B Preferred Stock or Series A Preferred Stock).

4. Optional Conversion. The holders of the Preferred Stock shall have conversion rights as follows (the “**Conversion Rights**”):

4.1 Right to Convert.

4.1.1 Conversion Ratio. Each share of Preferred Stock (other than the Series B Preferred Stock) shall be convertible, at the option of the holder thereof, at any time and from time to time, and without the payment of additional consideration by the holder thereof, into such number of fully paid and non-assessable shares of Class A Common Stock as is determined by dividing the Original Issue Price for such series of Preferred Stock by the Conversion Price (as defined below) for such series of Preferred Stock in effect at the time of conversion. Each share of Series B Preferred Stock shall be convertible, at the option of the holder thereof, at any time and from time to time, and without the payment of additional consideration by the holder thereof, into such number of fully paid and non-assessable shares of Class B Common Stock as is determined by dividing the Original Issue Price for the Series B Preferred Stock by the Conversion Price (as defined below) for the Series B Preferred Stock in effect at the time of conversion. The shares of Class A Common Stock or Class B Common Stock, as applicable, into which shares of Preferred Stock are convertible are referred to herein as the “**Conversion Stock**.” The “**Conversion Price**” for each series of Preferred Stock shall initially mean the Original Issue Price for such series of Preferred Stock as in effect on the filing date hereof. Such initial Conversion Price and the rate at which shares of Preferred Stock may be converted into shares of Conversion Stock, shall be subject to adjustment as provided below.

4.1.2 Termination of Conversion Rights. In the event of a notice of redemption of any shares of Series G-3 Preferred Stock, Series G-2 Preferred Stock, Series G Preferred Stock, Series F Preferred Stock, Series E Preferred Stock or Series D Preferred Stock pursuant to Section 6, the Conversion Rights of the shares designated for redemption shall terminate at the close of business on the last full day preceding the date fixed for redemption, unless the applicable redemption price is not fully paid on such redemption date, in which case the Conversion Rights for such shares shall continue until such price is paid in full. In the event of a liquidation, dissolution or winding up of the Corporation or a Deemed Liquidation Event, the Conversion Rights shall terminate at the close of business on the last full day preceding the date fixed for the payment of any such amounts distributable on such event to the holders of Preferred Stock.

4.2 Fractional Shares. No fractional shares of Conversion Stock shall be issued upon conversion of the Preferred Stock. In lieu of any fractional shares to which the holder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the fair market value of a share of Common Stock, as determined in good faith by the Board. Whether or not fractional shares would be issuable upon such conversion shall be determined on the basis of the total number of shares of Preferred Stock the holder is at the time converting into shares of Conversion Stock and the aggregate number of shares of Conversion Stock issuable upon such conversion.

4.3 Mechanics of Conversion.

4.3.1 Notice of Conversion. In order for a holder of Preferred Stock to voluntarily convert shares of Preferred Stock into shares of Conversion Stock, such holder shall surrender the certificate or certificates for such shares of Preferred Stock (or, if such registered holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate), at the office of the transfer agent for the Preferred Stock (or at the principal office of the Corporation if the Corporation serves as its own transfer agent), together with written notice that such holder elects to convert all or any number of the shares of the Preferred Stock represented by such certificate or certificates and, if applicable, any event on which such conversion is contingent. Such notice shall state such holder's name or the names of the nominees in which such holder wishes the certificate or certificates for shares of Conversion Stock to be issued. If required by the Corporation, certificates surrendered for conversion shall be endorsed or accompanied by a written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or his, her or its attorney duly authorized in writing. The close of business on the date of receipt by the transfer agent (or by the Corporation if the Corporation serves as its own transfer agent) of such certificates (or lost certificate affidavit and agreement) and notice shall be the time of conversion (the "**Conversion Time**"), and the shares of Conversion Stock issuable upon conversion of the shares represented by such certificate shall be deemed to be outstanding of record as of such date. The Corporation shall, as soon as practicable after the Conversion Time, (i) issue and deliver to such holder of Preferred Stock, or to his, her or its nominees, a certificate or certificates for the number of full shares of Conversion Stock issuable upon such conversion in accordance with the provisions hereof and a certificate for the number (if any) of the shares of Preferred Stock represented by the surrendered certificate that

were not converted into Conversion Stock, (ii) pay in cash such amount as provided in Section 4.2 in lieu of any fraction of a share of Conversion Stock otherwise issuable upon such conversion, and (iii) pay all declared or accrued but unpaid dividends on the shares of Preferred Stock converted (including, without limitation, all accrued but unpaid Series G-3 PIK Dividends, Series G Accruing Dividends, Series F Accruing Dividends, Series E Accruing Dividends, Series D Accruing Dividends, Series C Accruing Dividends, Series B-2 Accruing Dividends, Series B-1 Accruing Dividends, Series B Accruing Dividends or Series A Accruing Dividends, as applicable).

4.3.2 Reservation of Shares. The Corporation shall at all times when the Preferred Stock shall be outstanding, reserve and keep available out of its authorized but unissued capital stock, for the purpose of effecting the conversion of the Preferred Stock, such number of its duly authorized shares of Voting Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding Preferred Stock, including the conversion of shares of Series G-3 Preferred Stock issuable as Series G-3 PIK Dividends; and if at any time the number of authorized but unissued shares of Voting Common Stock shall not be sufficient to effect the conversion of all then-outstanding shares of the Preferred Stock, the Corporation shall take such corporate action as may be necessary to increase its authorized but unissued shares of Voting Common Stock, as the case may be, to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in best efforts to obtain the requisite stockholder approval of any necessary amendment to this Restated Certificate. Before taking any action which would cause an adjustment reducing the Conversion Price below the then par value of the shares of Voting Common Stock issuable upon conversion of the Preferred Stock, the Corporation will take any corporate action which may, in the opinion of its counsel, be necessary in order that the Corporation may validly and legally issue fully paid and non-assessable shares of Voting Common Stock at such adjusted Conversion Price.

4.3.3 Effect of Conversion. All shares of Preferred Stock which shall have been surrendered for conversion as herein provided shall no longer be deemed to be outstanding and all rights with respect to such shares shall immediately cease and terminate at the Conversion Time, except only the right of the holders thereof to receive shares of Conversion Stock in exchange therefor, to receive payment in lieu of any fraction of a share otherwise issuable upon such conversion as provided in Section 4.2 and to receive payment of any dividends declared but unpaid thereon. Any shares of Preferred Stock so converted shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Preferred Stock accordingly.

4.3.4 No Further Adjustment. Upon any such conversion, no adjustment to the Conversion Price shall be made for any declared or accrued but unpaid dividends on the Preferred Stock surrendered for conversion or on the Conversion Stock delivered upon conversion.

4.3.5 Taxes. The Corporation shall pay any and all issue and other similar taxes that may be payable in respect of any issuance or delivery of shares of Conversion Stock upon conversion of shares of Preferred Stock pursuant to this Section 4. The Corporation shall not, however, be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of shares of Conversion Stock in a name other than that in

which the shares of Preferred Stock so converted were registered, and no such issuance or delivery shall be made unless and until the person or entity requesting such issuance has paid to the Corporation the amount of any such tax or has established, to the satisfaction of the Corporation, that such tax has been paid.

4.4 Adjustments to Conversion Price for Diluting Issues.

4.4.1 Special Definitions. For purposes of this Article Seventh, the following definitions shall apply:

(a) “**Option**” means rights, options or warrants to subscribe for, purchase or otherwise acquire Common Stock or Convertible Securities.

(b) “**Original Issue Date**” for a series of Preferred Stock means the date on which the first share of such series of Preferred Stock was issued.

(c) “**Convertible Securities**” means any evidences of indebtedness, shares or other securities directly or indirectly convertible into or exchangeable for Common Stock, but excluding Options.

(d) “**Additional Shares of Common Stock**” means all shares of Common Stock issued (or, pursuant to Section 4.4.3 below, deemed to be issued) by the Corporation after the Original Issue Date of the Series G-3 Preferred Stock, other than (1) the following shares of Common Stock and (2) shares of Common Stock deemed issued pursuant to the following Options and Convertible Securities (clauses (1) and (2), collectively, “**Exempted Securities**”):

(i) shares of Common Stock, Options or Convertible Securities issued as a dividend or distribution on Preferred Stock, including without limitation, the Series G-3 PIK Dividends;

(ii) shares of Common Stock, Options or Convertible Securities issued by reason of a dividend, stock split, split-up or other distribution on shares of Common Stock that is covered by Section 4.6, 4.7, 4.8 or 4.9;

(iii) shares of Common Stock, Options or Convertible Securities issued upon the conversion or exercise of Options, Convertible Securities or other rights to acquire securities of the Corporation;

(iv) shares of Nonvoting Common Stock or Options issued to employees or directors of, or consultants or advisors to, the Corporation or any of its subsidiaries pursuant to an equity incentive plan, agreement or arrangement approved by the Board;

(v) shares of Common Stock, Options or Convertible Securities issued to banks, equipment lessors or other financial institutions, or to real property lessors, pursuant to a debt financing, equipment leasing or real property leasing transaction approved by the Board;

(vi) shares of Common Stock, Options or Convertible Securities issued to suppliers or third-party service-providers in connection with the provision of goods or services pursuant to transactions approved by the Board;

(vii) shares of Common Stock, Options or Convertible Securities issued pursuant to the acquisition of another corporation by the Corporation by merger, purchase of substantially all of the assets or other reorganization or to a joint venture agreement, provided, that such issuances are approved by the Board;

(viii) shares of Common Stock, Options or Convertible Securities issued in connection with sponsored research collaboration, technology license, development, OEM, marketing or other similar agreements or strategic partnerships approved by the Board;

(ix) shares of Common Stock, Options or Convertible Securities issued in connection with a Deemed Liquidation Event; or

(x) shares of Common Stock sold to the public in a Public Offering (as defined in [Section 5.1.1](#)) or Qualifying Public Offering (as defined in [Section 5.1.2](#)).

4.4.2 No Adjustment of Conversion Price. No adjustment (A) in the Series A Conversion Price, Series B Conversion Price, Series B-1 Conversion Price, or Series B-2 Conversion Price, as the case may be, shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice from the holders of a majority of the then outstanding shares of Series A Preferred Stock, Series B Preferred Stock, Series B-1 Preferred Stock and Series B-2 Preferred Stock, voting together as a single class as measured on the basis of voting power set forth in this Restated Certificate, (B) in the Series C Conversion Price shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice from the holders of at least sixty percent (60%) of the then outstanding shares of Series C Preferred Stock, (C) in the Series D Conversion Price shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice from the holders of at least sixty percent (60%) of the then outstanding shares of Series D Preferred Stock, (D) in the Series E Conversion Price shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice from the holders of a majority of the then outstanding shares of Series E Preferred Stock, (E) in the Series F Conversion Price shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice from the holders of a majority of the then outstanding shares of Series F Preferred Stock, (F) in the Series G Conversion Price shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice from the holders of a majority of the then outstanding shares of Series G Preferred Stock, (G) in the Series G-2 Conversion Price shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice from the holders of a majority of the then outstanding shares of Series G-2 Preferred Stock, and (H) in the Series G-3 Conversion Price shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the

Corporation receives written notice from the holders of a majority of the then outstanding shares of Series G-3 Preferred Stock, respectively, agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock, which election may be applied prospectively or retroactively and either generally or in a particular instance.

4.4.3 Deemed Issue of Additional Shares of Common Stock.

(a) If the Corporation at any time or from time to time after the Original Issue Date of the Series G-3 Preferred Stock shall issue any Options or Convertible Securities (excluding Options or Convertible Securities which are themselves Exempted Securities) or shall fix a record date for the determination of holders of any class of securities entitled to receive any such Options or Convertible Securities, then the maximum number of shares of Common Stock (as set forth in the instrument relating thereto, assuming the satisfaction of any conditions to exercisability, convertibility or exchangeability but without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or, in the case of Convertible Securities and Options therefor, the conversion or exchange of such Convertible Securities, shall be deemed to be Additional Shares of Common Stock issued as of the time of such issue or, in case such a record date shall have been fixed, as of the close of business on such record date.

(b) If the terms of any Option or Convertible Security, the issuance of which resulted in an adjustment to the Conversion Price pursuant to the terms of Section 4.4.4, are revised as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase or decrease in the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any such Option or Convertible Security or (2) any increase or decrease in the consideration payable to the Corporation upon such exercise, conversion and/or exchange, then, effective upon such increase or decrease becoming effective, the applicable Conversion Price computed upon the original issue of such Option or Convertible Security (or upon the occurrence of a record date with respect thereto) shall be readjusted to such Conversion Price as would have obtained had such revised terms been in effect upon the original date of issuance of such Option or Convertible Security. Notwithstanding the foregoing, no readjustment pursuant to this clause (b) shall have the effect of increasing a Conversion Price to an amount which exceeds the lower of (i) the applicable Conversion Price in effect immediately prior to the original adjustment made as a result of the issuance of such Option or Convertible Security, or (ii) the applicable Conversion Price that would have resulted from any issuances of Additional Shares of Common Stock (other than deemed issuances of Additional Shares of Common Stock as a result of the issuance of such Option or Convertible Security) between the original adjustment date and such readjustment date.

(c) If the terms of any Option or Convertible Security (excluding Options or Convertible Securities which are themselves Exempted Securities), the issuance of which did not result in an adjustment to the applicable Conversion Price pursuant to the terms of Section 4.4.4 (either because the consideration per share (determined pursuant to Section 4.4.5) of the Additional Shares of Common Stock subject thereto was equal to or greater

than the applicable Conversion Price then in effect, or because such Option or Convertible Security was issued before the Original Issue Date of the Series G-3 Preferred Stock), are revised after the Original Issue Date of the Series G-3 Preferred Stock as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase in the number of shares of Common Stock issuable upon the exercise, conversion or exchange of any such Option or Convertible Security or (2) any decrease in the consideration payable to the Corporation upon such exercise, conversion or exchange, then such Option or Convertible Security, as so amended or adjusted, and the Additional Shares of Common Stock subject thereto (determined in the manner provided in Section 4.4.3(a)) shall be deemed to have been issued effective upon such increase or decrease becoming effective.

(d) Upon the expiration or termination of any unexercised Option or unconverted or unexchanged Convertible Security (or portion thereof) which resulted (either upon its original issuance or upon a revision of its terms) in an adjustment to a Conversion Price pursuant to the terms of Section 4.4.4, the applicable Conversion Price shall be readjusted to such Conversion Price as would have obtained had such Option or Convertible Security (or portion thereof) never been issued.

(e) If the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Corporation upon such exercise, conversion and/or exchange, is calculable at the time such Option or Convertible Security is issued or amended but is subject to adjustment based upon subsequent events, any adjustment to the applicable Conversion Price provided for in this Section 4.4.3 shall be effected at the time of such issuance or amendment based on such number of shares or amount of consideration without regard to any provisions for subsequent adjustments (and any subsequent adjustments shall be treated as provided in clauses (b) and (c) of this Section 4.4.3). If the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Corporation upon such exercise, conversion and/or exchange, cannot be calculated at all at the time such Option or Convertible Security is issued or amended, any adjustment to the applicable Conversion Price that would result under the terms of this Section 4.4.3 at the time of such issuance or amendment shall instead be effected at the time such number of shares and/or amount of consideration is first calculable (even if subject to subsequent adjustments), assuming for purposes of calculating such adjustment to the applicable Conversion Price that such issuance or amendment took place at the time such calculation can first be made.

4.4.4 Adjustment of Conversion Price Upon Issuance of Additional Shares of Common Stock. In the event the Corporation shall at any time after the Original Issue Date of the Series G-3 Preferred Stock issue Additional Shares of Common Stock (including Additional Shares of Common Stock deemed to be issued pursuant to Section 4.4.3), without consideration or for a consideration per share less than the applicable Conversion Price in effect immediately prior to such issue, then such Conversion Price shall be reduced, concurrently with such issue, to a price (calculated to the nearest one-hundredth of a cent) determined in accordance with the following formula:

$$CP_2 = CP_1 * (A + B) \div (A + C).$$

For purposes of the foregoing formula, the following definitions shall apply:

- (a) “**CP₂**” shall mean the applicable Conversion Price in effect immediately after such issue of Additional Shares of Common Stock;
- (b) “**CP₁**” shall mean the applicable Conversion Price in effect immediately prior to such issue of Additional Shares of Common Stock;
- (c) “**A**” shall mean the number of shares of Common Stock outstanding immediately prior to such issue of Additional Shares of Common Stock (treating for this purpose as outstanding all shares of Common Stock issuable upon exercise of Options outstanding immediately prior to such issue or upon conversion or exchange of Convertible Securities (including the Preferred Stock) outstanding (assuming exercise of any outstanding Options therefor) immediately prior to such issue);
- (d) “**B**” shall mean the number of shares of Common Stock that would have been issued if such Additional Shares of Common Stock had been issued at a price per share equal to CP₁ (determined by dividing the aggregate consideration received by the Corporation in respect of such issue by CP₁); and
- (e) “**C**” shall mean the number of such Additional Shares of Common Stock issued in such transaction.

4.4.5 Determination of Consideration. For purposes of this Section 4.4, the consideration received by the Corporation for the issue of any Additional Shares of Common Stock shall be computed as follows:

(a) Cash and Property: Such consideration shall:

- (i) insofar as it consists of cash, be computed at the aggregate amount of cash received by the Corporation, excluding amounts paid or payable for accrued interest;
- (ii) insofar as it consists of property other than cash, be computed at the fair market value thereof at the time of such issue, as determined in good faith by the Board; and
- (iii) in the event Additional Shares of Common Stock are issued together with other shares or securities or other assets of the Corporation for consideration which covers both, be the proportion of such consideration so received, computed as provided in clauses (i) and (ii) above, as determined in good faith by the Board.

(b) Options and Convertible Securities. The consideration per share received by the Corporation for Additional Shares of Common Stock deemed to have been issued pursuant to Section 4.4.3, relating to Options and Convertible Securities, shall be determined by dividing:

(i) the total amount, if any, received or receivable by the Corporation as consideration for the issue of such Options or Convertible Securities, plus the minimum aggregate amount of additional consideration (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such consideration) payable to the Corporation upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities, by

(ii) the maximum number of shares of Common Stock (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities.

4.5 Multiple Closing Dates. In the event the Corporation shall issue on more than one date Additional Shares of Common Stock that are a part of one transaction or a series of related transactions and that would result in an adjustment to the applicable Conversion Price pursuant to the terms of Subsection 4.4.4, then, upon the final such issuance, the applicable Conversion Price shall be readjusted to give effect to all such issuances as if they occurred on the date of the first such issuance (and without giving effect to any additional adjustments as a result of any such subsequent issuances within such period).

4.6 Adjustment for Stock Splits and Combinations. If the Corporation shall at any time or from time to time after the Original Issue Date of the Series G-3 Preferred Stock effect a subdivision of the outstanding Voting Common Stock, the applicable Conversion Price in effect immediately before that subdivision shall be proportionately decreased so that the number of shares of Voting Common Stock issuable on conversion of each share of such series shall be increased in proportion to such increase in the aggregate number of shares of Voting Common Stock outstanding. If the Corporation shall at any time or from time to time after the Original Issue Date of the Series G-3 Preferred Stock combine the outstanding shares of Voting Common Stock, the applicable Conversion Price in effect immediately before the combination shall be proportionately increased so that the number of shares of Voting Common Stock issuable on conversion of each share of such series shall be decreased in proportion to such decrease in the aggregate number of shares of Voting Common Stock outstanding. Any adjustment under this subsection shall become effective at the close of business on the date the subdivision or combination becomes effective. The Corporation shall not effect a subdivision or combination of the outstanding Voting Common Stock or Nonvoting Common Stock, as the case may be, without effecting the same subdivision or combination of the outstanding Nonvoting Common Stock or Voting Common Stock, respectively.

4.7 Adjustment for Certain Dividends and Distributions. In the event the Corporation at any time or from time to time after the Original Issue Date of the Series G-3 Preferred Stock shall make or issue, or fix a record date for the determination of holders of Voting Common Stock entitled to receive, a dividend or other distribution payable on the Common Stock in additional shares of Voting Common Stock, then and in each such event the applicable Conversion Price in effect immediately before such event shall be decreased as of the time of such issuance or, in the event such a record date shall have been fixed, as of the close of business on such record date, by multiplying the applicable Conversion Price then in effect by a fraction:

(1) the numerator of which shall be the total number of shares of Voting Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date, and

(2) the denominator of which shall be the total number of shares of Voting Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date plus the number of shares of Common Stock issuable in payment of such dividend or distribution.

Notwithstanding the foregoing, (a) if such record date shall have been fixed and such dividend is not fully paid or if such distribution is not fully made on the date fixed therefor, the applicable Conversion Price shall be recomputed accordingly as of the close of business on such record date and thereafter the applicable Conversion Price shall be adjusted pursuant to this subsection as of the time of actual payment of such dividends or distributions, and (b) that no such adjustment shall be made if the holders of Preferred Stock simultaneously receive a dividend or other distribution of shares of Common Stock in a number equal to the number of shares of Voting Common Stock as they would have received if all outstanding shares of Preferred Stock had been converted into Voting Common Stock on the date of such event. The Corporation shall not make or issue, or fix a record date for the determination of holders of Voting Common Stock or Nonvoting Common Stock, as the case may be, a dividend or other distribution payable on the Voting Common Stock or Nonvoting Common Stock, respectively, in additional shares of Common Stock, without making or issuing, or fixing a record date for the determination of the holders of Nonvoting Common Stock or Voting Common Stock, respectively, a dividend or other distribution payable on the Nonvoting Common Stock or Voting Common Stock, respectively, in the same number of additional shares of Common Stock per share of Nonvoting Common Stock or Voting Common Stock, respectively, as payable per share of Voting Common Stock or Nonvoting Common Stock, respectively.

4.8 Adjustments for Other Dividends and Distributions. In the event the Corporation at any time or from time to time after the Original Issue Date of the Series G-3 Preferred Stock shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable in securities of the Corporation (other than a distribution of shares of Voting Common Stock in respect of outstanding shares of Common Stock) or in other property and the provisions of Section 1 do not apply to such dividend or distribution, then and in each such event the holders of Preferred Stock shall receive, simultaneously with the distribution to the holders of Voting Common Stock, a dividend or other distribution of such securities or other property in an amount equal to the amount of such securities or other property as they would have received if all outstanding shares of Preferred Stock had been converted into Voting Common Stock on the date of such event. The Corporation shall not make or issue, or fix a record date for the determination of holders of Voting Common Stock or Nonvoting Common Stock, as the case may be, a dividend or other distribution payable on the Voting Common Stock or Nonvoting Common Stock, respectively, in securities of the Corporation or other property, without making or issuing, or fixing a record date for the determination of the

holders of Nonvoting Common Stock or Voting Common Stock, respectively, a dividend or other distribution payable on the Nonvoting Common Stock or Voting Common Stock, respectively, in the same number of securities of the Corporation or other property per share of Nonvoting Common Stock or Voting Common Stock, respectively, as payable per share of Voting Common Stock or Nonvoting Common Stock, respectively.

4.9 Adjustment for Merger or Reorganization, etc. Subject to the provisions of Section 2.10, if there shall occur any reorganization, recapitalization, reclassification, consolidation or merger involving the Corporation in which the Voting Common Stock (but not the Preferred Stock) is converted into or exchanged for securities, cash or other property (other than a transaction covered by Sections 4.4, 4.7 or 4.8), then, following any such reorganization, recapitalization, reclassification, consolidation or merger, each share of Preferred Stock shall thereafter be convertible in lieu of the Voting Common Stock into which it was convertible prior to such event into the kind and amount of securities, cash or other property which a holder of the number of shares of Voting Common Stock of the Corporation issuable upon conversion of one share of Preferred Stock immediately prior to such reorganization, recapitalization, reclassification, consolidation or merger would have been entitled to receive pursuant to such transaction; and, in such case, appropriate adjustment (as determined in good faith by the Board) shall be made in the application of the provisions in this Section 4 with respect to the rights and interests thereafter of the holders of the Preferred Stock, to the end that the provisions set forth in this Section 4 (including provisions with respect to changes in and other adjustments of the Conversion Price) shall thereafter be applicable, as nearly as reasonably may be, in relation to any securities or other property thereafter deliverable upon the conversion of the Preferred Stock.

4.10 Special IPO Adjustment to Conversion Price of Series G-3 Preferred Stock. In the event of a Public Offering or Qualifying Public Offering, the Conversion Price of the Series G-3 Preferred Stock then in effect shall be adjusted downward to an amount equal to the lesser of (i) the product of (x) the price per share of Class A Common Stock sold in such Public Offering or Qualifying Public Offering and (y) the Applicable Discount, and (ii) \$51.5762 (as adjusted (1) for any stock dividends, combinations, splits, recapitalizations or the like and/or (2) in an appropriate manner pursuant to Section 4.4.4 above as if such amount were the Conversion Price of the Series G-3 Preferred Stock). “**Applicable Discount**” means (i) 90% in the event a Public Offering or Qualifying Public Offering is consummated on or prior to June 30, 2023, or (ii) 85% in the event a Public Offering or Qualifying Public Offering is consummated after June 30, 2023. The downward adjustment of the Conversion Price of the Series G-3 Preferred Stock, if any, pursuant to this Section 4.10 shall occur effective as of immediately prior to any conversion of the Series G-3 Preferred Stock into Class A Common Stock in connection with a Public Offering or Qualifying Public Offering (or, in the event that no such conversion occurs, effective as of immediately prior to the closing of such public offering), and for the avoidance of doubt, shall be reflected in the number of shares of Class A Common Stock into which each share of Series G-3 Preferred Stock are converted in connection with such public offering, including, without limitation, a conversion pursuant to Section 5.1.1(a). Notwithstanding the foregoing, the Conversion Price of Series G-3 Preferred Stock shall not be reduced at such time if the amount of such reduction would be less than \$0.01.

4.11 Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment of the applicable Conversion Price pursuant to this Section 4, the Corporation at its expense shall, as promptly as reasonably practicable, compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of Preferred Stock a certificate setting forth such adjustment or readjustment (including the kind and amount of securities, cash or other property into which the Preferred Stock is convertible) and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation shall, as promptly as reasonably practicable after the written request at any time of any holder of Preferred Stock furnish or cause to be furnished to such holder a certificate setting forth (i) the applicable Conversion Price then in effect, and (ii) the number of shares of Voting Common Stock and the amount, if any, of other securities, cash or property which then would be received upon the conversion of Preferred Stock.

4.12 Notice of Record Date. In the event:

(a) the Corporation shall take a record of the holders of its Common Stock (or other capital stock or securities at the time issuable upon conversion of the Preferred Stock) for the purpose of entitling or enabling them to receive any dividend or other distribution, or to receive any right to subscribe for or purchase any shares of capital stock of any class or any other securities, or to receive any other security; or

(b) of any capital reorganization of the Corporation, any reclassification of the Common Stock of the Corporation, or any Deemed Liquidation Event; or

(c) of the voluntary or involuntary dissolution, liquidation or winding-up of the Corporation,

then, and in each such case, the Corporation will send or cause to be sent to the holders of the Preferred Stock a notice specifying, as the case may be, (i) the record date for such dividend, distribution or right, and the amount and character of such dividend, distribution or right, or (ii) the effective date on which such reorganization, reclassification, consolidation, merger, transfer, dissolution, liquidation or winding-up is proposed to take place, and the time, if any is to be fixed, as of which the holders of record of Common Stock (or such other capital stock or securities at the time issuable upon the conversion of the Preferred Stock) shall be entitled to exchange their shares of Common Stock (or such other capital stock or securities) for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, transfer, dissolution, liquidation or winding-up, and the amount per share and character of such exchange applicable to the Preferred Stock and the Common Stock. Such notice shall be sent at least ten (10) days prior to the record date or effective date for the event specified in such notice.

5. Mandatory Conversion.

5.1 Trigger Events.

5.1.1 Preferred Stock.

(a) Upon either (i) the closing of the sale of shares of Class A Common Stock to the public in a firm-commitment underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended, resulting in at least \$100,000,000 of gross proceeds to the Corporation, before deductions of the underwriting discount

and commissions (a “**Public Offering**”), or (ii) the date and time, or the occurrence of an event, specified by vote or written consent of the holders of a majority of the outstanding shares of Series G-3 Preferred Stock, voting as a separate class (the time of such closing or the date and time specified or the time of the event specified in such vote or written consent is referred to herein as the “**Series G-3 Preferred Stock Mandatory Conversion Time**”), (A) all outstanding shares of Series G-3 Preferred Stock shall automatically be converted into shares of Class A Common Stock, in each case at the then effective conversion rate and (B) such shares may not be reissued by the Corporation.

(b) Upon either (i) the closing of the sale of shares of Class A Common Stock to the public in a firm-commitment underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended, at an offering price per share of not less than \$68.7683 (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Class A Common Stock), resulting in at least \$100,000,000 of gross proceeds to the Corporation, before deductions of the underwriting discount and commissions (a “**Qualifying Public Offering**”), or (ii) the date and time, or the occurrence of an event, specified by vote or written consent of the holders of a majority of the outstanding shares of Series G-2 Preferred Stock, voting as a separate class (the time of such closing or the date and time specified or the time of the event specified in such vote or written consent is referred to herein as the “**Series G-2 Preferred Stock Mandatory Conversion Time**”), (A) all outstanding shares of Series G-2 Preferred Stock shall automatically be converted into shares of Class A Common Stock, in each case at the then effective conversion rate and (B) such shares may not be reissued by the Corporation.

(c) Upon either (i) the closing of a Qualifying Public Offering, or (ii) the date and time, or the occurrence of an event, specified by vote or written consent of the holders of a majority of the outstanding shares of Series G Preferred Stock, voting as a separate class (the time of such closing or the date and time specified or the time of the event specified in such vote or written consent is referred to herein as the “**Series G Preferred Stock Mandatory Conversion Time**”), (A) all outstanding shares of Series G Preferred Stock shall automatically be converted into shares of Class A Common Stock, in each case at the then effective conversion rate and (B) such shares may not be reissued by the Corporation.

(d) Upon either (i) the closing of a Qualifying Public Offering, or (ii) the date and time, or the occurrence of an event, specified by vote or written consent of the holders of a majority of the outstanding shares of Series F Preferred Stock, voting as a separate class (the time of such closing or the date and time specified or the time of the event specified in such vote or written consent is referred to herein as the “**Series F Preferred Stock Mandatory Conversion Time**”), (A) all outstanding shares of Series F Preferred Stock shall automatically be converted into shares of Class A Common Stock, in each case at the then effective conversion rate and (B) such shares may not be reissued by the Corporation.

(e) Upon either (i) the closing of a Qualifying Public Offering, or (ii) the date and time, or the occurrence of an event, specified by vote or written consent of the holders of at least a majority of the outstanding shares of Series E Preferred Stock, voting as a separate class (the time of such closing or the date and time specified or the time of the event specified in such vote or written consent is referred to herein as the “**Series E Preferred Stock Mandatory Conversion Time**”), (A) all outstanding shares of Series E Preferred Stock shall automatically be converted into shares of Class A Common Stock, in each case at the then effective conversion rate and (B) such shares may not be reissued by the Corporation.

(f) Upon either (i) the closing of a Qualifying Public Offering, or (ii) the date and time, or the occurrence of an event, specified by vote or written consent of the holders of at least sixty percent (60%) of the outstanding shares of Series D Preferred Stock, voting as a separate class (the time of such closing or the date and time specified or the time of the event specified in such vote or written consent is referred to herein as the “**Series D Preferred Stock Mandatory Conversion Time**”), (A) all outstanding shares of Series D Preferred Stock shall automatically be converted into shares of Class A Common Stock, in each case at the then effective conversion rate and (B) such shares may not be reissued by the Corporation.

(g) Upon either (i) the closing of a Qualifying Public Offering, or (ii) the date and time, or the occurrence of an event, specified by vote or written consent of the holders of at least sixty percent (60%) of the outstanding shares of Series C Preferred Stock, voting as a separate class (the time of such closing or the date and time specified or the time of the event specified in such vote or written consent is referred to herein as the “**Series C Preferred Stock Mandatory Conversion Time**”), (A) all outstanding shares of Series C Preferred Stock shall automatically be converted into shares of Class A Common Stock, in each case at the then effective conversion rate and (B) such shares may not be reissued by the Corporation.

(h) Upon either (i) the closing of the sale of shares of Class A Common Stock to the public in a firm-commitment underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended, at an offering price of not less than the Series B-2 Original Issue Price, resulting in at least \$20,000,000 of gross proceeds to the Corporation, before deductions of the underwriting discount and commissions, or (ii) the date and time, or the occurrence of an event, specified by vote or written consent of the holders of a majority of the outstanding shares of Series B-2 Preferred Stock, Series B-1 Preferred Stock, Series B Preferred Stock and Series A Preferred Stock, voting together as a single class as measured on the basis of voting power set forth in this Restated Certificate (the time of such closing or the date and time specified or the time of the event specified in such vote or written consent is referred to herein as the “**Preferred Stock Mandatory Conversion Time**”), (A) all outstanding shares of Series B-2 Preferred Stock, Series B-1 Preferred Stock, and Series A Preferred Stock shall automatically be converted into shares of Class A Common Stock and all outstanding shares of Series B Preferred Stock shall automatically be converted into shares of Class B Common Stock, in each case at the then effective conversion rate, and (B) such shares may not be reissued by the Corporation. In addition, each share of Series B Preferred Stock shall automatically be converted into shares of Class A Common Stock, based on the then-effective Conversion Price, upon any sale, assignment, transfer, conveyance, hypothecation or other disposition of any legal or beneficial interest in such share, whether or not for value and whether voluntary or involuntary or by operation of law (a “**Series B Preferred Transfer**”), other than (i) any Series B Preferred Transfer without consideration by a holder of Series B Preferred Stock to such holder’s ancestors, descendants, siblings or spouse or to trusts or other entities established primarily for the purpose of estate planning for the benefit of such persons or such holder, (ii) any Series B Preferred Transfer or Transfers by a holder of Series B Preferred Stock to another holder of Series B Preferred Stock or its Controlled Affiliate (as defined below), (iii) any Series B Preferred Transfer

or Transfers to Controlled Affiliates, or (iv) any Series B Preferred Transfer or Transfers by (A) a partnership transferring to its partners or former partners in accordance with their interest in the partnership, (B) a corporation transferring to a wholly-owned subsidiary, its stockholders or to former stockholders in accordance with their interest in the corporation, or (C) a limited liability company transferring to its members or former members in accordance with their interest in the limited liability company. For purposes of this Restated Certificate, “**Controlled Affiliate**” shall mean, with respect to any person or entity, any other person or entity which, directly or indirectly, is controlled by, or is under common control with, such person or entity, where “control” shall mean and include the ownership or eighty percent (80%) or more of the voting securities or other voting interest of another person or entity.

5.1.2 Nonvoting Common Stock. Upon the closing of the sale of shares of Class A Common Stock to the public in a firm-commitment underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended (the time of such closing is referred to herein as the “**Nonvoting Mandatory Conversion Time**”), then each outstanding share of Nonvoting Stock shall automatically be converted into one (1) share of Class A Common Stock. The Series G-3 Preferred Stock Mandatory Conversion Time, Series G-2 Preferred Stock Mandatory Conversion Time, Series G Preferred Stock Mandatory Conversion Time, Series F Preferred Stock Mandatory Conversion Time, Series E Preferred Stock Mandatory Conversion Time, Series D Preferred Stock Mandatory Conversion Time, Series C Preferred Stock Mandatory Conversion Time, Preferred Stock Mandatory Conversion Time and the Nonvoting Mandatory Conversion Time shall each be referred to as the “**Mandatory Conversion Time**”, as applicable.

5.2 Procedural Requirements. All holders of record of shares of each series of Preferred Stock and Nonvoting Common Stock shall be sent written notice of the applicable Mandatory Conversion Time and the place designated for mandatory conversion of all such shares of such series of Preferred Stock and Nonvoting Common Stock pursuant to this Section 5. Such notice need not be sent in advance of the occurrence of the Mandatory Conversion Time. Upon receipt of such notice, each holder of shares of such series of Preferred Stock and Nonvoting Common Stock shall surrender his, her or its certificate or certificates for all such shares (or, if such holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation at the place designated in such notice. If so required by the Corporation, certificates surrendered for conversion shall be endorsed or accompanied by written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or by his, her or its attorney duly authorized in writing. All rights with respect to the Preferred Stock and Nonvoting Common Stock converted pursuant to Section 5.1, including the rights, if any, to receive notices and vote (other than as a holder of Voting Common Stock), as applicable, will terminate at the applicable Mandatory Conversion Time (notwithstanding the failure of the holder or holders thereof to surrender the certificates at or prior to such time), except only the rights of the holders thereof, upon surrender of their certificate or certificates (or lost certificate affidavit and agreement) therefor, to receive the items provided for in the next sentence of this Section 5.2. As soon as practicable after the applicable Mandatory Conversion Time and the surrender of the certificate or certificates (or lost certificate affidavit and agreement) for Preferred Stock or Nonvoting Common Stock, the

Corporation shall (a) issue and deliver to such holder, or to his, her or its nominees, a certificate or certificates for the number of full shares of Voting Common Stock issuable on such conversion in accordance with the provisions hereof, (b) pay cash as provided in Section 4.2 in lieu of any fraction of a share of Voting Common Stock otherwise issuable upon such conversion, and (c) pay any declared or accrued but unpaid dividends on the shares of Preferred Stock or Nonvoting Common Stock converted (including, without limitation, all accrued but unpaid Series G-3 PIK Dividends, Series G Accruing Dividends, Series F Accruing Dividends, Series E Accruing Dividends, Series D Accruing Dividends, Series C Accruing Dividends, Series B-2 Accruing Dividends, Series B-1 Accruing Dividends, Series B Accruing Dividends or Series A Accruing Dividends, as applicable), at the Corporation's option, in either (i) cash or (ii) in the case of a public offering, shares of Voting Common Stock determined by dividing (A) the aggregate amount of such unpaid dividends by (B) the final per share public offering price of such securities (and pay cash as provided in Section 4.2 in lieu of any fraction of a share of Voting Common Stock otherwise issuable upon such payment in shares of Voting Common Stock). Such converted Preferred Stock and Nonvoting Common Stock shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Preferred Stock or Nonvoting Common Stock accordingly.

6. Redemption.

6.1 Series G-3 Preferred Stock. Unless prohibited by Delaware law governing distributions to stockholders, shares of Series G-3 Preferred Stock shall be redeemed by the Corporation at a price equal to the Series G-3 Original Issue Price, plus any accrued but unpaid Series G-3 PIK Dividends, whether or not declared, together with any other dividends declared but unpaid thereon (the "**Series G-3 Redemption Price**"), in one (1) cash payment (such date of redemption, the "**Series G-3 Redemption Date**") not more than sixty (60) days after receipt by the Corporation, at any time during the period commencing on the date that is seven (7) years from the Original Issue Date of the Series G-3 Preferred Stock and ending sixty (60) days thereafter, of written notice from the holders of a majority of the then outstanding shares of Series G-3 Preferred Stock, voting as a separate class and series, requesting redemption of all shares of Series G-3 Preferred Stock (the "**Series G-3 Redemption Request**"); provided, however, that Series G-3 Excluded Shares (as defined below) shall not be redeemed. Upon receipt of a Series G-3 Redemption Request, the Corporation shall apply all of its assets to any such redemption, and to no other corporate purpose, except to the extent prohibited by Delaware law governing distributions to stockholders. If, on the Series G-3 Redemption Date, Delaware law governing distributions to stockholders prevents the Corporation from redeeming all shares of Series G-3 Preferred Stock to be redeemed, then the Corporation shall ratably redeem the maximum number of shares that it may redeem consistent with such law, and shall redeem the remaining shares as soon as it may lawfully do so under such law. The Corporation shall send written notice of the mandatory redemption (the "**Series G-3 Redemption Notice**") to each holder of record of Series G-3 Preferred Stock, Series G-2 Preferred Stock, Series G Preferred Stock, Series F Preferred Stock, Series E Preferred Stock and Series D Preferred Stock at least fifteen (15) days but no more than thirty (30) days prior to the Series G-3 Redemption Date. The Series G-3 Redemption Notice shall state (i) the number of shares of Series G-3 Preferred Stock held by the holder that the Corporation shall redeem on the Series G-3 Redemption Date, (ii) the Series G-3 Redemption Date and the Series G-3 Redemption Price, (iii) the date upon which the holder's right to convert such

shares terminates (as determined in accordance with [Section 4.1.2](#)), and (iv) for holders of shares in certificated form, that the holder is to surrender to the Corporation, in the manner and at the place designated, his, her or its certificate or certificates representing the shares of Series G-3 Preferred Stock to be redeemed.

If the Corporation receives, on or prior to the tenth (10th) day after the date of delivery of the Series G-3 Redemption Notice to a holder of Series G-3 Preferred Stock, written notice from such holder that such holder elects to be excluded from the redemption provided in this [Section 6.1](#), then the shares of Series G-3 Preferred Stock registered on the books of the Corporation in the name of such holder at the time of the Corporation's receipt of such notice shall thereafter be "**Series G-3 Excluded Shares**." Series G-3 Excluded Shares shall not be redeemed or redeemable pursuant to this [Section 6.1](#), whether on such Series G-3 Redemption Date or thereafter.

[6.2 Series G-2 Preferred Stock](#). Unless prohibited by Delaware law governing distributions to stockholders, shares of Series G-2 Preferred Stock shall be redeemed by the Corporation at a price equal to the Series G-2 Original Issue Price per share, together with any other dividends declared but unpaid thereon (the "**Series G-2 Redemption Price**"), in one (1) cash payment (such date of redemption, the "**Series G-2 Redemption Date**") not more than sixty (60) days after receipt by the Corporation, at any time during the period commencing on the date that is seven (7) years from the Original Issue Date of the Series G-3 Preferred Stock and ending sixty (60) days thereafter, of written notice from the holders of a majority of the then outstanding shares of Series G-2 Preferred Stock, voting as a separate class and series, requesting redemption of all shares of Series G-2 Preferred Stock (the "**Series G-2 Redemption Request**"); provided, however, that Series G-2 Excluded Shares (as defined below) shall not be redeemed. Upon receipt of a Series G-2 Redemption Request, the Corporation shall apply all of its assets to any such redemption, and to no other corporate purpose, except to the extent prohibited by Delaware law governing distributions to stockholders. If, on the Series G-2 Redemption Date, Delaware law governing distributions to stockholders prevents the Corporation from redeeming all shares of Series G-2 Preferred Stock to be redeemed, then the Corporation shall ratably redeem the maximum number of shares that it may redeem consistent with such law, and shall redeem the remaining shares as soon as it may lawfully do so under such law. The Corporation shall send written notice of the mandatory redemption (the "**Series G-2 Redemption Notice**") to each holder of record of Series G-3 Preferred Stock, Series G-2 Preferred Stock, Series G Preferred Stock, Series F Preferred Stock, Series E Preferred Stock and Series D Preferred Stock at least fifteen (15) days but no more than thirty (30) days prior to the Series G-2 Redemption Date. The Series G-2 Redemption Notice shall state (i) the number of shares of Series G-2 Preferred Stock held by the holder that the Corporation shall redeem on the Series G-2 Redemption Date, (ii) the Series G-2 Redemption Date and the Series G-2 Redemption Price, (iii) the date upon which the holder's right to convert such shares terminates (as determined in accordance with [Section 4.1.2](#)), and (iv) for holders of shares in certificated form, that the holder is to surrender to the Corporation, in the manner and at the place designated, his, her or its certificate or certificates representing the shares of Series G-2 Preferred Stock to be redeemed.

If the Corporation receives, on or prior to the tenth (10th) day after the date of delivery of the Series G-2 Redemption Notice to a holder of Series G-2 Preferred Stock, written notice from such holder that such holder elects to be excluded from the redemption provided in this [Section 6.2](#), then the shares of Series G-2 Preferred Stock registered on the books of the Corporation in the name of such holder at the time of the Corporation's receipt of such notice shall thereafter be "**Series G-2 Excluded Shares**." Series G-2 Excluded Shares shall not be redeemed or redeemable pursuant to this [Section 6.2](#), whether on such Series G-2 Redemption Date or thereafter.

6.3 Series G Preferred Stock. Unless prohibited by Delaware law governing distributions to stockholders, shares of Series G Preferred Stock shall be redeemed by the Corporation at a price equal to the Series G Original Issue Price per share, plus any Series G Accruing Dividends accrued but unpaid thereon, whether or not declared, together with any other dividends declared but unpaid thereon (the “**Series G Redemption Price**”), in one (1) cash payment (such date of redemption, the “**Series G Redemption Date**”) not more than sixty (60) days after receipt by the Corporation, at any time during the period commencing on the date that is seven (7) years from the Original Issue Date of the Series G-3 Preferred Stock and ending sixty (60) days thereafter, of written notice from the holders of a majority of the then outstanding shares of Series G Preferred Stock, voting as a separate class and series, requesting redemption of all shares of Series G Preferred Stock (the “**Series G Redemption Request**”); provided, however, that Series G Excluded Shares (as defined below) shall not be redeemed. Upon receipt of a Series G Redemption Request, the Corporation shall apply all of its assets to any such redemption, and to no other corporate purpose, except to the extent prohibited by Delaware law governing distributions to stockholders. If, on the Series G Redemption Date, Delaware law governing distributions to stockholders prevents the Corporation from redeeming all shares of Series G Preferred Stock to be redeemed, then the Corporation shall ratably redeem the maximum number of shares that it may redeem consistent with such law, and shall redeem the remaining shares as soon as it may lawfully do so under such law. The Corporation shall send written notice of the mandatory redemption (the “**Series G Redemption Notice**”) to each holder of record of Series G-3 Preferred Stock, Series G-2 Preferred Stock, Series G Preferred Stock, Series F Preferred Stock, Series E Preferred Stock and Series D Preferred Stock at least fifteen (15) days but no more than thirty (30) days prior to the Series G Redemption Date. The Series G Redemption Notice shall state (i) the number of shares of Series G Preferred Stock held by the holder that the Corporation shall redeem on the Series G Redemption Date, (ii) the Series G Redemption Date and the Series G Redemption Price, (iii) the date upon which the holder’s right to convert such shares terminates (as determined in accordance with Section 4.1.2), and (iv) for holders of shares in certificated form, that the holder is to surrender to the Corporation, in the manner and at the place designated, his, her or its certificate or certificates representing the shares of Series G Preferred Stock to be redeemed.

If the Corporation receives, on or prior to the tenth (10th) day after the date of delivery of the Series G Redemption Notice to a holder of Series G Preferred Stock, written notice from such holder that such holder elects to be excluded from the redemption provided in this Section 6.3, then the shares of Series G Preferred Stock registered on the books of the Corporation in the name of such holder at the time of the Corporation’s receipt of such notice shall thereafter be “**Series G Excluded Shares**.” Series G Excluded Shares shall not be redeemed or redeemable pursuant to this Section 6.3, whether on such Series G Redemption Date or thereafter.

6.4 Series F Preferred Stock. Unless prohibited by Delaware law governing distributions to stockholders, shares of Series F Preferred Stock shall be redeemed by the Corporation at a price equal to the Series F Original Issue Price per share, plus any Series F Accruing Dividends accrued but unpaid thereon, whether or not declared, together with any other dividends declared but unpaid thereon (the “**Series F Redemption Price**”), in one (1) cash payment

(such date of redemption, the “**Series F Redemption Date**”) not more than sixty (60) days after receipt by the Corporation, at any time during the period commencing on the date that is seven (7) years from the Original Issue Date of the Series G-3 Preferred Stock and ending sixty (60) days thereafter, of written notice from the holders of a majority of the then outstanding shares of Series F Preferred Stock, voting as a separate class and series, requesting redemption of all shares of Series F Preferred Stock (the “**Series F Redemption Request**”); provided, however, that Series F Excluded Shares (as defined below) shall not be redeemed. Upon receipt of a Series F Redemption Request, the Corporation shall apply all of its assets to any such redemption, and to no other corporate purpose, except to the extent prohibited by Delaware law governing distributions to stockholders. If, on the Series F Redemption Date, Delaware law governing distributions to stockholders prevents the Corporation from redeeming all shares of Series F Preferred Stock to be redeemed, then the Corporation shall ratably redeem the maximum number of shares that it may redeem consistent with such law, and shall redeem the remaining shares as soon as it may lawfully do so under such law. The Corporation shall send written notice of the mandatory redemption (the “**Series F Redemption Notice**”) to each holder of record of Series G-3 Preferred Stock, Series G-2 Preferred Stock, Series G Preferred Stock, Series F Preferred Stock, Series E Preferred Stock and Series D Preferred Stock at least fifteen (15) days but no more than thirty (30) days prior to the Series F Redemption Date. The Series F Redemption Notice shall state (i) the number of shares of Series F Preferred Stock held by the holder that the Corporation shall redeem on the Series F Redemption Date, (ii) the Series F Redemption Date and the Series F Redemption Price, (iii) the date upon which the holder’s right to convert such shares terminates (as determined in accordance with [Section 4.1.2](#)), and (iv) for holders of shares in certificated form, that the holder is to surrender to the Corporation, in the manner and at the place designated, his, her or its certificate or certificates representing the shares of Series F Preferred Stock to be redeemed.

If the Corporation receives, on or prior to the tenth (10th) day after the date of delivery of the Series F Redemption Notice to a holder of Series F Preferred Stock, written notice from such holder that such holder elects to be excluded from the redemption provided in this [Section 6.4](#), then the shares of Series F Preferred Stock registered on the books of the Corporation in the name of such holder at the time of the Corporation’s receipt of such notice shall thereafter be “**Series F Excluded Shares**.” Series F Excluded Shares shall not be redeemed or redeemable pursuant to this [Section 6.4](#), whether on such Series F Redemption Date or thereafter.

6.5 Series E Preferred Stock. Unless prohibited by Delaware law governing distributions to stockholders, shares of Series E Preferred Stock shall be redeemed by the Corporation at a price equal to the Series E Original Issue Price per share, plus any Series E Accruing Dividends accrued but unpaid thereon, whether or not declared, together with any other dividends declared but unpaid thereon (the “**Series E Redemption Price**”), in one (1) cash payment (such date of redemption, the “**Series E Redemption Date**”) not more than sixty (60) days after receipt by the Corporation, at any time during the period commencing on the date that is seven (7) years from the Original Issue Date of the Series G-3 Preferred Stock and ending sixty (60) days thereafter, of written notice from the holders of a majority of the then outstanding shares of Series E Preferred Stock, voting as a separate class and series, requesting redemption of all shares of Series E Preferred Stock (the “**Series E Redemption Request**”); provided, however, that Series E Excluded Shares (as defined below) shall not be redeemed. Upon receipt of a Series E Redemption Request, the Corporation shall apply all of its assets to any such redemption, and to no other corporate purpose, except to the extent prohibited by Delaware law governing distributions to

stockholders. If, on the Series E Redemption Date, Delaware law governing distributions to stockholders prevents the Corporation from redeeming all shares of Series E Preferred Stock to be redeemed, then the Corporation shall ratably redeem the maximum number of shares that it may redeem consistent with such law, and shall redeem the remaining shares as soon as it may lawfully do so under such law. The Corporation shall send written notice of the mandatory redemption (the “**Series E Redemption Notice**”) to each holder of record of Series G-3 Preferred Stock, Series G-2 Preferred Stock, Series G Preferred Stock, Series F Preferred Stock, Series E Preferred Stock and Series D Preferred Stock at least fifteen (15) days but no more than thirty (30) days prior to the Series E Redemption Date. The Series E Redemption Notice shall state (i) the number of shares of Series E Preferred Stock held by the holder that the Corporation shall redeem on the Series E Redemption Date, (ii) the Series E Redemption Date and the Series E Redemption Price, (iii) the date upon which the holder’s right to convert such shares terminates (as determined in accordance with Section 4.1.2), and (iv) for holders of shares in certificated form, that the holder is to surrender to the Corporation, in the manner and at the place designated, his, her or its certificate or certificates representing the shares of Series E Preferred Stock to be redeemed.

If the Corporation receives, on or prior to the tenth (10th) day after the date of delivery of the Series E Redemption Notice to a holder of Series E Preferred Stock, written notice from such holder that such holder elects to be excluded from the redemption provided in this Section 6.5, then the shares of Series E Preferred Stock registered on the books of the Corporation in the name of such holder at the time of the Corporation’s receipt of such notice shall thereafter be “**Series E Excluded Shares**.” Series E Excluded Shares shall not be redeemed or redeemable pursuant to this Section 6.5, whether on such Series E Redemption Date or thereafter.

6.6 Series D Preferred Stock. Unless prohibited by Delaware law governing distributions to stockholders, shares of Series D Preferred Stock shall be redeemed by the Corporation at a price equal to the Series D Original Issue Price per share, plus any Series D Accruing Dividends accrued but unpaid thereon, whether or not declared, together with any other dividends declared but unpaid thereon (the “**Series D Redemption Price**”), in one (1) cash payment (such date of redemption, the “**Series D Redemption Date**” and together with each of the Series G Redemption Date, the Series F Redemption Date and the Series E Redemption Date, a “**Redemption Date**”) not more than sixty (60) days after receipt by the Corporation, at any time during the period commencing on the date that is seven (7) years from the Original Issue Date of the Series G-3 Preferred Stock and ending sixty (60) days thereafter, of written notice from the holders of at least sixty percent (60%) of the then outstanding shares of Series D Preferred Stock, voting as a separate class and series, requesting redemption of all shares of Series D Preferred Stock (the “**Series D Redemption Request**”); provided, however, that Series D Excluded Shares (as defined below) shall not be redeemed. Upon receipt of a Series D Redemption Request, the Corporation shall apply all of its assets to any such redemption, and to no other corporate purpose, except to the extent prohibited by Delaware law governing distributions to stockholders. If, on the Series D Redemption Date, Delaware law governing distributions to stockholders prevents the Corporation from redeeming all shares of Series D Preferred Stock to be redeemed, then the Corporation shall ratably redeem the maximum number of shares that it may redeem consistent with such law, and shall redeem the remaining shares as soon as it may lawfully do so under such law. The Corporation shall send written notice of the mandatory redemption (the “**Series D Redemption Notice**”) to each holder of record of Series G-3 Preferred Stock, Series G-2 Preferred Stock, Series G Preferred Stock, Series F Preferred Stock, Series E Preferred Stock and Series D

Preferred Stock at least fifteen (15) days but no more than thirty (30) days prior to the Series D Redemption Date. The Series D Redemption Notice shall state (i) the number of shares of Series D Preferred Stock held by the holder that the Corporation shall redeem on the Series D Redemption Date, (ii) the Series D Redemption Date and the Series D Redemption Price, (iii) the date upon which the holder's right to convert such shares terminates (as determined in accordance with Section 4.1.2), and (iv) for holders of shares in certificated form, that the holder is to surrender to the Corporation, in the manner and at the place designated, his, her or its certificate or certificates representing the shares of Series D Preferred Stock to be redeemed.

If the Corporation receives, on or prior to the tenth (10th) day after the date of delivery of the Series D Redemption Notice to a holder of Series D Preferred Stock, written notice from such holder that such holder elects to be excluded from the redemption provided in this Section 6.6, then the shares of Series D Preferred Stock registered on the books of the Corporation in the name of such holder at the time of the Corporation's receipt of such notice shall thereafter be "**Series D Excluded Shares**." Series D Excluded Shares shall not be redeemed or redeemable pursuant to this Section 6.6, whether on such Series D Redemption Date or thereafter.

6.7 Priority of Redemption Payments. Notwithstanding anything in Section 6.1, Section 6.2, Section 6.3, Section 6.4, Section 6.5 or Section 6.6 to the contrary, if (i) the Corporation receives a Series G-3 Redemption Request, Series G-2 Redemption Request, Series G Redemption Request, Series F Redemption Request, Series E Redemption Request and/or a Series D Redemption Request, and (ii) on the applicable Redemption Date, Delaware law governing distributions to stockholders prevents the Corporation from redeeming all of the shares of Series G-3 Preferred Stock, Series G-2 Preferred Stock, Series G Preferred Stock, Series F Preferred Stock, Series E Preferred Stock and/or Series D Preferred Stock, then the Corporation shall so notify the holders of shares of Series G-3 Preferred Stock, Series G-2 Preferred Stock, Series G Preferred Stock, Series F Preferred Stock, Series E Preferred Stock and/or Series D Preferred Stock, as applicable, and the Corporation shall redeem such shares of Series G-3 Preferred Stock, Series G-2 Preferred Stock, Series G Preferred Stock, Series F Preferred Stock, Series E Preferred Stock and/or Series D Preferred Stock in the following order of priority: (A) *first*, the Corporation shall redeem the number of shares of Series G-3 Preferred Stock which the Corporation may redeem in a manner consistent with such law, *pro rata* among all holders of Series G-3 Preferred Stock, and shall redeem the remaining shares of Series G-3 Preferred Stock as soon as it may lawfully do so under such law; (B) *second*, after redemption of all shares of Series G-3 Preferred Stock, the Corporation shall redeem the number of shares of Series G-2 Preferred Stock which the Corporation may redeem in a manner consistent with such law, *pro rata* among all holders of Series G-2 Preferred Stock, and shall redeem the remaining shares of Series G-2 Preferred Stock as soon as it may lawfully do so under such law; (C) *third*, after redemption of all shares of Series G-3 Preferred Stock and Series G-2 Preferred Stock, the Corporation shall redeem the number of shares of Series G Preferred Stock which the Corporation may redeem in a manner consistent with such law, *pro rata* among all holders of Series G Preferred Stock, and shall redeem the remaining shares of Series G Preferred Stock as soon as it may lawfully do so under such law; (D) *fourth*, after redemption of all shares of Series G-3 Preferred Stock, Series G-2 Preferred Stock and Series G Preferred Stock, the Corporation shall redeem the number of shares of Series F Preferred Stock which the Corporation may redeem in a manner consistent with such law, *pro rata* among all holders of Series F Preferred Stock, and shall redeem the remaining shares of Series F Preferred Stock as soon as it may lawfully do so under such law; (E) *fifth*, after

redemption of all shares of Series G-3 Preferred Stock, Series G-2 Preferred Stock, Series G Preferred Stock and Series F Preferred Stock, the Corporation shall redeem the number of shares of Series E Preferred Stock which the Corporation may redeem in a manner consistent with such law, *pro rata* among all holders of Series E Preferred Stock, and shall redeem the remaining shares of Series E Preferred Stock as soon as it may lawfully do so under such law; and (F) *sixth*, after redemption of all shares of Series G-3 Preferred Stock, Series G-2 Preferred Stock, Series G Preferred Stock, Series F Preferred Stock and Series E Preferred Stock, the Corporation shall redeem the number of shares of Series D Preferred Stock which the Corporation may redeem in a manner consistent with such law, *pro rata* among all holders of Series D Preferred Stock, and shall redeem the remaining shares of Series D Preferred Stock as soon as it may lawfully do so under such law.

6.8 Surrender of Certificates; Payment. On or before the Series G-3 Redemption Date, Series G-2 Redemption Date, Series G Redemption Date, Series F Redemption Date, Series E Redemption Date and/or the Series D Redemption Date, each holder of Series G-3 Preferred Stock, Series G-2 Preferred Stock, Series G Preferred Stock, Series F Preferred Stock, Series E Preferred Stock or Series D Preferred Stock, as applicable, having shares redeemed shall, if a holder of shares in certificated form, surrender the certificate or certificates representing such shares (or, if such registered holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation, in the manner and at the place designated in the Series G-3 Redemption Notice, Series G-2 Redemption Notice, Series G Redemption Notice, Series F Redemption Notice, Series E Redemption Notice or the Series D Redemption Notice, and thereupon the Series G-3 Redemption Price, Series G-2 Redemption Price, Series G Redemption Price, Series F Redemption Price, Series E Redemption Price or the Series D Redemption Price for such shares shall be payable to the order of the person whose name appears on such certificate or certificates as the owner thereof.

6.9 Rights Subsequent to Redemption. If the Series G-3 Redemption Notice, Series G-2 Redemption Notice, Series G Redemption Notice, the Series F Redemption Notice, the Series E Redemption Notice or the Series D Redemption Notice shall have been duly given, and if the Series G-3 Redemption Price, Series G-2 Redemption Price, Series G Redemption Price, the Series F Redemption Price, the Series E Redemption Price or the Series D Redemption Price payable upon redemption of the shares of Series G-3 Preferred Stock, Series G-2 Preferred Stock, Series G Preferred Stock, Series F Preferred Stock, Series E Preferred Stock or Series D Preferred Stock to be redeemed (or shares of Voting Common Stock into which such shares of Series G-3 Preferred Stock, Series G-2 Preferred Stock, Series G Preferred Stock, Series F Preferred Stock, Series E Preferred Stock or Series D Preferred Stock have been converted) is paid or tendered for payment or deposited with an independent payment agent so as to be available therefor in a timely manner, then notwithstanding that any certificates evidencing any of the shares of Series G-3 Preferred Stock, Series G-2 Preferred Stock, Series G Preferred Stock, Series F Preferred Stock, Series E Preferred Stock or Series D Preferred Stock (or shares of Voting Common Stock into which such shares of Series G-3 Preferred Stock, Series G-2 Preferred Stock, Series G Preferred Stock, Series F Preferred Stock, Series E Preferred Stock or Series D Preferred Stock have been converted) so called for redemption shall not have been surrendered, dividends with respect to such shares shall cease to accrue after such date and all rights with respect to such shares shall forthwith after such date terminate, except only the right of the holders to receive the Series G-3 Redemption Price, Series G-2 Redemption Price, Series G Redemption Price, Series F Redemption Price, the Series E Redemption Price or the Series D Redemption Price, as applicable, without interest upon surrender of any such certificate or certificates therefor.

6.10 Failure to Pay Redemption Price. If, for any reason, the Corporation fails to pay the Series G-3 Redemption Price, Series G-2 Redemption Price, Series G Redemption Price, the Series F Redemption Price, the Series E Redemption Price and/or the Series D Redemption Price when due (including as a result of any applicable law prohibiting payment), then:

6.10.1 The Corporation shall, if requested by (i) the holders of a majority of the outstanding shares of Series G-3 Preferred Stock subject to redemption, voting as a separate class and series, upon failure to pay the Series G-3 Redemption Price, (ii) the holders of a majority of the outstanding shares of Series G-2 Preferred Stock subject to redemption, voting as a separate class and series, upon failure to pay the Series G-2 Redemption Price, (iii) the holders of a majority of the outstanding shares of Series G Preferred Stock subject to redemption, voting as a separate class and series, upon failure to pay the Series G Redemption Price, (iv) the holders of a majority of the outstanding shares of Series F Preferred Stock subject to redemption, voting as a separate class and series, upon failure to pay the Series F Redemption Price, (v) the holders of a majority of the outstanding shares of Series E Preferred Stock subject to redemption, voting as a separate class and series, upon failure to pay the Series E Redemption Price, or (vi) the holders of at least sixty percent (60%) of the outstanding shares of Series D Preferred Stock subject to redemption, voting as a separate class and series, upon failure to pay the Series D Redemption Price, in each case by delivery of written notice to the Corporation, initiate a sale process (the “**Sale Process**”) in accordance with this Section 6.10, intended to result in a transaction constituting a Deemed Liquidation Event. In furtherance of the foregoing, upon receipt of such written notice, the Corporation shall, and shall cause its officers, employees, consultants, counsel and advisors to use all commercially reasonable efforts to consummate a transaction that would constitute a Deemed Liquidation Event, including without limitation by taking (or causing to be taken) the actions set forth in this Section 6.10; provided, that this obligation and the obligations set forth in Subsections 6.10.2 and 6.10.3 shall not require the Board or the stockholders of the Corporation to approve any transaction that would constitute a Deemed Liquidation Event.

6.10.2 The Corporation shall engage a reputable investment bank (the “**Financial Advisor**”) to assist with the Sale Process. The Financial Advisor, as well as any other advisors engaged pursuant to this Subsection 6.10.2, shall represent the Corporation, and only the Corporation, in the Sale Process, and the costs, fees and expenses of such advisors shall be paid by the Corporation (or may be paid through a reduction from the sale proceeds payable to the stockholders of the Corporation).

6.10.3 Without limiting the generality of the provisions of Subsection 6.10.1, the Corporation shall, at the request of (i) the holders of a majority of the outstanding shares of Series G-3 Preferred Stock subject to redemption, voting as a separate class and series, (ii) the holders of a majority of the outstanding shares of Series G-2 Preferred Stock subject to redemption, voting as a separate class and series, (iii) the holders of a majority of the outstanding shares of Series G Preferred Stock subject to redemption, voting as a separate class

and series, (iv) the holders of a majority of the outstanding shares of Series F Preferred Stock subject to redemption, voting as a separate class and series, (v) the holders of a majority of the outstanding shares of Series E Preferred Stock subject to redemption, voting as a separate class and series, or (vi) the holders of at least sixty percent (60%) of the outstanding shares of Series D Preferred Stock subject to redemption, voting as a separate class and series, as applicable, and shall cause its employees, officers, consultants, counsel and advisors to:

(a) engage the Financial Advisor to provide a valuation of the Corporation and create a list of potential acquirers;

(b) assist the Financial Advisor in creating a list of potential acquirers;

(c) cause the Financial Advisor to contact potential acquirers and solicit offers with respect to the Sale Process from such potential acquirers as identified by the Financial Advisor and approved by the Corporation;

(d) set up and maintain a virtual or actual data room containing due diligence materials customarily provided in connection with a Sale Process, together with any other due diligence materials reasonably requested by any potential acquirer;

(e) execute customary non-disclosure agreements with potential acquirers;

(f) prepare, or assist the Financial Advisor with the preparation of, any marketing, financial or other materials deemed by the Financial Advisor to be necessary or helpful in connection with the Sale Process;

(g) attend and participate in any meetings, conference calls, or presentations regarding the Corporation and its business with potential acquirers; and

(h) subject to approval of the Corporation's Board of Directors, execute a letter of intent or term sheet on terms and conditions reasonably acceptable to the Corporation.

6.10.4 The Corporation shall, upon the request of (i) the holders of a majority of the outstanding shares of Series G-3 Preferred Stock subject to redemption, voting as a separate class and series, (ii) the holders of a majority of the outstanding shares of Series G-2 Preferred Stock subject to redemption, voting as a separate class and series, (iii) the holders of a majority of the outstanding shares of Series G Preferred Stock subject to redemption, voting as a separate class and series, (iv) the holders of a majority of the outstanding shares of Series F Preferred Stock subject to redemption, voting as a separate class and series, (v) the holders of a majority of the outstanding shares of Series E Preferred Stock subject to redemption, voting as a separate class and series, or (vi) the holders of at least sixty percent (60%) of the outstanding shares of Series D Preferred Stock subject to redemption, voting as a separate class and series, as applicable, call a meeting of the Corporation's Board of Directors to discuss or vote on a proposed transaction constituting a Deemed Liquidation Event or other matters relating to the Sale Process; provided, that nothing herein shall require the Corporation's Board of Directors to approve any Deemed Liquidation Event.

6.10.5 The covenants set forth in this Section 6.10 shall terminate and be of no further force or effect upon the earlier of (i) the date immediately prior to the consummation of a Public Offering, (ii) the date when the Corporation first becomes subject to the periodic reporting requirements of Section 12(g) or 15(d) of the Securities Exchange Act of 1934, as amended, or (iii) a Deemed Liquidation Event.

7. Converted, Redeemed or Otherwise Acquired Shares. Any shares of Preferred Stock that are converted, redeemed or otherwise acquired by the Corporation or any of its subsidiaries shall be automatically and immediately cancelled and retired and shall not be reissued, sold or transferred. Neither the Corporation nor any of its subsidiaries may exercise any voting or other rights granted to the holders of Preferred Stock following redemption.

8. Waiver. Any of the rights, powers, preferences and other terms of the Series G-3 Preferred Stock set forth herein may be waived on behalf of all holders of Series G-3 Preferred Stock by the affirmative written consent or vote of the holders of a majority of the shares of Series G-3 Preferred Stock then outstanding, voting as a separate class. Any of the rights, powers, preferences and other terms of the Series G-2 Preferred Stock set forth herein may be waived on behalf of all holders of Series G-2 Preferred Stock by the affirmative written consent or vote of the holders of a majority of the shares of Series G-2 Preferred Stock then outstanding, voting as a separate class. Any of the rights, powers, preferences and other terms of the Series G Preferred Stock set forth herein may be waived on behalf of all holders of Series G Preferred Stock by the affirmative written consent or vote of the holders of a majority of the shares of Series G Preferred Stock then outstanding, voting as a separate class. Any of the rights, powers, preferences and other terms of the Series F Preferred Stock set forth herein may be waived on behalf of all holders of Series F Preferred Stock by the affirmative written consent or vote of the holders of a majority of the shares of Series F Preferred Stock then outstanding, voting as a separate class. Any of the rights, powers, preferences and other terms of the Series E Preferred Stock set forth herein may be waived on behalf of all holders of Series E Preferred Stock by the affirmative written consent or vote of the holders of a majority of the shares of Series E Preferred Stock then outstanding, voting as a separate class. Any of the rights, powers, preferences and other terms of the Series D Preferred Stock set forth herein may be waived on behalf of all holders of Series D Preferred Stock by the affirmative written consent or vote of the holders of at least sixty percent (60%) of the shares of Series D Preferred Stock then outstanding, voting as a separate class. Any of the rights, powers, preferences and other terms of the Series C Preferred Stock set forth herein may be waived on behalf of all holders of Series C Preferred Stock by the affirmative written consent or vote of the holders of at least sixty percent (60%) of the shares of Series C Preferred Stock then outstanding, voting as a separate class. Any of the rights, powers, preferences and other terms of any other series of Preferred Stock (other than the Series E Preferred Stock, Series D Preferred Stock and Series C Preferred Stock) set forth herein may be waived on behalf of all holders of such series of Preferred Stock by the affirmative written consent or vote of the holders of a majority of the shares of such series of Preferred Stock then outstanding.

9. Notices. Any notice required or permitted by the provisions of this Article Seventh to be given to a holder of shares of Preferred Stock shall be mailed, postage prepaid, to the post office address last shown on the records of the Corporation, or given by electronic communication in compliance with the provisions of the DGCL, and shall be deemed sent upon such mailing or electronic transmission.

EIGHTH: Subject to any additional vote required by this Restated Certificate or Bylaws, in furtherance and not in limitation of the powers conferred by statute, the Board is expressly authorized to make, repeal, alter, amend and rescind any or all of the Bylaws of the Corporation.

NINTH: Subject to any additional vote required by this Restated Certificate, the number of directors of the Corporation shall be determined in the manner set forth in the Bylaws of the Corporation.

TENTH: Elections of directors need not be by written ballot unless the Bylaws of the Corporation shall so provide.

ELEVENTH: Meetings of stockholders may be held within or without the State of Delaware, as the Bylaws of the Corporation may provide. The books of the Corporation may be kept outside the State of Delaware at such place or places as may be designated from time to time by the Board or in the Bylaws of the Corporation.

TWELFTH: To the fullest extent permitted by law, a director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director. If the DGCL or any other law of the State of Delaware is amended after approval by the stockholders of this Article Twelfth to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Corporation shall be eliminated or limited to the fullest extent permitted by the DGCL as so amended.

Any repeal or modification of the foregoing provisions of this Article Twelfth by the stockholders of the Corporation shall not adversely affect any right or protection of a director of the Corporation existing at the time of, or increase the liability of any director of the Corporation with respect to any acts or omissions of such director occurring prior to, such repeal or modification.

THIRTEENTH: To the fullest extent permitted by applicable law, the Corporation is authorized to provide indemnification of (and advancement of expenses to) directors, officers and agents of the Corporation (and any other persons to which the DGCL permits the Corporation to provide indemnification) through Bylaw provisions, agreements with such agents or other persons, vote of stockholders or disinterested directors or otherwise, in excess of the indemnification and advancement otherwise permitted by Section 145 of the DGCL.

Any amendment, repeal or modification of the foregoing provisions of this Article Thirteenth shall not adversely affect any right or protection of any director, officer or other agent of the Corporation existing at the time of such amendment, repeal or modification.

FOURTEENTH: The Corporation renounces, to the fullest extent permitted by law, any interest or expectancy of the Corporation in, or in being offered an opportunity to participate in, any Excluded Opportunity. An “**Excluded Opportunity**” is any matter, transaction or interest that is presented to, or acquired, created or developed by, or which otherwise comes into the possession of (i) any director of the Corporation who is not an employee of the Corporation or any of its subsidiaries, or (ii) any holder of Preferred Stock or any partner, member, director, stockholder, employee or agent of any such holder, other than someone who is an employee of the Corporation or any of its subsidiaries (collectively, “**Covered Persons**”), unless such matter, transaction or interest is presented to, or acquired, created or developed by, or otherwise comes into the possession of, a Covered Person expressly and solely in such Covered Person’s capacity as a director of the Corporation. Any repeal or modification of this Article Fourteenth will only be prospective and will not affect the rights under this Article Fourteenth in effect at the time of the occurrence or of any actions or omissions to act giving rise to liability. Notwithstanding anything to the contrary contained elsewhere in this Amended and Restated Certificate of Incorporation, the affirmative vote of the Requisite Preferred Holders will be required to amend or repeal or to adopt any provisions inconsistent with this Article Fourteenth.

FIFTEENTH: The following indemnification provisions shall apply to the persons enumerated below.

1. Right to Indemnification of Directors and Officers. The Corporation shall indemnify and hold harmless, to the fullest extent permitted by applicable law as it presently exists or may hereafter be amended, any person (an “**Indemnified Person**”) who was or is made or is threatened to be made a party or is otherwise involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative (a “**Proceeding**”), by reason of the fact that such person, or a person for whom such person is the legal representative, is or was a director or officer of the Corporation or, while a director or officer of the Corporation, is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation or of a partnership, joint venture, limited liability company, trust, enterprise or nonprofit entity, including service with respect to employee benefit plans, against all liability and loss suffered and expenses (including attorneys’ fees) reasonably incurred by such Indemnified Person in such Proceeding. Notwithstanding the preceding sentence, except as otherwise provided in Section 3 of this Article Fifteenth, the Corporation shall be required to indemnify an Indemnified Person in connection with a Proceeding (or part thereof) commenced by such Indemnified Person only if the commencement of such Proceeding (or part thereof) by the Indemnified Person was authorized in advance by the Board of Directors of the Corporation.

2. Prepayment of Expenses of Directors and Officers. The Corporation shall pay the expenses (including attorneys’ fees) incurred by an Indemnified Person in defending any Proceeding in advance of its final disposition, provided, however, that, to the extent required by law, such payment of expenses in advance of the final disposition of the Proceeding shall be made only upon receipt of an undertaking by the Indemnified Person to repay all amounts advanced if it should be ultimately determined that the Indemnified Person is not entitled to be indemnified under this Article Fifteenth or otherwise.

3. Claims by Directors and Officers. If a claim for indemnification or advancement of expenses under this Article Fifteenth is not paid in full within thirty (30) days after a written claim therefor by the Indemnified Person has been received by the Corporation, the Indemnified Person may file suit to recover the unpaid amount of such claim and, if successful in whole or in part, shall be entitled to be paid the expense of prosecuting such claim. In any such action the Corporation shall have the burden of proving that the Indemnified Person is not entitled to the requested indemnification or advancement of expenses under applicable law.

4. Indemnification of Employees and Agents. The Corporation may indemnify and advance expenses to any person who was or is made or is threatened to be made or is otherwise involved in any Proceeding by reason of the fact that such person, or a person for whom such person is the legal representative, is or was an employee or agent of the Corporation or, while an employee or agent of the Corporation, is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation or of a partnership, joint venture, limited liability company, trust, enterprise or nonprofit entity, including service with respect to employee benefit plans, against all liability and loss suffered and expenses (including attorneys' fees) reasonably incurred by such person in connection with such Proceeding. The ultimate determination of entitlement to indemnification of persons who are non-director or officer employees or agents shall be made in such manner as is determined by the Board of Directors of the Corporation in its sole discretion. Notwithstanding the foregoing sentence, the Corporation shall not be required to indemnify a person in connection with a Proceeding initiated by such person if the Proceeding was not authorized in advance by the Board of Directors of the Corporation.

5. Advancement of Expenses of Employees and Agents. The Corporation may pay the expenses (including attorneys' fees) incurred by an employee or agent in defending any Proceeding in advance of its final disposition on such terms and conditions as may be determined by the Board of Directors of the Corporation.

6. Non-Exclusivity of Rights. The rights conferred on any person by this Article Fifteenth shall not be exclusive of any other rights which such person may have or hereafter acquire under any statute, provision of the certificate of incorporation, these by-laws, agreement, vote of stockholders or disinterested directors or otherwise.

7. Other Indemnification. The Corporation's obligation, if any, to indemnify any person who was or is serving at its request as a director, officer or employee of another corporation, partnership, limited liability company, joint venture, trust, organization or other enterprise shall be reduced by any amount such person may collect as indemnification from such other corporation, partnership, limited liability company, joint venture, trust, organization or other enterprise.

8. Insurance. The Board of Directors of the Corporation may, to the full extent permitted by applicable law as it presently exists, or may hereafter be amended from time to time, authorize an appropriate officer or officers to purchase and maintain at the Corporation's expense insurance: (a) to indemnify the Corporation for any obligation which it incurs as a result of the indemnification of directors, officers and employees under the provisions of this Article Fifteenth; and (b) to indemnify or insure directors, officers and employees against liability in instances in which they may not otherwise be indemnified by the Corporation under the provisions of this Article Fifteenth.

9. Amendment or Repeal. Any repeal or modification of the foregoing provisions of this Article Fifteenth shall not adversely affect any right or protection hereunder of any person in respect of any act or omission occurring prior to the time of such repeal or modification. The rights provided hereunder shall inure to the benefit of any Indemnified Person and such person's heirs, executors and administrators.

SIXTEENTH: Unless the Corporation consents in writing to the selection of an alternative forum, the Court of Chancery in the State of Delaware shall be the sole and exclusive forum for any stockholder (including a beneficial owner) to bring (i) any derivative action or proceeding brought on behalf of the Corporation, (ii) any action asserting a claim of breach of fiduciary duty owed by any director, officer or other employee of the Corporation to the Corporation or the Corporation's stockholders, (iii) any action asserting a claim against the Corporation, its directors, officers or employees arising pursuant to any provision of the Delaware General Corporation Law or the Corporation's certificate of incorporation or Bylaws or (iv) any action asserting a claim against the Corporation, its directors, officers or employees governed by the internal affairs doctrine, except for, as to each of (i) through (iv) above, any claim as to which the Court of Chancery determines that there is an indispensable party not subject to the jurisdiction of the Court of Chancery (and the indispensable party does not consent to the personal jurisdiction of the Court of Chancery within ten days following such determination), which is vested in the exclusive jurisdiction of a court or forum other than the Court of Chancery, or for which the Court of Chancery does not have subject matter jurisdiction. If any provision or provisions of this Article Sixteenth shall be held to be invalid, illegal or unenforceable as applied to any person or entity or circumstance for any reason whatsoever, then, to the fullest extent permitted by law, the validity, legality and enforceability of such provisions in any other circumstance and of the remaining provisions of this Article Sixteenth (including, without limitation, each portion of any sentence of this Article Sixteenth containing any such provision held to be invalid, illegal or unenforceable that is not itself held to be invalid, illegal or unenforceable) and the application of such provision to other persons or entities and circumstances shall not in any way be affected or impaired thereby.

* * *

4. That the foregoing amendment and restatement was approved by the holders of the requisite number of shares of this corporation in accordance with Section 228 of the DGCL.

5. That this Tenth Amended and Restated Certificate of Incorporation, which restates and integrates and further amends the provisions of this corporation's Ninth Amended and Restated Certificate of Incorporation, has been duly adopted in accordance with Sections 242 and 245 of the DGCL.

IN WITNESS WHEREOF, this Tenth Amended and Restated Certificate of Incorporation has been executed by a duly authorized officer of this corporation on this 18th day of April, 2022.

By: /s/ Ryan Fukushima

Ryan Fukushima
Chief Operating Officer

**ELEVENTH AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION
OF
TEMPUS LABS, INC.**

Eric Lefkofsky hereby certifies that:

ONE: The current name of this corporation is Tempus Labs, Inc. The original name of this corporation is Bioin, Inc., and the date of filing the original Certificate of Incorporation of this corporation with the Secretary of State of the State of Delaware was September 21, 2015.

TWO: The original Certificate of Incorporation of this corporation was amended by a Certificate of Amendment filed with the Secretary of State of the State of Delaware on September 29, 2015 and was further amended by a Certificate of Amendment filed with the Secretary of State of the State of Delaware on February 12, 2016. The Amended and Restated Certificate of Incorporation was filed on June 20, 2016 and was amended by a Certificate of Amendment filed with the Secretary of State of the State of Delaware on October 6, 2016. The Second Amended and Restated Certificate of Incorporation was filed on November 22, 2016 with the Secretary of State of the State of Delaware. The Third Amended and Restated Certificate of Incorporation was filed on April 17, 2017 with the Secretary of State of the State of Delaware. The Fourth Amended and Restated Certificate of Incorporation was filed on September 8, 2017 with the Secretary of State of the State of Delaware. The Fifth Amended and Restated Certificate of Incorporation was filed on March 16, 2018 with the Secretary of State of the State of Delaware. The Sixth Amended and Restated Certificate of Incorporation was filed on August 23, 2018 with the Secretary of State of the State of Delaware. The Seventh Amended and Restated Certificate of Incorporation was filed on April 30, 2019 with the Secretary of State of the State of Delaware. The Eighth Amended and Restated Certificate of Incorporation was filed on February 6, 2020 with the Secretary of State of the State of Delaware. The Ninth Amended and Restated Certificate of Incorporation was filed on November 19, 2020 with the Secretary of State of the State of Delaware and was further amended by a Certificate of Amendment filed with the Secretary of State of the State of Delaware on March 15, 2021. The Tenth Amended and Restated Certificate of Incorporation was filed on April 18, 2022 with the Secretary of State of the State of Delaware.

THREE: He is the duly elected and acting Chief Executive Officer of **TEMPUS LABS, INC.**, a Delaware corporation.

FOUR: The Certificate of Incorporation of this corporation is hereby amended and restated to read as follows:

I.

The name of this company is Tempus Labs, Inc. (the "**Company**").

II.

The address of the registered office of the Company in the State of Delaware is 1209 Orange Street, City of Wilmington, County of New Castle, Delaware 19801, and the name of the registered agent of the Company in the State of Delaware at such address is The Corporation Trust Company.

III.

The purpose of the Company is to engage in any lawful act or activity for which a corporation may be organized under the General Corporation Law of the State of Delaware ("**DGCL**").

IV.

A. The Company is authorized to issue three classes of stock to be designated, respectively, "Class A Common Stock," "Class B Common Stock" and "Preferred Stock." The total number of shares that the Company is authorized to issue is 1,025,500,000 shares, 1,000,000,000 shares of which shall be Class A Common Stock (the "***Class A Common Stock***"), 5,500,000 shares of which shall be Class B Common Stock (the "***Class B Common Stock***" together with the Class A Common Stock, the "***Common Stock***") and 20,000,000 shares of which shall be Preferred Stock (the "***Preferred Stock***"). The Preferred Stock shall have a par value of \$0.0001 per share and the Common Stock shall have a par value of \$0.0001 per share.

B. Subject to the restrictions of Section 4(d) of Part D of Article IV, the Preferred Stock may be issued from time to time in one or more series. The Board of Directors of the Company is hereby expressly authorized by resolution or resolutions to provide for the issue of all or any of the shares of the Preferred Stock in one or more series, and to fix the number of shares of such shares and to determine for each such series, such voting powers, full or limited, or no voting powers, and such designation, preferences, and relative, participating, optional, or other rights and such qualifications, limitations, or restrictions thereof, as shall be stated and expressed in the resolution or resolutions adopted by the Board of Directors providing for the issuance of such shares and as may be permitted by the DGCL. The Board of Directors is also expressly authorized to increase (but not above the authorized number of shares of Preferred Stock) or decrease (but not below the number of shares of such series then outstanding) the number of shares of any series subsequent to the issuance of shares of that series.

C. The number of authorized shares of Preferred Stock, Class A Common Stock or Class B Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the voting power of all of the outstanding shares of stock of the Company entitled to vote thereon, without a separate vote of the holders of the Preferred Stock, or of any series thereof, Class A Common Stock or Class B Common Stock unless a vote of any such holders is required pursuant to the terms of any Certificate of Designation filed with respect to any series of Preferred Stock.

D. Except as provided above, the rights, preferences, privileges, restrictions and other matters relating to the Class A Common Stock and Class B Common Stock are as follows:

1. Definitions.

(a) "***Acquisition***" means any consolidation or merger of the Company with or into any other Entity, other than any such consolidation or merger in which the stockholders of the Company immediately prior to such consolidation or merger continue to hold a majority of the voting power of the surviving Entity in substantially the same proportions (or, if the surviving Entity is a wholly owned subsidiary of another Entity, the surviving Entity's Parent) immediately after such consolidation, merger or reorganization; or (B) any transaction or series of related transactions to which the Company is a party in which in excess of 50% of the Company's voting power is transferred or issued; provided that an Acquisition shall not include any transaction or series of transactions principally for bona fide equity financing purposes.

(b) "***Asset Transfer***" means the sale, lease or exchange of all or substantially all the assets of the Company.

(c) "***Board of Directors***" means the board of directors of the Company.

(d) “**Certificate of Incorporation**” means the certificate of incorporation of the Company, as amended and/or restated from time to time, including the terms of any certificate of designations of any series of Preferred Stock.

(e) “**Disposition Control**” means, with respect to a share of Class B Common Stock, the power (whether exclusive or shared) to direct any sale, assignment, transfer, conveyance hypothecation or other transfer or disposition, directly or indirectly, of such share.

(f) “**Entity**” means any corporation, partnership, limited liability company or other legal entity.

(g) “**Effective Time**” means the time this Eleventh Amended and Restated Certificate of Incorporation of the Company filed with the Secretary of State of the State of Delaware became effective in accordance with the DGCL.

(h) “**Family Member**” means with respect to any natural person, the spouse, ex-spouse, domestic partner, lineal (including by adoption) descendant or antecedent, brother or sister, the adopted child or adopted grandchild, or the spouse or domestic partner of any child, adopted child, grandchild or adopted grandchild of such individual.

(i) “**Final Conversion Date**” means 5:00 p.m. in New York City, New York on the last Trading Day of the fiscal year during which a Final Conversion Trigger Event occurs.

(j) “**Final Conversion Trigger Event**” shall mean the earliest to occur of any of the following (i) the twenty (20) year anniversary of the filing of the Company’s Certificate of Amendment to the Ninth Amended and Restated Certificate of Incorporation, which is March 15, 2041; (ii) the date on which the Founder is no longer providing services to the Company as an executive officer or director; and (iii) the date that the Founder and his controlled entities hold, in the aggregate, fewer than ten million (10,000,000) shares of the Company’s capital stock (as adjusted for stock splits, stock dividends, combinations, subdivisions and recapitalizations).

(k) “**Founder**” means Eric Lefkofsky, an individual.

(l) “**Liquidation Event**” means (i) any Asset Transfer or Acquisition in which cash or other property is, pursuant to the express terms of the Asset Transfer or Acquisition, to be distributed to the stockholders in respect of their shares of capital stock in the Company or (ii) any liquidation, dissolution and winding up of the Company; provided, however, for the avoidance of doubt, compensation pursuant to any employment, consulting, severance or other compensatory arrangement to be paid to or received by a person who is also a holder of Class A Common Stock, Class B Common Stock or Preferred Stock does not constitute consideration or a “distribution to stockholders” in respect of the Class A Common Stock, Class B Common Stock or Preferred Stock.

(m) “**Parent**” of an Entity means any Entity that directly or indirectly owns or controls a majority of the voting power of the voting securities or interests of such Entity.

(n) “**Permitted Entity**” means any of the following:

(i) a trust for the benefit of any person so long as the Founder directly, or indirectly through one or more other Permitted Entities, has exclusive Disposition Control and exclusive Voting Control with respect to the shares of Class B Common Stock held by such trust;

(ii) a trust under the terms of which the Founder has retained a “qualified interest” within the meaning of §2702(b) of the Internal Revenue Code of 1986 (as amended, the “**Internal Revenue Code**”) or a reversionary interest so long as the Founder has exclusive Disposition Control and exclusive Voting Control with respect to the shares of Class B Common Stock held by such trust;

(iii) a trust for the benefit of one or more of (1) the Founder, (2) a Family Member of the Founder, (3) a Permitted Entity or (4) a charitable organization, foundation or similar Entity in which the trustee is one or more of (x) the Founder, (y) a professional in the business of providing trustee services, including private professional fiduciaries, trust companies, accounting, legal or financial advisors, or bank trust departments or (z) a member of the Board of Directors, an executive officer of the Company, a private banker at a nationally or internationally recognized financial institution or a legal advisor of the Founder, in each case, so long as such person is approved by a majority of the members of the Board of Directors other than the Founder (if serving as a member of the Board of Directors), provided, that any such person described in clauses (x), (y) or (z) of the foregoing is subject to appointment and removal solely by the Founder (directly or indirectly through a Permitted Entity) or a Permitted Entity (a “**Qualified Trustee**”); provided that exclusive Disposition Control and exclusive Voting Control over shares of Class B Common Stock held by such trust is at all times held by one or both of (i) the Qualified Trustee and (ii) the Founder or a Permitted Entity, and if at any time (A) the Founder or a Permitted Entity or (B) the Qualified Trustee does not have exclusive Disposition Control and exclusive Voting Control with respect to the shares of Class B Common Stock held by such trust, then each share of Class B Common Stock then held by such trust shall automatically convert into one (1) fully paid and nonassessable share of Class A Common Stock; and provided, further, in the event a Qualified Trustee resigns as trustee, or becomes ineligible to be a Qualified Trustee, or otherwise ceases to serve as a Qualified Trustee, the Founder or Permitted Entity, as applicable, shall have sixty (60) days to appoint a replacement Qualified Trustee before any shares of Class B Common Stock held by such trust shall be automatically converted into shares of Class A Common Stock;

(iv) a trust under the terms of which the Founder has the power to revert in the Founder title to the trust property, if such power is exercisable solely by the Founder without the approval or consent of any other person or with the consent of a “related or subordinate party” within the meaning of §672(c) of the Internal Revenue Code, provided that exclusive Disposition Control and exclusive Voting Control over shares of Class B Common Stock held by such trust is at all times held by one or both of (i) the Qualified Trustee and (ii) the Founder or a Permitted Entity; and provided, in the event a Qualified Trustee resigns as trustee, or becomes ineligible to be a Qualified Trustee, or otherwise ceases to serve as a Qualified Trustee, the Founder or Permitted Entity, as applicable, shall have sixty (60) days to appoint a replacement Qualified Trustee before any shares of Class B Common Stock held by such trust shall be automatically converted into shares of Class A Common Stock. A trust satisfying the conditions of Section 1(n)(iii) or this Section 1(n)(iv) is referred to herein as a “**Qualified Trust**”;

(v) an Individual Retirement Account, as defined in Section 408(a) of the Internal Revenue Code, or a pension, profit sharing, stock bonus or other type of plan or trust of which the Founder is a participant or beneficiary and which satisfies the requirements for qualification under Section 401 of the Internal Revenue Code; provided that in each case the Founder has exclusive Disposition Control and exclusive Voting Control with respect to the shares of Class B Common Stock held in such account, plan or trust;

(vi) a charitable organization, foundation or similar Entity organized and operated primarily for religious, scientific, literary, education or a charitable purpose (a “**Qualified Charity**”) so long as the Founder, directly, or indirectly through one or more other Permitted Entities, or a Qualified Trustee of a Qualified Trust, retains exclusive Disposition Control and exclusive Voting Control

with respect to the shares of Class B Common Stock held by such Qualified Charity, it being understood that the Founder shall be deemed for all purposes hereof to retain exclusive Disposition Control and exclusive Voting Control with respect to the shares of Class B Common Stock held of record by such Qualified Charity as long as the Founder, a Permitted Entity, or a Qualified Trustee of a Qualified Trust has the right to, directly or indirectly, elect and remove such number of the members of the board of directors, managers or other similar persons in a Qualified Charity who have sufficient voting or other power to direct or exercise the Voting Control and Disposition Control of the shares of Class B Common Stock held of record by such Qualified Charity; provided such Transfer does not involve any payment of cash, securities, property or other consideration (other than an interest in such Qualified Charity) to the Founder or such Permitted Entity, as applicable;

(vii) an estate, so long as the Founder has exclusive Disposition Control and exclusive Voting Control with respect to the shares of Class B Common Stock held by such estate; and

(viii) any Entity (each, a "**Founder Entity**") in which the Founder, directly, or indirectly through one or more Permitted Entities, or a Qualified Trustee of a Qualified Trust, owns or controls shares, membership interests or other voting interests with sufficient voting control in the Entity, or otherwise has legally enforceable rights, such that the Founder retains exclusive Disposition Control and exclusive Voting Control with respect to the shares of Class B Common Stock held of record by such Founder Entity, it being understood that the Class B Stockholder shall be deemed for all purposes hereof to retain exclusive Disposition Control and exclusive Voting Control with respect to the shares of Class B Common Stock held of record by such Founder Entity as long as the Founder, a Permitted Entity, or a Qualified Trustee of a Qualified Trust has the right to, directly or indirectly, elect and remove such number of the members of the board of directors, managers or other similar persons in a Founder Entity who have sufficient voting or other power to direct or exercise the Voting Control and Disposition Control of the shares of Class B Common Stock held of record by such Founder Entity.

For the sake of clarity, in this Section 1(n), the Founder will be deemed to have exclusive Disposition Control and exclusive Voting Control over shares of Class B Common Stock held by a person if a Permitted Entity or, in the case of a Qualified Trust, a Qualified Trustee has exclusive Disposition Control and exclusive Voting Control over such shares.

(o) "**Permitted Transfer**" means, and is restricted to, any Transfer of a share of Class B Common Stock:

(i) by a Qualified Stockholder who is a natural person (including a natural person serving in a trustee capacity with regard to a trust for the benefit of himself or herself and/or his or her Family Members), to the trustee of a Permitted Entity that is a trust of such Qualified Stockholder or to such Qualified Stockholder in his or her individual capacity or as a trustee of a Permitted Entity that is a trust;

(ii) by the trustee of a Permitted Entity that is a trust of a Qualified Stockholder, to such Qualified Stockholder, the trustee of any other Permitted Entity that is a trust of such Qualified Stockholder or any Permitted Entity of such Qualified Stockholder;

(iii) by a Qualified Stockholder to any Permitted Entity of such Qualified Stockholder; or

(iv) by a Permitted Entity of a Qualified Stockholder to such Qualified Stockholder or any other Permitted Entity or the trustee of a Permitted Entity that is a trust of such Qualified Stockholder.

(p) “**Permitted Transferee**” means a transferee of shares of Class B Common Stock received in a Transfer that constitutes a Permitted Transfer.

(q) “**Qualified Stockholder**” means (i) the Founder, (ii) any record holder of a share of Class B Common Stock at the Effective Time, and (iii) a Permitted Transferee.

(r) “**Trading Day**” means any day on which The Nasdaq Stock Market, or any national stock exchange under which the Company’s equity securities are listed for trading, is open for trading.

(s) “**Transfer**” of a share of Class B Common Stock means any sale, assignment, transfer, conveyance, hypothecation or other transfer or disposition of such share or any legal or beneficial interest in such share, whether or not for value and whether voluntary or involuntary or by operation of law, including, without limitation, a transfer of a share of Class B Common Stock to a broker or other nominee (regardless of whether there is a corresponding change in beneficial ownership), or the transfer of, or entering into a binding agreement with respect to, Voting Control (as defined below) over such share by proxy or otherwise; provided, however, that the following shall not be considered a “Transfer” within the meaning of this Article IV:

(i) the granting of a revocable proxy to officers or directors of the Company at the request of the Board of Directors in connection with actions to be taken at an annual or special meeting of stockholders;

(ii) the existence of any proxy granted prior to the Effective Time or the amendment or expiration of any such proxy;

(iii) entering into a voting trust, agreement or arrangement (with or without granting a proxy) solely with stockholders who are holders of Class B Common Stock that (A) is disclosed either in a Schedule 13D filed with the Securities and Exchange Commission or in writing to the Secretary of the Company, (B) either has a term not exceeding one year or is terminable by the holder of the shares subject thereto at any time and (C) does not involve any payment of cash, securities, property or other consideration to the holder of the shares subject thereto other than the mutual promise to vote shares in a designated manner;

(iv) the pledge of shares of Class B Common Stock by a stockholder that creates a mere security interest in such shares pursuant to a bona fide loan or indebtedness transaction for so long as such stockholder continues to exercise exclusive Voting Control over such pledged shares; provided, however, that a foreclosure on such shares or other similar action by the pledgee shall constitute a “Transfer” unless such foreclosure or similar action qualifies as a “Permitted Transfer”; or

(v) entering into, or reaching an agreement, arrangement or understanding regarding, a support or similar voting or tender agreement (with or without granting a proxy) in connection with a Liquidation Event, Asset Transfer or Acquisition that has been approved by the Board of Directors.

A “**Transfer**” shall also be deemed to have occurred with respect to a share of Class B Common Stock beneficially held by (i) a Permitted Transferee on the date that such Permitted Transferee ceases to meet the qualifications to be a Permitted Transferee of the Qualified Stockholder who effected the Transfer of such shares to such Permitted Transferee, or (ii) an Entity that is a Qualified Stockholder, if there occurs a Transfer on a cumulative basis, from and after the Effective Time, of a majority of the voting power of the voting securities of such Entity or any Parent of such Entity, other than a Transfer to parties that were, as of the Effective Time, holders of voting securities of any such Entity or Parent of such Entity.

(t) “*Voting Control*” means, with respect to a share of Class B Common Stock, the power (whether exclusive or shared) to vote or direct the voting, directly or indirectly, of such share by proxy, voting agreement or otherwise.

2. Rights Relating To Dividends, Subdivisions and Combinations.

(a) Subject to the prior rights of holders of any Preferred Stock at the time outstanding having prior rights as to dividends, the holders of the Class A Common Stock and Class B Common Stock shall be entitled to receive, when, as and if declared by the Board of Directors, out of any assets of the Company legally available therefor, such dividends as may be declared from time to time by the Board of Directors. Except as permitted in Section 2(b) of this Part D of Article IV, any dividends paid to the holders of shares of Class A Common Stock and Class B Common Stock shall be paid pro rata, on an equal priority, *pari passu* basis, unless different treatment of the shares of each such class is approved by the affirmative vote of the holders of a majority of the outstanding shares of Class A Common Stock and a majority of the outstanding shares of Class B Common Stock, each voting separately as a class.

(b) The Company shall not declare or pay any dividend or make any distribution to the holders of Class A Common Stock or Class B Common Stock payable in securities of the Company unless the same dividend or distribution with the same record date and payment date shall be declared and paid on all shares of Common Stock; provided, however, that (i) dividends or other distributions payable in shares of Class A Common Stock or rights to acquire shares of Class A Common Stock may be declared and paid to the holders of Class A Common Stock without the same dividend or distribution being declared and paid to the holders of the Class B Common Stock if, and only if, a dividend payable in shares of Class B Common Stock, or rights to acquire shares of Class B Common Stock, as applicable, are declared and paid to the holders of Class B Common Stock at the same rate and with the same record date and payment date; and (ii) dividends or other distributions payable in shares of Class B Common Stock or rights to acquire shares of Class B Common Stock may be declared and paid to the holders of Class B Common Stock without the same dividend or distribution being declared and paid to the holders of the Class A Common Stock if, and only if, a dividend payable in shares of Class A Common Stock, or rights to acquire shares of Class A Common Stock, as applicable, are declared and paid to the holders of Class A Common Stock at the same rate and with the same record date and payment date.

(c) If the Company in any manner subdivides or combines (including by reclassification) the outstanding shares of Class A Common Stock or Class B Common Stock, then the outstanding shares of all Common Stock will be subdivided or combined in the same proportion and manner.

3. Liquidation Rights. In the event of a Liquidation Event, upon the completion of the distributions required with respect to any Preferred Stock that may then be outstanding, the remaining assets of the Company legally available for distribution to stockholders, or consideration payable to the stockholders of the Company, in the case of an Acquisition constituting a Liquidation Event, shall be distributed on an equal priority, pro rata basis to the holders of Class A Common Stock and Class B Common Stock (and the holders of any Preferred Stock that may then be outstanding, to the extent required by the Certificate of Incorporation), unless different treatment of the shares of each such class is approved by the affirmative vote of the holders of a majority of the outstanding shares of Class A Common Stock and a majority of the outstanding shares of Class B Common Stock, each voting separately as a class; provided, however, for the avoidance of doubt, compensation pursuant to any employment, consulting, severance or other compensatory arrangement to be paid to or received by a person who is also a holder of Class A Common Stock, Class B Common Stock or Preferred Stock does not constitute consideration or a “distribution to stockholders” in respect of the Class A Common Stock, Class B Common Stock or Preferred Stock.

4. Voting Rights.

(a) **Class A Common Stock.** Each holder of shares of Class A Common Stock shall be entitled to one vote for each share thereof held.

(b) **Class B Common Stock.** Each holder of shares of Class B Common Stock shall be entitled to thirty (30) votes for each share thereof held.

(c) **Voting Generally.** Except as required by law or as otherwise set forth herein, the holders of Preferred Stock, Class A Common Stock and Class B Common Stock shall vote together and not as separate series or classes. Except as otherwise required by applicable law or as otherwise set forth herein, holders of Class A Common Stock and Class B Common Stock, as such, shall not be entitled to vote on any amendment to the Certificate of Incorporation that relates solely to the terms of one or more outstanding series of Preferred Stock if the holders of such affected series are entitled, either separately or together with the holders of one or more other such series, to vote thereon pursuant to the Certificate of Incorporation or applicable law.

(d) **Class B Common Stock Protective Provisions.** Notwithstanding anything herein to the contrary, so long as any shares of Class B Common Stock remain outstanding, the Company shall not, without the approval by vote or written consent of the holders of a majority of the outstanding shares Class B Common Stock, voting together as a separate class, directly or indirectly, or whether by amendment, or through merger, recapitalization, consolidation or otherwise:

(i) amend, alter, or repeal any provision of the Certificate of Incorporation or the Bylaws of the Company in a manner that modifies the voting, conversion or other powers, preferences, or other special rights or privileges, or restrictions of the Class B Common Stock;

(ii) reclassify any outstanding shares of Class A Common Stock into shares having rights as to dividends or liquidation that are senior to the Class B Common Stock or the right to more than one vote for each share thereof;

(iii) issue any shares of Preferred Stock having the power (whether exclusive or shared) to vote, or direct the voting of such shares by proxy, voting agreement or otherwise, equal or superior to the Voting Control; or

(iv) issue any additional shares of Class B Common Stock or other securities convertible into shares of Class B Common Stock, except for the issuance of Class B Common Stock issuable upon a dividend payable in accordance with Section 2(b) of this Part D of Article IV.

5. Optional Conversion.

(a) Optional Conversion of the Class B Common Stock.

(i) At the option of the holder thereof, each share of Class B Common Stock shall be convertible, at any time or from time to time, into one fully paid and nonassessable share of Class A Common Stock as provided herein.

(ii) Each holder of Class B Common Stock who elects to convert the same into shares of Class A Common Stock shall surrender the certificate or certificates therefor (if any), duly endorsed, at the office of the Company or any transfer agent for the Class B Common Stock, and shall give written notice to the Company at such office that such holder elects to convert the same and shall state therein the number of shares of Class B Common Stock being converted. Such conversion shall be deemed to have been made immediately prior to the close of business on the date of such surrender of the certificate or certificates representing the shares of Class B Common Stock to be converted, or, if the shares are uncertificated, immediately prior to the close of business on the date that the holder delivers notice of such conversion to the Company's transfer agent and the person entitled to receive the shares of Class A Common Stock issuable upon such conversion shall be treated for all purposes as the record holder of such shares of Class A Common Stock at such time.

6. Automatic Conversion.

(a) **Automatic Conversion of the Class B Common Stock.** Each share of Class B Common Stock shall automatically be converted into one fully paid and nonassessable share of Class A Common Stock upon a Transfer, other than a Permitted Transfer, of such share of Class B Common Stock. Such conversion shall occur automatically without the need for any further action by the holders of such shares and whether or not the certificates representing such shares (if any) are surrendered to the Company or its transfer agent; provided, however, that the Company shall not be obligated to issue certificates evidencing the shares of Class A Common Stock issuable upon such conversion unless the certificates evidencing such shares of Class B Common Stock are either delivered to the Company or its transfer agent as provided below, or the holder notifies the Company or its transfer agent that such certificates have been lost, stolen or destroyed and executes an agreement satisfactory to the Company to indemnify the Company from any loss incurred by it in connection with such certificates. Upon the occurrence of such automatic conversion of the Class B Common Stock, the holders of Class B Common Stock so converted shall surrender the certificates representing such shares (if any) at the office of the Company or any transfer agent for the Class A Common Stock.

(b) **Final Conversion.** On the Final Conversion Date, each issued share of Class B Common Stock shall automatically, without any further action, convert into one share of Class A Common Stock. Following the Final Conversion Date, the Company may no longer issue any additional shares of Class B Common Stock. Such conversion shall occur automatically without the need for any further action by the holders of such shares and whether or not the certificates representing such shares (if any) are surrendered to the Company or its transfer agent; provided, however, that the Company shall not be obligated to issue certificates evidencing the shares of Class A Common Stock issuable upon such conversion unless the certificates evidencing such shares of Class B Common Stock are either delivered to the Company or its transfer agent as provided below, or the holder notifies the Company or its transfer agent that such certificates have been lost, stolen or destroyed and executes an agreement satisfactory to the Company to indemnify the Company from any loss incurred by it in connection with such certificates. Upon the occurrence of such automatic conversion of the Class B Common Stock, the holders of Class B Common Stock so converted shall surrender the certificates representing such shares (if any) at the office of the Company or any transfer agent for the Class A Common Stock.

(c) **Procedures.** The Company may, from time to time, establish such policies and procedures relating to the conversion of Class B Common Stock to Class A Common Stock and the general administration of this dual class stock structure, including the issuance of stock certificates (or the establishment of book-entry positions) with respect thereto, as it may deem reasonably necessary or advisable, and may from time to time request that holders of shares of Class B Common Stock furnish certifications, affidavits or other proof to the Corporation as it deems necessary to verify the ownership of Class B Common Stock and to confirm that a conversion to Class A Common Stock has not occurred. A determination by the Secretary of the Company as to whether a Transfer results in a conversion to Class A Common Stock shall be conclusive and binding.

(d) Immediate Effect. In the event of a conversion of shares of Class B Common Stock to shares of Class A Common Stock pursuant to this Section 6 of Part D of Article IV, such conversion(s) shall be deemed to have been made at the time that the Transfer of shares occurred or immediately upon the Final Conversion Date, as applicable. Upon any conversion of Class B Common Stock to Class A Common Stock, all rights of the holder of shares of Class B Common Stock shall cease and the person or persons in whose names or names the certificate or certificates (or book-entry position(s)) representing the shares of Class A Common Stock are to be issued shall be treated for all purposes as having become the record holder or holders of such shares of Class A Common Stock.

7. Redemption. The Common Stock is not redeemable.

8. Reservation of Stock Issuable Upon Conversion. The Company shall at all times reserve and keep available out of its authorized but unissued shares of Class A Common Stock, solely for the purpose of effecting the conversion of the shares of the Class B Common Stock, as applicable, such number of its shares of Class A Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of Class B Common Stock; and if at any time the number of authorized but unissued shares of Class A Common Stock shall not be sufficient to effect the conversion of all then-outstanding shares of Class B Common Stock, as applicable, the Company will take such corporate action as may, in the opinion of its counsel, be necessary to increase its authorized but unissued shares of Class A Common Stock to such numbers of shares as shall be sufficient for such purpose.

9. Prohibition on Reissuance of Shares. Shares of Class B Common Stock that are acquired by the Company for any reason (whether by repurchase, upon conversion, or otherwise) shall be retired in the manner required by law and shall not be reissued as shares of Class B Common Stock.

V.

For the management of the business and for the conduct of the affairs of the Company, and in further definition, limitation and regulation of the powers of the Company, of its directors and of its stockholders or any class thereof, as the case may be, it is further provided that:

A. Board of Directors.

1. Generally. Except as otherwise provided in the Certificate of Incorporation or the DGCL, the business and affairs of the Company shall be managed by or under the direction of the Board of Directors. The number of directors that shall constitute the Board of Directors shall be fixed exclusively by resolutions adopted by the Board of Directors; provided, however, that, notwithstanding the foregoing, until the Final Conversion Date, the number of directors that shall constitute the whole Board of Directors may also be fixed by a resolution approved by the affirmative vote of the holders of a majority of the voting power of the Class A Common Stock and Class B Common Stock, voting together as a single class.

2. Election.

- (a)** Directors shall be elected at each annual meeting of the stockholders to hold office until the next annual meeting.
- (b)** No stockholder entitled to vote at an election for directors may cumulate votes.

(c) Notwithstanding the foregoing provisions of this section, each director shall serve until his successor is duly elected and qualified or until his or her earlier death, resignation or removal. No decrease in the number of directors constituting the Board of Directors shall shorten the term of any incumbent director.

(d) Election of directors need not be by written ballot unless the Bylaws so provide.

3. Removal of Directors. Subject to any limitations imposed by applicable law, removal shall be as provided in Section 141(k) of the DGCL.

4. Vacancies. Subject to any limitations imposed by applicable law and subject to the rights of the holders of any series of Preferred Stock, any vacancies on the Board of Directors resulting from death, resignation, disqualification, removal or other causes and any newly created directorships resulting from any increase in the number of directors shall be filled by the affirmative vote of (a) a majority of the directors then in office, even though less than a quorum of the Board of Directors, or by the sole remaining director, or (b), if such vacancy is created prior to the Final Conversion Date, the holders of a majority of the voting power of the outstanding shares of Class A Common Stock and Class B Common Stock, voting together as a single class. Any director elected in accordance with the preceding sentence shall hold office for the remainder of the full term of the director for which the vacancy was created or occurred and until such director's successor shall have been elected and qualified.

5. Preferred Directors. Notwithstanding anything herein to the contrary, during any period when the holders of any series of Preferred Stock, voting separately as a series or together with one or more series, have the right to elect additional directors, then upon commencement and for the duration of the period during which such right continues: (i) the then otherwise total authorized number of directors of the Company shall automatically be increased by such specified number of directors, and the holders of such Preferred Stock shall be entitled to elect the additional directors so provided for or fixed pursuant to said provisions; and (ii) each such additional director shall serve until such director's successor shall have been duly elected and qualified, or until such director's right to hold such office terminates pursuant to said provisions, whichever occurs earlier, subject to his or her earlier death, resignation, retirement, disqualification or removal. Except as otherwise provided by the Board of Directors in the resolution or resolutions establishing such series, whenever the holders of any series of Preferred Stock having such right to elect additional directors are divested of such right pursuant to the provisions of such stock, the terms of office of all such additional directors elected by the holders of such stock, or elected to fill any vacancies resulting from the death, resignation, disqualification or removal of such additional directors, shall forthwith terminate and the total authorized number of directors of the Company shall be reduced accordingly.

B. Stockholder Actions. Following the Final Conversion Date, no action shall be taken by the stockholders of the Company except at an annual or special meeting of stockholders called in accordance with the Bylaws and no action shall be taken by the stockholders by written consent. Advance notice of stockholder nominations for the election of directors and of business to be brought by stockholders before any meeting of the stockholders of the Company shall be given in the manner provided in the Bylaws of the Company. Prior to the Final Conversion Date, any action required or permitted to be taken by the stockholders of the Company at a meeting may be effected by consent in writing or by electronic transmission of such stockholders in compliance with Section 228 of the DGCL.

C. Bylaws. Subject to the restrictions of Section 4(d) of Part D of Article IV, the Board of Directors is expressly empowered to adopt, amend or repeal the Bylaws of the Company. The stockholders shall also have power to adopt, amend or repeal the Bylaws of the Company; provided, however, that, any time after the Final Conversion Date, in addition to any vote of the holders of any class or series of stock of the Company required by law or by the Certificate of Incorporation, such action by stockholders shall require the affirmative vote of the holders of at least 66 2/3% of the voting power of all of the then-outstanding shares of the capital stock of the Company entitled to vote generally in the election of directors, voting together as a single class.

D. Special Meetings of Stockholders. Special meetings of the stockholders (i) may be called, for any purpose as is a proper matter for stockholder action under the DGCL, by (A) the Chairperson of the Board of Directors, (B) the Chief Executive Officer, or (C) the Board of Directors pursuant to a resolution adopted by a majority of the total number of authorized directors (whether or not there exist any vacancies in previously authorized directorships at the time any such resolution is presented to the Board of Directors for adoption), and (ii) until the Final Conversion Date, shall be called, for any purpose as is a proper matter for stockholder action under the DGCL, by the Secretary of the Company upon the written request of stockholders of record entitled to cast not less than a majority of the votes at such special meeting, provided that such written request is in compliance with the Bylaws of the Company.

VI.

A. The liability of the directors of the Company for monetary damages for breach of fiduciary duty as a director shall be eliminated to the fullest extent permitted under applicable law. If the DGCL is hereafter amended to permit exculpation of officers, then, from and after the effective time of such amendment, the officers of the Company for which such exculpation is permitted shall not be liable to the Company or its stockholders for monetary damages for breach of fiduciary duty as an officer, except to the extent such exemption from liability or limitation thereof is not permitted under the DGCL as the same exists or may thereafter be amended.

B. To the fullest extent permitted by applicable law, the Company may provide indemnification of (and advancement of expenses to) directors, officers, and other agents of the Company (and any other persons to which applicable law permits the Company to provide indemnification) through Bylaw provisions, agreements with such agents or other persons, vote of stockholders or disinterested directors or otherwise.

C. Any repeal or modification of this Article VI shall only be prospective and shall not affect the rights under this Article VI in effect at the time of the alleged occurrence of any action or omission to act giving rise to liability.

D. Unless the Company consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for the following types of actions or proceedings under Delaware statutory or common law: (A) any derivative action or proceeding brought on behalf of the Company; (B) any action or proceeding asserting a claim of breach of a fiduciary duty owed by any current or former director, officer or other employee of the Company or any stockholder to the Company or the Company's stockholders; (C) any action or proceeding asserting a claim against the Company or any current or former director, officer or other employee of the Company or any stockholder arising pursuant to any provision of the DGCL, the Certificate of Incorporation or the Bylaws of the Company (as each may be amended from time to time); (D) any action or proceeding to interpret, apply, enforce or determine the validity of the Certificate of Incorporation or the Bylaws of the Company (including any right, obligation or remedy thereunder); (E) any action or proceeding as to which the DGCL confers jurisdiction to the Court of Chancery of the State of Delaware; and (F) any action asserting a claim against the Company or any director, officer or other employee of the Company or any stockholder, governed by the internal affairs doctrine, in all cases to the fullest extent permitted by law and subject to the court's having personal jurisdiction over the indispensable parties named as defendants. This Article VII shall not apply to suits brought to enforce a duty or liability created by the Securities Exchange Act of 1934 or any other claim for which the federal courts have exclusive jurisdiction.

E. Unless the Company consents in writing to the selection of an alternative forum, the federal district courts of the United States of America shall be the exclusive forum for the resolution of any complaint asserting a cause or causes of action arising under the Securities Act of 1933, as amended, including all causes of action asserted against any defendant named in such complaint. For the avoidance of doubt, this provision is intended to benefit and may be enforced the Company, its officers and directors, the underwriters to any offering giving rise to such complaint, and any other professional entity whose profession gives authority to a statement made by that person or entity and who has prepared or certified any part of the documents underlying the offering.

F. Any person or Entity holding, owning or otherwise acquiring any interest in shares of capital stock of the Company shall be deemed to have notice of and to have consented to the provisions of this Article VI.

VII.

A. The Company reserves the right to amend, alter, change or repeal any provision contained in this Certificate of Incorporation, in the manner now or hereafter prescribed by statute, except as provided in paragraph B. of this Article VII and subject to the restrictions of Section 4(d) of Part D of Article IV, and all rights conferred upon the stockholders herein are granted subject to this reservation.

B. Notwithstanding any other provisions of this Certificate of Incorporation or any provision of law that might otherwise permit a lesser vote or no vote, but in addition to any affirmative vote required by law or by this Certificate of Incorporation, after the Final Conversion Date, the affirmative vote of the holders of at least 66 2/3% of the voting power of all of the then-outstanding shares of capital stock of the Company entitled to vote generally in the election of directors, voting together as a single class, shall be required to alter, amend or repeal Articles V, VI, and VII.

* * * *

FOUR: This Amended and Restated Certificate of Incorporation has been duly authorized in accordance with Sections 228, 242 and 245 of the DGCL.

[Signature Page Follows]

Tempus Labs, Inc. has caused this Eleventh Amended and Restated Certificate of Incorporation to be signed by a duly authorized officer on [•], 202[•].

TEMPUS LABS, INC.

By: _____
Eric Lefkofsky
Chief Executive Officer

**AMENDED AND RESTATED
BYLAWS
OF
TEMPUS LABS, INC.
(A DELAWARE CORPORATION)**

AMENDED AND RESTATED BYLAWS

OF

TEMPUS LABS, INC.

(A DELAWARE CORPORATION)

ARTICLE I

OFFICES

Section 1. Registered Office. The registered office of the corporation in the State of Delaware shall be as set forth in the Amended and Restated Certificate of Incorporation, as may be amended from time to time, of the corporation (the “Certificate of Incorporation”).

Section 2. Other Offices. The corporation may also have and maintain an office or principal place of business at such place as may be fixed by the Board of Directors of the corporation (the “Board of Directors”), and may also have offices at such other places, both within and without the State of Delaware as the Board of Directors may from time to time determine or the business of the corporation may require.

ARTICLE II

CORPORATE SEAL

Section 1. Corporate Seal. The Board of Directors may adopt a corporate seal. If adopted, the corporate seal shall consist of a die bearing the name of the corporation and the inscription, “Corporate Seal-Delaware.” Said seal may be used by causing it or a facsimile thereof to be impressed or affixed or reproduced or otherwise.

ARTICLE III

STOCKHOLDERS’ MEETINGS

Section 1. Place of Meetings. Meetings of the stockholders of the corporation may be held at such place, if any, either within or without the State of Delaware, as may be determined from time to time by the Board of Directors. The Board of Directors may, in its sole discretion, determine that the meeting shall not be held at any place, but may instead be held solely by means of remote communication as provided under the General Corporation Law of the State of Delaware (“DGCL”) and Section 14 below.

Section 2. Annual Meetings.

(a) The annual meeting of the stockholders of the corporation, for the purpose of election of directors and for such other business as may properly come before it, shall be held on such date and at such time as may be designated from time to time by the Board of Directors. Nominations of persons for election to the Board of Directors of the corporation and proposals of business to be considered by the stockholders may be made at an annual meeting of stockholders: (i) pursuant to the corporation’s notice of meeting of stockholders; (ii) by or at the direction of the Board of Directors or a duly authorized committee thereof; or (iii) by any stockholder of the corporation who was a stockholder of record (and, with respect to any beneficial owner, if different, on whose behalf such business is proposed or such nomination or nominations are made, only if such beneficial owner was the beneficial owner of shares of the corporation) at the time of giving the stockholder’s notice provided for in Section 5(b) below, who is entitled to vote at the meeting and who complied with the notice procedures set forth in this Section 5. For the avoidance of doubt, clause (iii) above shall be the exclusive means for a stockholder to make nominations and submit other business (other than matters properly included in the corporation’s notice of meeting of stockholders and proxy statement under Rule 14a-8 under the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder (the “1934 Act”)) before an annual meeting of stockholders.

(b) At an annual meeting of the stockholders, only such business shall be conducted as is a proper matter for stockholder action under Delaware law, the Certificate of Incorporation and these Bylaws, and as shall have been properly brought before the meeting in accordance with the procedures below.

(i) For nominations for the election to the Board of Directors to be properly brought before an annual meeting by a stockholder pursuant to clause (iii) of Section 5(a), the stockholder must deliver written notice to the Secretary at the principal executive offices of the corporation on a timely basis as set forth in Section 5(b)(iii) and must update and supplement such written notice on a timely basis as set forth in Section 5(c). Such stockholder's notice shall set forth: (A) as to each nominee such stockholder proposes to nominate at the meeting: (1) the name, age, business address and residence address of such nominee, (2) the principal occupation or employment of such nominee, (3) the class or series and number of shares of each class or series of capital stock of the corporation that are owned of record and beneficially by such nominee, (4) the date or dates on which such shares were acquired and the investment intent of such acquisition, (5) a statement whether such nominee, if elected, intends to tender, promptly following such person's failure to receive the required vote for election or re-election at the next meeting at which such person would face election or re-election, an irrevocable resignation effective upon acceptance of such resignation by the Board of Directors, and (6) all other information concerning such nominee as would be required to be disclosed in a proxy statement soliciting proxies for the election of such nominee as a director in an election contest (even if an election contest is not involved and whether or not proxies are being or will be solicited), or that is otherwise required to be disclosed pursuant to Section 14 of the 1934 Act and the rules and regulations promulgated thereunder (including such person's written consent to being named in the corporation's proxy statement and associated proxy card as a nominee of the stockholder and to serving as a director if elected); and (B) all of the information required by Section 5(b)(iv). The corporation may require any proposed nominee to furnish such other information as it may reasonably require to determine the eligibility of such proposed nominee to serve as an independent director of the corporation (as such term is used in any applicable stock exchange listing requirements or applicable law) or on any committee or sub-committee of the Board of Directors under any applicable stock exchange listing requirements or applicable law, or that could be material to a reasonable stockholder's understanding of the independence, or lack thereof, of such proposed nominee.

(ii) Other than proposals sought to be included in the corporation's proxy materials pursuant to Rule 14a-8 under the 1934 Act, for business other than nominations for the election to the Board of Directors to be properly brought before an annual meeting by a stockholder pursuant to clause (iii) of Section 5(a), the stockholder must deliver written notice to the Secretary at the principal executive offices of the corporation on a timely basis as set forth in Section 5(b)(iii), and must update and supplement such written notice on a timely basis as set forth in Section 5(c). Such stockholder's notice shall set forth: (A) as to each matter such stockholder proposes to bring before the meeting, a brief description of the business desired to be brought before the meeting, the text of the proposal or business (including the text of any resolutions proposed for consideration and in the event that such business includes a proposal to amend these Bylaws, the language of the proposed amendment), the reasons for conducting such business at the meeting, and any material interest (including any anticipated benefit of such business to any Proponent (as defined below) other than solely as a result of its ownership of the corporation's capital stock, that is material to any Proponent individually, or to the Proponents in the aggregate) in such business of any Proponent; and (B) the information required by Section 5(b)(iv).

(iii) To be timely, the written notice required by Section 5(b)(i) or 5(b)(ii) must be received by the Secretary at the principal executive offices of the corporation not later than the close of business on the 90th day, nor earlier than the close of business on the 120th day, prior to the first anniversary of the immediately preceding year's annual meeting; *provided, however*, that, subject to the last sentence of this Section 5(b)(iii), in the event that (A) the date of the annual meeting is advanced more than 30 days prior to or delayed by more than 30 days after the anniversary of the preceding year's annual meeting,

notice by the stockholder to be timely must be so received not earlier than the close of business on the 120th day prior to such annual meeting and not later than the close of business on the later of the 90th day prior to such annual meeting or, if later than the 90th day prior to such annual meeting, the tenth day following the day on which public announcement of the date of such meeting is first made by the corporation or (B) the corporation did not have an annual meeting in the preceding year, notice by the stockholder to be timely must be so received not later than the tenth day following the day on which public announcement of the date of such meeting is first made. In no event shall an adjournment or postponement of an annual meeting for which notice has been given, or the public announcement thereof has been made, commence a new time period (or extend any time period) for the giving of a stockholder's notice as described above.

(iv) The written notice required by Section 5(b)(i) or 5(b)(ii) shall also set forth, as of the date of the notice and as to the stockholder giving the notice and the beneficial owner, if any, on whose behalf the nomination or proposal is made (each, a "Proponent" and collectively, the "Proponents"): (A) the name and address of each Proponent, including, if applicable, such name and address as they appear on the corporation's books and records; (B) the class, series and number of shares of each class or series of the capital stock of the corporation that are, directly or indirectly, owned of record or beneficially (within the meaning of Rule 13d-3 under the 1934 Act) by each Proponent (provided, that for purposes of this Section 5(b)(iv), such Proponent shall in all events be deemed to beneficially own all shares of any class or series of capital stock of the corporation as to which such Proponent has a right to acquire beneficial ownership at any time in the future); (C) a description of any agreement, arrangement or understanding (whether oral or in writing) with respect to such nomination or proposal (and/or the voting of shares of any class or series of capital stock of the corporation) between or among any Proponent and any of its affiliates or associates, and any others (including their names) acting in concert, or otherwise under the agreement, arrangement or understanding, with any of the foregoing; (D) a representation that the Proponents are holders of record or beneficial owners, as the case may be, of shares of the corporation at the time of giving notice, will be entitled to vote at the meeting, and intend to appear in person or by proxy at the meeting to nominate the person or persons specified in the notice (with respect to a notice under Section 5(b)(i)) or to propose the business that is specified in the notice (with respect to a notice under Section 5(b)(ii)); (E) a representation as to whether the Proponents intend to deliver a proxy statement and form of proxy to holders of a sufficient number of the corporation's voting shares to elect such nominee or nominees (with respect to a notice under Section 5(b)(i)) or to carry such proposal (with respect to a notice under Section 5(b)(ii)); (F) to the extent known by any Proponent, the name and address of any other stockholder supporting the proposal on the date of such stockholder's notice; and (G) a description of all Derivative Transactions (as defined below) by each Proponent during the previous 12 month period, including the date of the transactions and the class, series and number of securities involved in, and the material economic terms of, such Derivative Transactions.

(c) A stockholder providing the written notice required by Section 5(b)(i) or 5(b)(ii) shall update and supplement such notice in writing, if necessary, so that the information provided or required to be provided in such notice is true and correct in all material respects as of (i) the record date for the determination of stockholders entitled to notice of the meeting and (ii) the date that is five Business Days (as defined below) prior to the meeting and, in the event of any adjournment or postponement thereof, five Business Days prior to such adjourned or postponed meeting. In the case of an update and supplement pursuant to clause (i) of this Section 5(c), such update and supplement shall be received by the Secretary at the principal executive offices of the corporation not later than five Business Days after the public announcement of the record date for the determination of stockholders entitled to notice of the meeting. In the case of an update and supplement pursuant to clause (ii) of this Section 5(c), such update and supplement shall be received by the Secretary at the principal executive offices of the corporation not later than two Business Days prior to the date for the meeting, and, in the event of any adjournment or postponement thereof, two Business Days prior to such adjourned or postponed meeting.

(d) A person shall not be eligible for election or re-election as a director at an annual meeting, unless the person is nominated in accordance with either clause (ii) or (iii) of Section 5(a) and in accordance with the procedures set forth in Section 5(b), Section 5(c), and Section 5(d), as applicable. Only such business shall be conducted at any annual meeting of the stockholders of the corporation as shall have been brought before the meeting in accordance with clauses (i), (ii), or (iii) of Section 5(a) and in

accordance with the procedures set forth in Section 5(b) and Section 5(c), as applicable. Except as otherwise required by applicable law, the chairperson of the meeting shall have the power and duty to determine whether a nomination or any business proposed to be brought before the meeting was made, or proposed, as the case may be, in accordance with the procedures set forth in these Bylaws and, if any proposed nomination or business is not in compliance with these Bylaws, or the Proponent does not act in accordance with the representations in Sections 5(b)(iv)(D) and 5(b)(iv)(E), to declare that such proposal or nomination shall not be presented for stockholder action at the meeting and shall be disregarded, or that such business shall not be transacted, notwithstanding that proxies in respect of such nomination or such business may have been solicited or received.

(e) Notwithstanding the foregoing provisions of this Section 5, in order to include information with respect to a stockholder proposal in the proxy statement and form of proxy for a stockholders' meeting, a stockholder must also comply with all applicable requirements of the 1934 Act and the rules and regulations thereunder. Nothing in these Bylaws shall be deemed to affect any rights of stockholders to request inclusion of proposals in the corporation's proxy statement pursuant to Rule 14a-8 under the 1934 Act; *provided, however*, that any references in these Bylaws to the 1934 Act or the rules and regulations thereunder are not intended to and shall not limit the requirements applicable to proposals and/or nominations to be considered pursuant to Section 5(a)(iii). Nothing in these Bylaws shall be deemed to affect any rights of holders of any class or series of preferred stock to nominate and elect directors pursuant to and to the extent provided in any applicable provision of the Certificate of Incorporation.

(f) Notwithstanding anything herein to the contrary, in the event that the number of directors to be elected to the Board of Directors of the corporation at the annual meeting is increased effective after the time period for which nominations would otherwise be due under Section 5(b)(iii) and there is no public announcement by the corporation naming the nominees for the additional directorships at least one hundred (100) days prior to the first anniversary of the preceding year's annual meeting, a stockholder's notice required by this Section 5 shall also be considered timely, but only with respect to nominees for the additional directorships, if it shall be delivered to the Secretary at the principal executive offices of the corporation not later than the close of business on the tenth (10th) day following the day on which such public announcement is first made by the corporation.

(g) For purposes of Sections 5 and 6,

(i) "affiliates" and "associates" shall have the meanings set forth in Rule 405 under the Securities Act of 1933, as amended (the "1933 Act");

(ii) "Business Day" means any day other than Saturday, Sunday or a day on which banks are closed in New York City, New York;

(iii) "close of business" means 6:00 p.m. local time at the principal executive offices of the corporation on any calendar day, whether or not the day is a Business Day;

(iv) "Derivative Transaction" means any agreement, arrangement, interest or understanding entered into by, or on behalf or for the benefit of, any Proponent or any of its affiliates or associates, whether record or beneficial:

(A) the value of which is derived in whole or in part from the value of any class or series of shares or other securities of the corporation;

(B) that otherwise provides any direct or indirect opportunity to gain or share in any gain derived from a change in the value of securities of the corporation;

(C) the effect or intent of which is to mitigate loss, manage risk or benefit from changes in value or price with respect to any securities of the corporation; or

(D) that provides the right to vote or increase or decrease the voting power of, such Proponent, or any of its affiliates or associates, directly or indirectly, with respect to any securities of the corporation,

which agreement, arrangement, interest or understanding may include, without limitation, any option, warrant, debt position, note, bond, convertible security, swap, stock appreciation or similar right, short position, profit interest, hedge, right to dividends, voting agreement, performance-related fee or arrangement to borrow or lend shares (whether or not subject to payment, settlement, exercise or conversion in any such class or series), and any proportionate interest of such Proponent in the securities of the corporation held by any general or limited partnership, or any limited liability company, of which such Proponent is, directly or indirectly, a general partner or managing member; and

(v) “public announcement” shall mean disclosure in a press release reported by the Dow Jones News Service, Associated Press or comparable national news service or in a document publicly filed by the corporation with the Securities and Exchange Commission pursuant to Section 13, 14 or 15(d) of the 1934 Act or by such other means reasonably designed to inform the public or security holders in general of such information, including, without limitation, posting on the corporation’s investor relations website.

Section 3. Special Meetings.

(a) Special meetings of the stockholders of the corporation (i) may be called, for any purpose as is a proper matter for stockholder action under Delaware law, by (A) the Chairperson of the Board of Directors, (B) the Chief Executive Officer, or (C) the Board of Directors pursuant to a resolution adopted by a majority of the total number of authorized directors (whether or not there exist any vacancies in previously authorized directorships at the time any such resolution is presented to the Board of Directors for adoption), and (ii) until the Final Conversion Date (as defined in the Certificate of Incorporation) shall be called, for any purpose as is a proper matter for stockholder action under Delaware law, by the Secretary of the Company upon written request of stockholders of record entitled to cast not less than a majority of the votes at such special meeting, provided that such written request is in compliance with the requirements of Section 6(b) hereof (“Stockholder-Requested Meeting”).

(b) For a special meeting called pursuant to Section 6(a)(i), the Board of Directors shall determine the time and place, if any, of such special meeting. Upon determination of the time and place, if any, of the meeting, the Secretary shall cause a notice of meeting to be given to the stockholders entitled to vote, in accordance with the provisions of Section 7. For a Stockholder-Requested Meeting, the request shall (i) be in writing, signed and dated by a stockholder of record, (ii) set forth the purpose of calling the special meeting and include the information required by the stockholder’s notice as set forth in Section 5(b)(i) and in Section 5(b)(ii) (for the proposal of business other than nominations) and (iii) be delivered personally or sent by certified or registered mail, return receipt requested, to the Secretary at the principal executive offices of the corporation. If the Board of Directors determines that a request pursuant to Section 6(a)(ii) is valid, the Board of Directors shall determine the time and place, if any, of a Stockholder-Requested Meeting, which time shall be not less than thirty (30) days nor more than ninety (90) days after the receipt of such request, and shall set a record date for the determination of stockholders entitled to vote at such meeting in the manner set forth in Section 38 hereof. Following determination of the time and place, if any, of the meeting, the Secretary shall cause a notice of meeting to be given to the stockholders entitled to vote, in accordance with the provisions of Section 7 of these Bylaws. No business may be transacted at a special meeting, including a Stockholder-Requested Meeting, otherwise than as specified in the notice of meeting.

(c) Nominations of persons for election to the Board of Directors may be made at a special meeting of stockholders at which directors are to be elected (i) by or at the direction of the Board of Directors or a duly authorized committee thereof or (ii) by any stockholder of the corporation who is a stockholder of record (and, with respect to any beneficial owner, if different, on whose behalf such nomination or nominations are made, only if such beneficial owner was the beneficial owner of shares of the corporation) at the time of giving notice provided for in this paragraph, who is entitled to vote at the

meeting and who delivers written notice to the Secretary of the corporation setting forth the information required by Sections 5(b)(i) and 5(b)(iv). In the event the corporation calls a special meeting of stockholders for the purpose of electing one or more directors to the Board of Directors, any such stockholder of record may nominate a person or persons (as the case may be), for election to such position(s) as specified in the corporation's notice of meeting, if written notice setting forth the information required by Sections 5(b)(i) and 5(b)(iv) shall be received by the Secretary at the principal executive offices of the corporation not earlier than 120 days prior to such special meeting and not later than the close of business on the later of the 90th day prior to such meeting or the tenth day following the day on which the corporation first makes a public announcement of the date of the special meeting and of the nominees proposed by the Board of Directors to be elected at such meeting. The stockholder shall also update and supplement such information as required under Section 5(c). In no event shall an adjournment or a postponement of a special meeting for which notice has been given, or the public announcement thereof has been made, commence a new time period (or extend any time period) for the giving of a stockholder's notice as described above.

A person shall not be eligible for election or re-election as a director at the special meeting unless the person is nominated either in accordance with clause (i) or clause (ii) of this Section 6(c). Except as otherwise required by applicable law, the chairperson of the meeting shall have the power and duty to determine whether a nomination was made in accordance with the procedures set forth in these Bylaws and, if any proposed nomination or business is not in compliance with these Bylaws, or if the Proponent does not act in accordance with the representations in Sections 5(b)(iv)(D) and 5(b)(iv)(E), to declare that such nomination shall not be presented for stockholder action at the meeting and shall be disregarded, notwithstanding that proxies in respect of such nomination may have been solicited or received.

(d) Notwithstanding the foregoing provisions of this Section 6, a stockholder must also comply with all applicable requirements of the 1934 Act and the rules and regulations thereunder with respect to matters set forth in this Section 6. Nothing in these Bylaws shall be deemed to affect any rights of stockholders to request inclusion of proposals in the corporation's proxy statement pursuant to Rule 14a-8 under the 1934 Act; *provided, however*, that any references in these Bylaws to the 1934 Act or the rules and regulations thereunder are not intended to and shall not limit the requirements applicable to nominations for the election to the Board of Directors to be considered pursuant to Section 6(c).

Section 4. Notice of Meetings. Except as otherwise provided by applicable law, notice, given in writing or by electronic transmission, of each meeting of stockholders shall be given not less than ten nor more than 60 days before the date of the meeting to each stockholder entitled to vote at such meeting. Such notice shall specify the place, if any, date and hour, in the case of special meetings, the purpose or purposes of the meeting, the record date for determining stockholders entitled to vote at the meeting, if such record date is different from the record date for determining stockholders entitled to notice of the meeting, and the means of remote communications, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at any such meeting. If mailed, notice is given when deposited in the United States mail, postage prepaid, directed to the stockholder at such stockholder's address as it appears on the records of the corporation. If sent via electronic transmission, notice is given when directed to such stockholder's electronic mail address unless (a) the stockholder has notified the corporation in writing or by electronic transmission of an objection to receiving notice by electronic mail or (b) electronic transmission of such notice is prohibited by applicable law. Notice of the time, place, if any, and purpose of any meeting of stockholders (to the extent required) may be waived in writing, signed by the person entitled to notice thereof, or by electronic transmission by such person, either before or after such meeting, and will be waived by any stockholder by his or her attendance thereat in person, by remote communication, if applicable, or by proxy, except when the stockholder attends a meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Any stockholder so waiving notice of such meeting shall be bound by the proceedings of any such meeting in all respects as if due notice thereof had been given.

Section 5. Quorum and Vote Required. At all meetings of stockholders, except where otherwise provided by statute or by the Certificate of Incorporation, or by these Bylaws, the presence, in person, by remote communication, if applicable, or by proxy duly authorized, of the holders of a majority of the voting power of the outstanding shares of stock entitled to vote at the meeting shall constitute a quorum for the transaction of business. In the absence of a quorum, any meeting of stockholders may be adjourned, from time to time, either by the chairperson of the meeting or by vote of the holders of a majority of the voting power of the shares represented thereat and entitled to vote thereon, but no other business shall be transacted at such meeting. The stockholders present at a duly called or convened meeting, at which a quorum is present, may continue to transact business until adjournment, notwithstanding the withdrawal of enough stockholders to leave less than a quorum.

Except as otherwise provided by statute or by applicable stock exchange rules, or by the Certificate of Incorporation or these Bylaws, in all matters other than the election of directors, the affirmative vote of the holders of a majority of the voting power of the shares present in person, by remote communication, if applicable, or represented by proxy duly authorized at the meeting and voting affirmatively or negatively (excluding abstentions and broker non-votes) on such matter shall be the act of the stockholders. Except as otherwise provided by statute, the Certificate of Incorporation or these Bylaws, directors shall be elected by a plurality of the votes of the shares present in person, by remote communication, if applicable, or represented by proxy duly authorized at the meeting and entitled to vote generally on the election of directors. Where a separate vote by a class or classes or series is required, except where otherwise provided by statute or by the Certificate of Incorporation or these Bylaws or any applicable stock exchange rules, a majority of the voting power of the outstanding shares of such class or classes or series, present in person, by remote communication, if applicable, or represented by proxy duly authorized, shall constitute a quorum entitled to take action with respect to that vote on that matter. Except where otherwise provided by statute or by the Certificate of Incorporation or these Bylaws or any applicable stock exchange rules, the affirmative vote of the holders of a majority (plurality, in the case of the election of directors) of the voting power of the shares of such class or classes or series present in person, by remote communication, if applicable, or represented by proxy at the meeting and voting affirmatively or negatively (excluding abstention and broker non-votes) on such matter shall be the act of such class or classes or series.

Section 6. Adjournment and Notice of Adjourned Meetings. Any meeting of stockholders, whether annual or special, may be adjourned from time to time either by the chairperson of the meeting or by the vote of the holders of a majority of the voting power of the shares present in person, by remote communication, if applicable, or represented by proxy duly authorized at the meeting and entitled to vote thereon. When a meeting is adjourned to another time or place, if any, notice need not be given of the adjourned meeting if the time and place, if any, thereof and the means of remote communication, if any, by which stockholders and proxyholders may be deemed present in person and may vote at such meeting are announced at the meeting at which the adjournment is taken. At the adjourned meeting, the corporation may transact any business that might have been transacted at the original meeting. If the adjournment is for more than 30 days or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting. If after the adjournment a new record date for determination of stockholders entitled to vote is fixed for the adjourned meeting, the Board of Directors shall fix as the record date for determining stockholders entitled to notice of such adjourned meeting the same or an earlier date as that fixed for determination of stockholders entitled to vote at the adjourned meeting, and shall give notice of the adjourned meeting to each stockholder of record as of the record date so fixed for notice of such adjourned meeting.

Section 7. Voting Rights. For the purpose of determining those stockholders entitled to vote at any meeting of the stockholders or adjournment thereof, except as otherwise provided by applicable law, only persons in whose names shares stand on the stock records of the corporation on the record date shall be entitled to vote at any meeting of stockholders. Every person entitled to vote shall have the right to do so either in person, by remote communication, if applicable, or by an agent or agents authorized by a proxy granted in accordance with Delaware law. An agent so appointed need not be a stockholder. No proxy shall be voted after three years from its date of creation unless the proxy provides for a longer period. A proxy shall be irrevocable if it states that it is irrevocable and if, and only as long as, it is coupled with an interest sufficient in law to support an irrevocable power. A stockholder may revoke any proxy which is not irrevocable by attending the meeting and voting in person or by delivering to the Secretary of the corporation a revocation of the proxy or a new proxy bearing a later date. Voting at meetings of stockholders need not be by written ballot.

Section 8. Joint Owners of Stock. If shares or other securities having voting power stand of record in the names of two or more persons, whether fiduciaries, members of a partnership, joint tenants, tenants in common, tenants by the entirety, or otherwise, or if two or more persons have the same fiduciary relationship respecting the same shares, unless the Secretary is given written notice to the contrary and is furnished with a copy of the instrument or order appointing them or creating the relationship wherein it is so provided, their acts with respect to voting shall have the following effect: (a) if only one votes, his or her act binds all; (b) if more than one votes, the act of the majority so voting binds all; or (c) if more than one votes, but the vote is evenly split on any particular matter, each faction may vote the securities in question proportionally, or may apply to the Delaware Court of Chancery for relief as provided in Section 217(b) of the DGCL. If the instrument filed with the Secretary shows that any such tenancy is held in unequal interests, a majority or even-split for the purpose of subsection (c) shall be a majority or even-split in interest.

Section 9. List of Stockholders. The corporation shall prepare, at least ten days before every meeting of stockholders, a complete list of the stockholders entitled to vote at said meeting, arranged in alphabetical order, showing the address of each stockholder and the number and class of shares registered in the name of each stockholder; provided, however, if the record date for determining the stockholders entitled to vote is less than ten days before the meeting date, the list shall reflect all of the stockholders entitled to vote as of the tenth day before the meeting date. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting, (a) on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of the meeting, or (b) during ordinary business hours, at the principal place of business of the corporation. In the event that the corporation determines to make the list available on an electronic network, the corporation may take reasonable steps to ensure that such information is available only to stockholders of the corporation. The list shall be open to examination of any stockholder during the time of the meeting as provided by applicable law.

Section 10. Action without Meeting.

(a) Unless otherwise provided in the Certificate of Incorporation, any action required by statute to be taken at any annual or special meeting of the stockholders, or any action which may be taken at any annual or special meeting of the stockholders, may, until the Final Conversion Date (as defined in the Certificate of Incorporation), be taken without a meeting, without prior notice and without a vote, if a consent in writing, or by electronic transmission setting forth the action so taken, shall be signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted. Following the Final Conversion Date, no action shall be taken by the stockholders of the Company except at an annual or special meeting of stockholders called in accordance with the Bylaws and no action shall be taken by the stockholders by written consent.

(b) In order that the corporation may determine the stockholders entitled to consent to corporate action in writing without a meeting, so long as such action is provided for, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which date shall not be more than ten days after the date upon which the resolution fixing the record date is adopted by the Board of Directors. Any stockholder of record seeking to have the stockholders authorize or take corporate action by written consent may, by written notice to the Secretary, request the Board of Directors to fix a record date. The Board of Directors shall promptly, but in all events within ten days after the date on which such a request is received, adopt a resolution fixing the record date. If no request to fix a record date is made or no record date has been fixed by the Board of Directors within ten days of the date on which such a request is received, the record date for determining stockholders entitled to consent to corporate action in writing without a meeting, when no prior action by the Board of Directors is required by applicable law, shall be the first date on which a signed written consent setting forth the action taken or proposed to be taken is delivered to the corporation by delivery to its registered office in the State of Delaware, its principal place of business or an officer or agent of the corporation having custody of the book in which proceedings of meetings of stockholders are recorded. Delivery made to the corporation's registered office shall be by hand or by certified or registered mail, return receipt requested. If no record date has been fixed by the Board of Directors and prior action by the Board of Directors is required by law, the record date for determining stockholders entitled to consent to corporate action in writing without a meeting shall be at the close of business on the day on which the Board of Directors adopts the resolution taking such prior action.

Section 11. Remote Communication. For the purposes of these Bylaws, if authorized by the Board of Directors in its sole discretion, and subject to such guidelines and procedures as the Board of Directors may adopt, stockholders and proxyholders may, by means of remote communication:

(a) participate in a meeting of stockholders; and

(b) be deemed present in person and vote at a meeting of stockholders whether such meeting is to be held at a designated place or solely by means of remote communication, provided that (i) the corporation shall implement reasonable measures to verify that each person deemed present and permitted to vote at the meeting by means of remote communication is a stockholder or proxyholder, (ii) the corporation shall implement reasonable measures to provide such stockholders and proxyholders a reasonable opportunity to participate in the meeting and to vote on matters submitted to the stockholders, including an opportunity to read or hear the proceedings of the meeting substantially concurrently with such proceedings, and (iii) if any stockholder or proxyholder votes or takes other action at the meeting by means of remote communication, a record of such vote or other action shall be maintained by the corporation.

Section 12. Organization.

(a) At every meeting of stockholders, the Chairperson of the Board of Directors, or, if a Chairperson has not been appointed, is absent or refuses to act, the Chief Executive Officer, or if no Chief Executive Officer is then serving or the Chief Executive Officer is absent or refuses to act, the President, or, if the President is absent or refuses to act, a chairperson of the meeting designated by the Board of Directors, or, if the Board of Directors does not designate such chairperson, a chairperson of the meeting chosen by a majority of the voting power of the stockholders entitled to vote, present in person or by proxy duly authorized, shall act as chairperson of the meeting of stockholders. The Chairperson of the Board of Directors may appoint the Chief Executive Officer as chairperson of the meeting. The Secretary, or, in his or her absence, an Assistant Secretary or other officer or other person directed to do so by the chairperson of the meeting, shall act as secretary of the meeting.

(b) The Board of Directors shall be entitled to make such rules or regulations for the conduct of meetings of stockholders as it shall deem necessary, appropriate or convenient. Subject to such rules and regulations of the Board of Directors, if any, the chairperson of the meeting shall have the right and authority to convene and (for any or no reason) to recess and/or adjourn the meeting, to prescribe such rules, regulations and procedures and to do all such acts as, in the judgment of such chairperson, are necessary, appropriate or convenient for the proper conduct of the meeting, including, without limitation, establishing an agenda or order of business for the meeting, rules and procedures for maintaining order at the meeting and the safety of those present, limitations on participation in such meeting to stockholders of record of the corporation and their duly authorized and constituted proxies and such other persons as the chairperson shall permit, restrictions on entry to the meeting after the time fixed for the commencement thereof, limitations on the time allotted to questions or comments by participants and regulation of the opening and closing of the polls for balloting on matters that are to be voted on by ballot. The date and time of the opening and closing of the polls for each matter upon which the stockholders will vote at the meeting shall be announced at the meeting. Unless and to the extent determined by the Board of Directors or the chairperson of the meeting, meetings of stockholders shall not be required to be held in accordance with rules of parliamentary procedure.

ARTICLE IV

DIRECTORS

Section 1. Number and Term of Office. The authorized number of directors of the corporation shall be fixed in accordance with the Certificate of Incorporation. Directors need not be stockholders unless so required by the Certificate of Incorporation. If for any cause, the directors shall not have been elected at an annual meeting, they may be elected as soon thereafter as convenient at a special meeting of the stockholders called for that purpose in the manner provided in these Bylaws.

Section 2. Powers. The business and affairs of the corporation shall be managed by or under the direction of the Board of Directors, except as may be otherwise provided by the Certificate of Incorporation or the DGCL.

Section 3. Classes of Directors. The directors shall be divided into classes as and to the extent provided in the Certificate of Incorporation, except as otherwise required by applicable law.

Section 4. Vacancies. Vacancies on the Board of Directors shall be filled as provided in the Certificate of Incorporation, except as otherwise required by applicable law.

Section 5. Resignation. Any director may resign at any time by delivering his or her notice in writing or by electronic transmission to the Board of Directors or the Secretary. Such resignation shall take effect at the time of delivery of the notice or at any later time specified therein. Acceptance of such resignation shall not be necessary to make it effective. When one or more directors shall resign from the Board of Directors, effective at a future date, a majority of the directors then in office, including those who have so resigned, shall have power to fill such vacancy or vacancies, the vote thereon to take effect when such resignation or resignations shall become effective, and each director so chosen shall hold office for the unexpired portion of the term of the director whose place shall be vacated and until his or her successor shall have been duly elected and qualified or until his or her earlier death, resignation or removal.

Section 6. Removal. Subject to any limitation imposed by applicable law, any individual director or the entire Board of Directors may be removed from office as provided in Section 141(k) of the DGCL.

Section 7. Meetings.

(a) **Regular Meetings.** Unless otherwise restricted by the Certificate of Incorporation, regular meetings of the Board of Directors may be held at any time or date and at any place within or without the State of Delaware that has been designated by the Board of Directors and publicized among all directors, either orally or in writing, by telephone, including a voice-messaging system or other system designed to record and communicate messages, or by electronic mail or other electronic means. No further notice shall be required for regular meetings of the Board of Directors.

(b) **Special Meetings.** Unless otherwise restricted by the Certificate of Incorporation, special meetings of the Board of Directors may be held at any time and place within or without the State of Delaware as designated and called by the Chairperson of the Board of Directors, the Chief Executive Officer or the Board of Directors.

(c) **Meetings by Electronic Communications Equipment.** Any member of the Board of Directors, or of any committee thereof, may participate in a meeting by means of conference telephone or other communications equipment by means of which all persons participating in the meeting can hear each other, and participation in a meeting by such means shall constitute presence in person at such meeting.

(d) **Notice of Special Meetings.** Notice of the time and place, if any, of all special meetings of the Board of Directors shall be transmitted orally or in writing, by telephone, including a voice messaging system or other system or technology designed to record and communicate messages, or by electronic mail or other electronic means, during normal business hours, at least 24 hours before the date and time of the meeting. If notice is sent by U.S. mail, it shall be sent by first class mail, postage prepaid, at least three days before the date of the meeting.

(e) **Waiver of Notice.** Notice of any meeting of the Board of Directors may be waived in writing, or by electronic transmission, at any time before or after the meeting and will be waived by any director by attendance thereat, except when the director attends the meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. The transaction of all business at any meeting of the Board of Directors, or any committee thereof, however called or noticed, or wherever held, shall be as valid as though it had been transacted at a meeting duly held after regular call and notice, if a quorum be present and if, either before or after the meeting, each of the directors not present who did not receive notice shall sign a written waiver of notice or shall waive notice by electronic transmission. All such waivers shall be filed with the corporate records or made a part of the minutes of the meeting.

Section 8. Quorum and Voting.

(a) Unless the Certificate of Incorporation requires a greater number, and except with respect to questions related to indemnification arising under Section 45 for which a quorum shall be one-third of the exact number of directors fixed from time to time by the Board of Directors in accordance with the Certificate of Incorporation, a quorum of the Board of Directors shall consist of a majority of the total number of directors then serving on the Board of Directors or, if greater, one-third of the exact number of directors fixed from time to time by the Board of Directors in accordance with the Certificate of Incorporation. At any meeting whether a quorum be present or otherwise, a majority of the directors present may adjourn from time to time until the time fixed for the next regular meeting of the Board of Directors, without notice other than by announcement at the meeting.

(b) At each meeting of the Board of Directors at which a quorum is present, all questions and business shall be determined by the affirmative vote of a majority of the directors present, unless a different vote be required by applicable law, the Certificate of Incorporation or these Bylaws.

Section 9. Action without Meeting. Unless otherwise restricted by the Certificate of Incorporation or these Bylaws, any action required or permitted to be taken at any meeting of the Board of Directors or of any committee thereof may be taken without a meeting, if all members of the Board of Directors or committee, as the case may be, consent thereto in writing or by electronic transmission. Such consent or consents shall be filed with the minutes of proceedings of the Board of Directors or committee. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form.

(a) **Fees and Compensation.** Directors shall be entitled to such compensation for their services as may be approved by the Board of Directors, or a committee thereof to which the Board of Directors has delegated such responsibility and authority, including, if so approved, by resolution of the Board of Directors or a committee thereof to which the Board of Directors has delegated such responsibility and authority, a fixed sum and reimbursement of expenses incurred, if any, for attendance at each regular or special meeting of the Board of Directors and at any meeting of a committee of the Board of Directors, as well as reimbursement for other reasonable expenses incurred with respect to duties as a member of the Board of Directors or any committee thereof. Nothing herein contained shall be construed to preclude any director from serving the corporation in any other capacity as an officer, agent, employee, or otherwise and receiving compensation therefor.

Section 10. Committees.

(a) **Executive Committee.** The Board of Directors may appoint an Executive Committee to consist of one or more members of the Board of Directors. The Executive Committee, to the extent permitted by applicable law and provided in the resolution of the Board of Directors shall have and may exercise all the powers and authority of the Board of Directors in the management of the business and affairs of the corporation, and may authorize the seal of the corporation to be affixed to all papers that may require it; but no such committee shall have the power or authority in reference to (i) approving or adopting, or recommending to the stockholders, any action or matter (other than the election or removal of directors) expressly required by the DGCL to be submitted to stockholders for approval, or (ii) adopting, amending or repealing any Bylaw of the corporation.

(b) **Other Committees.** The Board of Directors may, from time to time, appoint such other committees as may be permitted by applicable law. Such other committees appointed by the Board of Directors shall consist of one or more members of the Board of Directors and shall have such powers and perform such duties as may be prescribed by the resolution or resolutions creating such committees, but in no event shall any such committee have the powers denied to the Executive Committee in these Bylaws.

(c) **Term.** The Board of Directors, subject to any requirements of any outstanding series of preferred stock and the provisions of subsections (a) or (b) of this Section 10, may at any time increase or decrease the number of members of a committee or terminate the existence of a committee. The membership of a committee member shall terminate on the date of his or her death or voluntary resignation from the committee or from the Board of Directors. The Board of Directors may at any time for any reason remove any individual committee member and the Board of Directors may fill any committee vacancy created by death, resignation, removal or increase in the number of members of the committee. The Board of Directors may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee, and, in addition, in the absence or disqualification of any member of a committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not such member or members constitute a quorum, may unanimously appoint another member of the Board of Directors to act at the meeting in the place of any such absent or disqualified member.

(d) **Meetings.** Unless the Board of Directors shall otherwise provide, regular meetings of the Executive Committee or any other committee appointed pursuant to this Section 10 shall be held at such times and places, if any, as are determined by the Board of Directors, or by any such committee, and when notice thereof has been given to each member of such committee, no further notice of such regular meetings need be given thereafter. Special meetings of any such committee may be held at such place, if any, that has been determined from time to time by such committee, and may be called by any director who is a member of such committee, upon notice to the members of such committee of the time and place, if any, of such special meeting given in the manner provided for the giving of notice to members of the Board of Directors of the time and place, if any, of special meetings of the Board of Directors. Notice of any meeting of any committee may be waived in writing or by electronic transmission at any time before or after the meeting and will be waived by any director by attendance thereat, except when the director attends such meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Unless otherwise provided by the Board of Directors in the resolutions authorizing the creation of the committee, a majority of the authorized number of members of any such committee shall constitute a quorum for the transaction of business, and the act of a majority of those present at any meeting at which a quorum is present shall be the act of such committee.

Section 11. Lead Independent Director. The Chairperson of the Board of Directors, or if the Chairperson is not an independent director, one of the independent directors, may be designated by the Board of Directors as lead independent director to serve until replaced by the Board of Directors (“Lead Independent Director”). The Lead Independent Director will preside over meetings of the independent directors and perform such other duties as may be established or delegated by the Board of Directors and perform such other duties as may be established or delegated by the Chairperson of the Board of Directors.

Section 12. Organization. At every meeting of the directors, the Chairperson of the Board of Directors, or, if a Chairperson has not been appointed or is absent, the Lead Independent Director, or if the Lead Independent Director is absent, the Chief Executive Officer (if a director), or, if a Chief Executive Officer is absent, the President (if a director), or if the President is absent, the most senior Vice President (if a director), or, in the absence of any such person, a chairperson of the meeting chosen by a majority of the directors present, shall preside over the meeting. The Secretary, or in his or her absence, any Assistant Secretary or other officer, director or other person directed to do so by the person presiding over the meeting, shall act as secretary of the meeting.

ARTICLE V

OFFICERS

Section 1. Officers Designated. The officers of the corporation shall include, if and when designated by the Board of Directors, the Chairperson of the Board of Directors (provided that notwithstanding the foregoing or anything to the contrary in these Bylaws, the Chairperson of the Board of Directors shall not be deemed an officer of the corporation unless specifically designated an officer by the Board of Directors), the Chief Executive Officer, the President, one or more Vice Presidents, the Secretary, the Chief Financial Officer and the Treasurer. The Board of Directors may also appoint one or more Assistant Secretaries and Assistant Treasurers and such other officers and agents with such powers and duties as it shall deem appropriate or necessary. The Board of Directors may assign such additional titles to one or more of the officers as it shall deem appropriate. Any one person may hold any number of offices of the corporation at any one time unless specifically prohibited therefrom by applicable law, the Certificate of Incorporation or these Bylaws. The salaries and other compensation of the officers of the corporation shall be fixed by or in the manner designated by the Board of Directors or by a committee thereof to which the Board of Directors has delegated such responsibility.

Section 2. Tenure and Duties of Officers.

(a) **General.** All officers shall hold office at the pleasure of the Board of Directors and until their successors shall have been duly elected and qualified, unless sooner removed. If the office of any officer becomes vacant for any reason, the vacancy may be filled by the Board of Directors or by a committee thereof to which the Board of Directors has delegated such responsibility or, if so authorized by the Board of Directors, by the Chief Executive Officer or another officer of the corporation.

(b) **Duties of Chief Executive Officer.** The Chief Executive Officer shall preside at all meetings of the stockholders and, if a director, at all meetings of the Board of Directors, unless a Chairperson of the Board of Directors or Lead Independent Director has been appointed and is present. The Chief Executive Officer shall be the chief executive officer of the corporation and, subject to the supervision, direction and control of the Board of Directors, shall have the general powers and duties of supervision, direction, management and control of the business and officers of the corporation as are customarily associated with the position of Chief Executive Officer. To the extent that a Chief Executive Officer has been appointed and no President has been appointed, all references in these Bylaws to the President shall be deemed references to the Chief Executive Officer. The Chief Executive Officer shall perform other duties customarily associated with the office and shall also perform such other duties and have such other powers, as the Board of Directors shall designate from time to time.

(c) **Duties of President.** The President shall preside at all meetings of the stockholders and, if a director, at all meetings of the Board of Directors, unless a Chairperson of the Board of Directors, Lead Independent Director, or Chief Executive Officer has been appointed and is present. Unless another officer has been appointed Chief Executive Officer of the corporation, the President shall be the chief executive officer of the corporation and, subject to the supervision, direction and control of the Board of Directors, shall have the general powers and duties of supervision, direction, management and control of the business and officers of the corporation as are customarily associated with the position of President. The President shall perform other duties customarily associated with the office and shall also perform such other duties and have such other powers, as the Board of Directors (or the Chief Executive Officer, if the Chief Executive Officer and President are not the same person and the Board of Directors has delegated the designation of the President's duties to the Chief Executive Officer) shall designate from time to time.

(d) **Duties of Vice Presidents.** A Vice President may assume and perform the duties of the President in the absence or disability of the President or whenever the office of President is vacant (unless the duties of the President are being filled by the Chief Executive Officer). A Vice President shall perform other duties customarily associated with the office and shall also perform such other duties and have such other powers as the Board of Directors or the Chief Executive Officer, or, if the Chief Executive Officer has not been appointed or is absent, the President shall designate from time to time.

(e) **Duties of Secretary and Assistant Secretary.** The Secretary shall attend all meetings of the stockholders and of the Board of Directors and shall record all acts, votes and proceedings thereof in the minute books of the corporation. The Secretary shall give notice in conformity with these Bylaws of all meetings of the stockholders and of all meetings of the Board of Directors and any committee thereof requiring notice. The Secretary shall perform all other duties provided for in these Bylaws and other duties customarily associated with the office and shall also perform such other duties and have such other powers, as the Board of Directors or the Chief Executive Officer, or if no Chief Executive Officer is then serving, the President shall designate from time to time. The Chief Executive Officer, or if no Chief Executive Officer is then serving, the President may direct any Assistant Secretary or other officer to assume and perform the duties of the Secretary in the absence or disability of the Secretary, and each Assistant Secretary shall perform other duties customarily associated with the office and shall also perform such other duties and have such other powers as the Board of Directors or the Chief Executive Officer, or if no Chief Executive Officer is then serving, the President shall designate from time to time.

(f) **Duties of Chief Financial Officer.** The Chief Financial Officer shall keep or cause to be kept the books of account of the corporation in a thorough and proper manner and shall render statements of the financial affairs of the corporation in such form and as often as required by the Board of Directors, the Chief Executive Officer, or the President. The Chief Financial Officer, subject to the order of the Board of Directors, shall have the custody of all funds and securities of the corporation. The Chief Financial Officer shall perform other duties customarily associated with the office and shall also perform such other duties and have such other powers as the Board of Directors or the Chief Executive Officer, or if no Chief Executive Officer is then serving, the President shall designate from time to time. To the extent that a Chief Financial Officer has been appointed and no Treasurer has been appointed, all references in these Bylaws to the Treasurer shall be deemed references to the Chief Financial Officer. The President may direct the Treasurer, if any, or any Assistant Treasurer to assume and perform the duties of the Chief Financial Officer in the absence or disability of the Chief Financial Officer.

(g) **Duties of Treasurer and Assistant Treasurer.** Unless another officer has been appointed Chief Financial Officer of the corporation, the Treasurer shall be the chief financial officer of the corporation, shall keep or cause to be kept the books of account of the corporation in a thorough and proper manner and shall render statements of the financial affairs of the corporation in such form and as often as required by the Board of Directors, the Chief Executive Officer or the President. Unless another officer has been appointed Chief Financial Officer of the corporation, the Treasurer, subject to the order of the Board of Directors, shall have the custody of all funds and securities of the corporation. The Treasurer shall perform other duties customarily associated with the office and shall also perform such other duties and have such other powers as the Board of Directors or the Chief Executive Officer, or if no Chief Executive Officer is then serving, the President shall designate from time to time. The Chief Executive Officer, or if no Chief Executive Officer is then serving, the President may direct any Assistant Treasurer or other officer to assume and perform the duties of the Treasurer in the absence or disability of the Treasurer, and each Assistant Treasurer shall perform other duties commonly incident to the office and shall also perform such other duties and have such other powers as the Board of Directors or the Chief Executive Officer, or if no Chief Executive Officer is then serving, the President shall designate from time to time.

Section 3. Delegation of Authority.

(a) The Board of Directors may from time to time delegate the powers or duties of any officer to any other officer or agent, notwithstanding any provision hereof.

(b) The Chairperson of the Board of Directors, when present, shall preside at all meetings of the stockholders and the Board of Directors. The Chairperson of the Board of Directors shall perform such other duties customarily associated with the office and shall also perform such other duties and have such other powers, as the Board of Directors shall designate from time to time.

Section 4. Resignations. Any officer may resign at any time by giving notice in writing or by electronic transmission to the Board of Directors, the Chairperson of the Board of Directors, the Chief Executive Officer, the President or the Secretary. Any such resignation shall be effective when received by the person or persons to whom such notice is given, unless a later time is specified therein, in which event the resignation shall become effective at such later time. Unless otherwise specified in such notice, the acceptance of any such resignation shall not be necessary to make it effective. Any resignation shall be without prejudice to the rights, if any, of the corporation under any contract with the resigning officer.

Section 5. Removal. Any officer may be removed from office at any time, either with or without cause, by the Board of Directors, or by any committee thereof or any superior officer upon whom such power of removal may have been conferred by the Board of Directors.

ARTICLE VI

EXECUTION OF CORPORATE INSTRUMENTS AND VOTING OF SECURITIES OWNED BY THE CORPORATION

Section 1. Execution of Corporate Instruments. The Board of Directors may, in its discretion, determine the method and designate the signatory officer or officers, or other person or persons, to execute, sign or endorse on behalf of the corporation any corporate instrument or document, or to sign on behalf of the corporation the corporate name without limitation, or to enter into contracts on behalf of the corporation, except where otherwise provided by applicable law or these Bylaws, and such execution or signature shall be binding upon the corporation.

All checks and drafts drawn on banks or other depositories on funds to the credit of the corporation or in special accounts of the corporation shall be signed by such person or persons as the Board of Directors shall from time to time authorize so to do.

Unless otherwise specifically determined by the Board of Directors or otherwise required by applicable law, the execution, signing or endorsement of any corporate instrument or document may be effected manually, by facsimile or (to the extent permitted by applicable law and subject to such policies and procedures as the corporation may have in effect from time to time) by electronic signature.

Unless authorized or ratified by the Board of Directors or within the agency power of an officer, no officer, agent or employee shall have any power or authority to bind the corporation by any contract or engagement or to pledge its credit or to render it liable for any purpose or for any amount.

Section 2. Voting of Securities Owned by the Corporation. All stock and other securities of or interests in other corporations or entities owned or held by the corporation for itself, or for other parties in any capacity, shall be voted, and all proxies with respect thereto shall be executed, by the person authorized so to do by resolution of the Board of Directors, or, in the absence of such authorization, by the Chairperson of the Board of Directors, the Chief Executive Officer, the President, or any Vice President.

ARTICLE VII

SHARES OF STOCK

Section 1. Form and Execution of Certificates. The shares of the corporation shall be represented by certificates, or shall be uncertificated if so provided by resolution or resolutions of the Board of Directors. Certificates for the shares of stock, if any, shall be in such form as is consistent with the Certificate of Incorporation and applicable law. Every holder of stock in the corporation represented by certificates shall be entitled to have a certificate signed by or in the name of the corporation by any two

authorized officers of the corporation, certifying the number, and the class or series, of shares owned by such holder in the corporation. Any or all of the signatures on the certificate may be facsimiles. In case any officer, transfer agent, or registrar who has signed or whose facsimile signature has been placed upon a certificate shall have ceased to be such officer, transfer agent, or registrar before such certificate is issued, it may be issued with the same effect as if he were such officer, transfer agent, or registrar at the date of issue.

Section 2. Lost Certificates. A new certificate or certificates shall be issued in place of any certificate or certificates theretofore issued by the corporation alleged to have been lost, stolen, or destroyed, upon the making of an affidavit of that fact by the person claiming the certificate of stock to be lost, stolen, or destroyed. The corporation may require, as a condition precedent to the issuance of a new certificate or certificates, the owner of such lost, stolen, or destroyed certificate or certificates, or the owner's legal representative, to agree to indemnify the corporation in such manner as it shall require or to give the corporation a surety bond in such form and amount as it may direct as indemnity against any claim that may be made against the corporation with respect to the certificate alleged to have been lost, stolen, or destroyed.

Section 3. Transfers.

(a) Transfers of record of shares of stock of the corporation shall be made only upon its books by the holders thereof, in person or by attorney duly authorized, and, in the case of stock represented by certificate, upon the surrender of a properly endorsed certificate or certificates for a like number of shares.

(b) The corporation shall have power to enter into and perform any agreement with any number of stockholders of any one or more classes or series of stock of the corporation to restrict the transfer of shares of stock of the corporation of any one or more classes or series owned by such stockholders in any manner not prohibited by the DGCL.

Section 4. Fixing Record Dates.

(a) In order that the corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which record date shall, subject to applicable law, not be more than 60 nor less than ten days before the date of such meeting. If the Board of Directors so fixes a record date for determining the stockholders entitled to notice of any meeting of stockholders, such date shall also be the record date for determining the stockholders entitled to vote at such meeting, unless the Board of Directors determines, at the time it fixes the record date for determining the stockholders entitled to notice of such meeting, that a later date on or before the date of the meeting shall be the record date for determining the stockholders entitled to vote at such meeting. If no record date is fixed by the Board of Directors, the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day immediately preceding the day on which notice is given, or if notice is waived, at the close of business on the day immediately preceding the day on which the meeting is held. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; *provided, however*, that the Board of Directors may fix a new record date for the adjourned meeting in accordance with the provisions of this Section 38(a).

(b) In order that the corporation may determine the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights or the stockholders entitled to exercise any rights in respect of any change, conversion or exchange of stock, or for the purpose of any other lawful action, the Board of Directors may fix, in advance, a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted, and which record date shall be not more than 60 days prior to such action. If no record date is fixed, the record date for determining stockholders for any such purpose shall be at the close of business on the day on which the Board of Directors adopts the resolution relating thereto.

Section 5. Registered Stockholders. The corporation shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends, and to vote as such owner, and shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of any other person whether or not it shall have express or other notice thereof, except as otherwise provided by the laws of Delaware.

Section 6. Additional Powers of the Board. In addition to, and without limiting, the powers set forth in these Bylaws, the Board of Directors shall have power and authority to make all such rules and regulations as it shall deem expedient concerning the issue, transfer, and registration of certificates for shares of stock of the corporation, including the use of uncertificated shares of stock, subject to the provisions of the DGCL, other applicable law, the Certificate of Incorporation and these Bylaws. The Board of Directors may appoint and remove transfer agents and registrars of transfers, and may require all stock certificates to bear the signature of any such transfer agent and/or any such registrar of transfers.

ARTICLE VIII

OTHER SECURITIES OF THE CORPORATION

Section 1. Execution of Other Securities. All bonds, debentures and other corporate securities of the corporation, other than stock certificates (covered in Article VII), may be signed by the Chairperson of the Board of Directors, the Chief Executive Officer, the President or any Vice President, or such other person as may be authorized by the Board of Directors; *provided, however,* that where any such bond, debenture or other corporate security shall be authenticated by the manual signature, or where permissible facsimile signature, of a trustee under an indenture pursuant to which such bond, debenture or other corporate security shall be issued, the signatures of the persons signing and attesting the corporate seal on such bond, debenture or other corporate security may be the imprinted facsimile of the signatures of such persons. Interest coupons appertaining to any such bond, debenture or other corporate security, authenticated by a trustee as aforesaid, shall be signed by an executive officer of the corporation or such other person as may be authorized by the Board of Directors, or bear imprinted thereon the facsimile signature of such person. In case any officer who shall have signed or attested any bond, debenture or other corporate security, or whose facsimile signature shall appear thereon or on any such interest coupon, shall have ceased to be such officer before the bond, debenture or other corporate security so signed or attested shall have been delivered, such bond, debenture or other corporate security nevertheless may be adopted by the corporation and issued and delivered as though the person who signed the same or whose facsimile signature shall have been used thereon had not ceased to be such officer of the corporation.

ARTICLE IX

DIVIDENDS

Section 1. Declaration of Dividends. Dividends upon the capital stock of the corporation, subject to the provisions of the Certificate of Incorporation and applicable law, if any, may be declared by the Board of Directors. Dividends may be paid in cash, in property, or in shares of the corporation's capital stock, subject to the provisions of the Certificate of Incorporation and applicable law.

Section 2. Dividend Reserve. Before payment of any dividend, there may be set aside out of any funds of the corporation available for dividends such sum or sums as the Board of Directors from time to time, in its absolute discretion, determines proper as a reserve or reserves to meet contingencies, or for equalizing dividends, or for repairing or maintaining any property of the corporation, or for such other purpose or purposes as the Board of Directors shall determine to be conducive to the interests of the corporation, and the Board of Directors may modify or abolish any such reserve in the manner in which it was created.

ARTICLE X

FISCAL YEAR

Section 1. Fiscal Year. The fiscal year of the corporation shall be fixed by resolution of the Board of Directors.

ARTICLE XI

INDEMNIFICATION

Section 1. Indemnification of Directors, Executive Officers, Employees and Other Agents.

(a) **Directors and Executive Officers.** The corporation shall indemnify to the full extent permitted under and in any manner permitted under the DGCL or any other applicable law, any person who is made or threatened to be made a party to or is otherwise involved (as a witness or otherwise) in any threatened, pending, or completed action, suit, or proceeding, whether civil, criminal, administrative, or investigative (hereinafter, a "Proceeding"), by reason of the fact that such person is or was a director or executive officer (for the purposes of this Article XI, "executive officers" shall be those persons designated by the corporation as (a) executive officers for purposes of the disclosures required in the corporation's proxy and periodic reports or (b) officers for purposes of Section 16 of the 1934 Act) of the corporation, or while serving as a director or executive officer of the corporation, is or was serving at the request of the corporation as a director, officer, employee, or agent of another corporation, partnership, joint venture, trust, or other enterprise, including service with respect to an employee benefit plan (collectively, "Another Enterprise"), against expenses (including attorneys' fees), judgments, fines (including ERISA excise taxes or penalties) and amounts paid in settlement actually and reasonably incurred by him or her in connection with such Proceeding if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful; *provided, however*, that the corporation may modify the extent of such indemnification by individual contracts with its directors and executive officers; and, *provided, further*, that the corporation shall not be required to indemnify any director or executive officer in connection with any proceeding (or part thereof) initiated by such person unless (i) such indemnification is expressly required to be made by applicable law, (ii) the proceeding was authorized by the Board of Directors of the corporation, (iii) such indemnification is provided by the corporation, in its sole discretion, pursuant to the powers vested in the corporation under the DGCL or any other applicable law or (iv) such indemnification is required to be made under subsection (d) of this Section 45.

(b) **Other Officers, Employees and Other Agents.** The corporation shall have power to indemnify (including the power to advance expenses in a manner consistent with subsection (c) of this Section 45) its other officers, employees and other agents as set forth in the DGCL or any other applicable law. The Board of Directors shall have the power to delegate the determination of whether indemnification shall be given to any such person except executive officers to such officers or other persons as the Board of Directors shall determine.

(c) **Expenses.** The corporation shall advance to any person who was or is a party or is threatened to be made a party to any threatened, pending or completed Proceeding, by reason of the fact that such person is or was a director or executive officer, of the corporation, or is or was serving at the request of the corporation as a director or executive officer of Another Enterprise, prior to the final disposition of the Proceeding, promptly following request therefor, all expenses (including attorneys' fees) incurred by any director or executive officer in connection with such Proceeding provided, however, that if the DGCL requires, an advancement of expenses incurred by a director or executive officer in his or her capacity as a director or executive officer (and not in any other capacity in which service was or is rendered by such indemnitee, including, without limitation, service to an employee benefit plan) shall be made only upon delivery to the corporation of an undertaking (hereinafter an "undertaking"), by or on behalf of such indemnitee, to repay all amounts so advanced if it shall ultimately be determined by final judicial decision from which there is no further right to appeal (hereinafter a "final adjudication") that such indemnitee is not entitled to be indemnified for such expenses under this Section 45 or otherwise.

Notwithstanding the foregoing, unless otherwise determined pursuant to paragraph (d) of this Section 45, no advance shall be made by the corporation to an executive officer of the corporation (except by reason of the fact that such executive officer is or was a director of the corporation in which event this paragraph shall not apply) in any Proceeding, if a determination is reasonably and promptly made (i) by a majority vote of directors who were not parties to the Proceeding, even if not a quorum, or (ii) by a committee of such directors designated by a majority vote of such directors, even though less than a quorum, or (iii) if there are no such directors, or such directors so direct, by independent legal counsel in a written opinion, that the facts known to the decision-making party at the time such determination is made demonstrate clearly and convincingly that such person acted in bad faith or in a manner that such person did not believe to be in or not opposed to the best interests of the corporation.

(d) **Enforcement.** Without the necessity of entering into an express contract, all rights to indemnification and advances to directors and executive officers under this Section 45 shall be deemed to be contractual rights, shall vest when the person becomes a director or executive officer of the corporation, shall continue as vested contract rights even if such person ceases to be a director or executive officer of the corporation, and shall be effective to the same extent and as if provided for in a contract between the corporation and the director or executive officer. Any right to indemnification or advances granted by this Section 45 to a director or executive officer shall be enforceable by or on behalf of the person holding such right in any court of competent jurisdiction if (i) the claim for indemnification or advances is denied, in whole or in part, or (ii) no disposition of such claim is made within 90 days of request therefor. To the fullest extent permitted by applicable law, the claimant in such enforcement action, if successful in whole or in part, shall be entitled to be paid also the expense of prosecuting the claim. In connection with any claim for indemnification, the corporation shall be entitled to raise as a defense to any such action that the claimant has not met the standards of conduct that make it permissible under the DGCL or any other applicable law for the corporation to indemnify the claimant for the amount claimed. In connection with any claim by an executive officer of the corporation (except in any Proceeding, by reason of the fact that such executive officer is or was a director of the corporation) for advances, the corporation shall be entitled to raise a defense as to any such action clear and convincing evidence that such person acted in bad faith or in a manner that such person did not believe to be in or not opposed to the best interests of the corporation, or with respect to any criminal action or proceeding that such person acted without reasonable cause to believe that his or her conduct was lawful. Neither the failure of the corporation (including its Board of Directors, independent legal counsel or its stockholders) to have made a determination prior to the commencement of such action that indemnification of the claimant is proper in the circumstances because he or she has met the applicable standard of conduct set forth in the DGCL or any other applicable law, nor an actual determination by the corporation (including its Board of Directors, independent legal counsel or its stockholders) that the claimant has not met such applicable standard of conduct, shall be a defense to the action or create a presumption that claimant has not met the applicable standard of conduct. In any suit brought by a director or executive officer to enforce a right to indemnification or to an advancement of expenses hereunder, the burden of proving that the director or executive officer is not entitled to be indemnified, or to such advancement of expenses, under this Section 45 or otherwise shall be on the corporation.

(e) **Non-Exclusivity of Rights.** The rights conferred on any person by this Section 45 shall not be exclusive of any other right that such person may have or hereafter acquire under any applicable statute, provision of the Certificate of Incorporation, Bylaws, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in his or her official capacity and as to action in another capacity while holding office. The corporation is specifically authorized to enter into individual contracts with any or all of its directors, officers, employees or agents respecting indemnification and advances, to the fullest extent not prohibited by the DGCL, or by any other applicable law.

(f) **Survival of Rights.** The rights conferred on any person by this Bylaw shall continue as to a person who has ceased to be a director, executive officer, officer, employee or other agent and shall inure to the benefit of the heirs, executors and administrators of such a person.

(g) **Insurance.** To the fullest extent permitted by the DGCL or any other applicable law, the corporation, upon approval by the Board of Directors, may purchase and maintain insurance on behalf of any person required or permitted to be indemnified pursuant to this Section 45.

(h) **Amendments.** Any repeal or modification of this Section 45 shall only be prospective and shall not affect the rights under this Section 45 as in effect at the time of the alleged occurrence of any action or omission to act that is the cause of any Proceeding against any agent of the corporation.

(i) **Saving Clause.** If this Article XI or any portion hereof shall be invalidated on any ground by any court of competent jurisdiction, then the corporation shall nevertheless indemnify each director and executive officer to the full extent not prohibited by any applicable portion of this Article XI that shall not have been invalidated, or by any other applicable law. If this Article XI shall be invalid due to the application of the indemnification provisions of another jurisdiction, then the corporation shall indemnify each director and executive officer to the full extent under any other applicable law.

(j) **Certain Definitions and Construction of Terms.** For the purposes of Article XI of these Bylaws, the following definitions and rules of construction shall apply:

(i) The term “**Proceeding**” shall be broadly construed and shall include, without limitation, the investigation, preparation, prosecution, defense, settlement, arbitration and appeal of, and the giving of testimony in, any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative.

(ii) The term “**expenses**” shall be broadly construed and shall include, without limitation, court costs, attorneys’ fees, witness fees, fines, amounts paid in settlement or judgment and any other costs and expenses of any nature or kind incurred in connection with any Proceeding.

(iii) The term the “**corporation**” shall include, in addition to the resulting corporation, any constituent corporation (including any constituent of a constituent) absorbed in a consolidation or merger that, if its separate existence had continued, would have had power and authority to indemnify its directors, officers, and employees or agents, so that any person who is or was a director, officer, employee or agent of such constituent corporation, or is or was serving at the request of such constituent corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, shall stand in the same position under the provisions of this Section 45 with respect to the resulting or surviving corporation as he would have with respect to such constituent corporation if its separate existence had continued.

(iv) References to a “**director**,” “**executive officer**,” “**officer**,” “**employee**,” or “**agent**” of the corporation shall include, without limitation, situations where such person is serving at the request of the corporation as, respectively, a director, executive officer, officer, employee, trustee or agent of another corporation, partnership, joint venture, trust or other enterprise.

(v) References to “**Another Enterprise**” shall include employee benefit plans; references to “**fines**” shall include any excise taxes assessed on a person with respect to an employee benefit plan; and references to “**serving at the request of the corporation**” shall include any service as a director, officer, employee or agent of the corporation that imposes duties on, or involves services by, such director, officer, employee, or agent with respect to an employee benefit plan, its participants, or beneficiaries; and a person who acted in good faith and in a manner such person reasonably believed to be in the interest of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner “not opposed to the best interests of the corporation” as referred to in this Section 45.

ARTICLE XII

NOTICES

Section 1. Notices.

(a) **Notice to Stockholders.** Notice to stockholders of stockholder meetings shall be given as provided in Section 7. Without limiting the manner by which notice may otherwise be given effectively to stockholders under any agreement or contract with such stockholder, and except as otherwise required by applicable law, written notice to stockholders for purposes other than stockholder meetings may be sent by U.S. mail or nationally recognized overnight courier, or by electronic mail or other electronic means.

(b) **Notice to Directors.** Any notice required to be given to any director may be given by the method stated in subsection (a), as otherwise provided in these Bylaws (including by any of the means specified in Section 22(d)), or by overnight delivery service. Any notice sent by overnight delivery service or U.S. mail shall be sent to such address as such director shall have filed in writing with the Secretary, or, in the absence of such filing, to the last known post office address of such director.

(c) **Affidavit of Mailing.** An affidavit of mailing, executed by a duly authorized and competent employee of the corporation or its transfer agent appointed with respect to the class of stock affected, or other agent, specifying the name and address or the names and addresses of the stockholder or stockholders, or director or directors, to whom any such notice or notices was or were given, and the time and method of giving the same, shall in the absence of fraud, be prima facie evidence of the facts therein contained.

(d) **Methods of Notice.** It shall not be necessary that the same method of giving notice be employed in respect of all recipients of notice, but one permissible method may be employed in respect of any one or more, and any other permissible method or methods may be employed in respect of any other or others.

(e) **Notice to Person with Whom Communication is Unlawful.** Whenever notice is required to be given, under applicable law or any provision of the Certificate of Incorporation or Bylaws of the corporation, to any person with whom communication is unlawful, the giving of such notice to such person shall not be required and there shall be no duty to apply to any governmental authority or agency for a license or permit to give such notice to such person. Any action or meeting which shall be taken or held without notice to any such person with whom communication is unlawful shall have the same force and effect as if such notice had been duly given. In the event that the action taken by the corporation is such as to require the filing of a certificate under any provision of the DGCL, the certificate shall state, if such is the fact and if notice is required, that notice was given to all persons entitled to receive notice except such persons with whom communication is unlawful.

(f) **Notice to Stockholders Sharing an Address.** Except as otherwise prohibited under the DGCL, any notice given under the provisions of the DGCL, the Certificate of Incorporation or these Bylaws shall be effective if given by a single written notice to stockholders who share an address if consented to by the stockholders at that address to whom such notice is given. Such consent shall have been deemed to have been given if such stockholder fails to object in writing to the corporation within 60 days of having been given notice by the corporation of its intention to send the single notice. Any consent shall be revocable by the stockholder by written notice to the corporation.

ARTICLE XIII

AMENDMENTS

Section 1. Amendments. Subject to the limitations set forth in herein or the provisions of the Certificate of Incorporation, the Board of Directors is expressly empowered to adopt, amend or repeal the Bylaws of the corporation. Any adoption, amendment or repeal of the Bylaws of the corporation by the Board of Directors shall require the approval of a majority of the authorized number of directors. The stockholders also shall have power to adopt, amend or repeal the Bylaws of the corporation; *provided, however*, that, any time after the Final Conversion Date, in addition to any vote of the holders of any class or series of stock of the corporation required by law or by the Certificate of Incorporation, such action by stockholders shall require the affirmative vote of the holders of a majority of the voting power of all of the then-outstanding shares of the capital stock of the corporation entitled to vote generally in the election of directors, voting together as a single class.

ARTICLE XIV

LOANS TO OFFICERS

Section 1. Loans to Officers. Except as otherwise prohibited by applicable law, the corporation may lend money to, or guarantee any obligation of, or otherwise assist any officer or other employee of the corporation or of its subsidiaries, including any officer or employee who is a director of the corporation or its subsidiaries, whenever, in the judgment of the Board of Directors, such loan, guarantee or assistance may reasonably be expected to benefit the corporation. The loan, guarantee or other assistance may be with or without interest and may be unsecured, or secured in such manner as the Board of Directors shall approve, including, without limitation, a pledge of shares of stock of the corporation. Nothing in these Bylaws shall be deemed to deny, limit or restrict the powers of guaranty or warranty of the corporation at common law or under any statute.

TENTH AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

This TENTH AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT is made as of April 18, 2022, by and among Tempus Labs, Inc., a Delaware corporation (the "**Company**"), each of the investors listed on Schedule A hereto, each of whom is referred to in this Agreement as an "**Investor**" and each of the stockholders listed on Schedule B hereto, each of whom is referred to in this Agreement as a "**Common Holder**."

WHEREAS, the Company and certain of the Investors are parties to the Series G-3 Preferred Stock Purchase Agreement, of even date herewith (the "**Series G-3 Purchase Agreement**"), pursuant to which such Investors have agreed to purchase shares of the Series G-3 Preferred Stock of the Company, par value \$0.0001 per share ("**Series G-3 Preferred Stock**");

WHEREAS, certain of the Investors hold shares of Series A Preferred Stock, par value \$0.0001 per share ("**Series A Preferred Stock**"), Series B Preferred Stock of the Company, par value \$0.0001 per share ("**Series B Preferred Stock**"), Series B-1 Preferred Stock of the Company, par value \$0.0001 per share ("**Series B-1 Preferred Stock**"), Series B-2 Preferred Stock of the Company, par value \$0.0001 per share ("**Series B-2 Preferred Stock**"), Series C Preferred Stock of the Company, par value \$0.0001 per share ("**Series C Preferred Stock**"), Series D Preferred Stock of the Company, par value \$0.0001 per share ("**Series D Preferred Stock**"), Series E Preferred Stock of the Company, par value \$0.0001 per share ("**Series E Preferred Stock**"), Series F Preferred Stock of the Company, par value \$0.0001 per share ("**Series F Preferred Stock**"), Series G Preferred Stock of the Company, par value \$0.0001 per share ("**Series G Preferred Stock**"), Series G-2 Preferred Stock of the Company, par value \$0.0001 per share ("**Series G Preferred Stock**") and/or Voting Common Stock and possess registration rights, information rights, rights of first offer and other rights pursuant to that certain Ninth Amended and Restated Investors' Rights Agreement dated as of November 19, 2020, by and among the parties thereto (the "**Prior Agreement**");

WHEREAS, the parties to the Prior Agreement desire to amend and restate the Prior Agreement in its entirety with this Agreement; and

WHEREAS, the Investors, the Common Holders and the Company hereby agree that this Agreement shall govern the rights of the Investors and the Common Holders to cause the Company to register shares of Voting Common Stock issuable to the Investors, to receive certain information from the Company, and to participate in future equity offerings by the Company, and shall govern certain other matters as set forth in this Agreement.

NOW, THEREFORE, the parties hereby agree as follows:

1. Definitions. For purposes of this Agreement:

1.1 "**Affiliate**" means, with respect to any specified Person, any other Person who, directly or indirectly, controls, is controlled by, or is under common control with such Person, including, without limitation, any general partner, managing member, officer or director of such Person or any venture capital fund or other investment fund now or hereafter existing that is controlled by such Person or by one or more general partners or managing members of, or shares the same (or an affiliate of the same) management company, common investment management or investment adviser with, such Person.

1.2 “**Baillie Gifford**” means Baillie Gifford & Co., Baillie Gifford Overseas Limited and any successor or affiliated registered investment advisor to the Baillie Gifford Investors.

1.3 “**Baillie Gifford Investors**” means the Investors that are advisory clients of Baillie Gifford.

1.4 “**Certificate**” means the Company’s Tenth Amended and Restated Certificate of Incorporation, as filed with the Office of the Secretary of State of the State of Delaware on the date hereof, as may be amended from time to time.

1.5 “**CFIUS Approval**” means (i) the Company and the applicable Purchaser(s) shall have received written notice from CFIUS that review under Section 721 of the Defense Production Act of 1950 as amended by the Foreign Investment Risk Review Modernization Act of 2018, including implementing regulations thereof, 31 C.F.R. Parts 800 and 802 (the “**DPA**”), of the transactions contemplated hereby has been concluded, and CFIUS shall have determined that there are no unresolved national security concerns with respect to the transactions contemplated hereby, and advised that action under Section 721 of the DPA, and any investigation related thereto, has been concluded with respect to the transactions contemplated hereby; (ii) CFIUS shall have concluded that the transactions contemplated hereby are not covered transactions and are not subject to review under Section 721 of the DPA; or (iii) CFIUS shall have sent a report to the President of the United States (the “**President**”) requesting the President’s decision on the notice and either (1) the period under Section 721 of the DPA during which the President may announce his decision to take action to suspend or prohibit the transactions contemplated hereby shall have expired without any such action being announced or taken or (2) the President shall have announced a decision not to take any action to suspend or prohibit the transactions contemplated hereby.

1.6 “**Class A Common Stock**” means shares of the Class A Common Stock, \$0.0001 par value per share.

1.7 “**Class B Common Stock**” means shares of the Class B Common Stock, \$0.0001 par value per share.

1.8 “**Common Stock**” means, collectively, the shares of the Company’s Voting Common Stock and the Nonvoting Common Stock.

1.9 “**Damages**” means any claim, loss, damage or liability (joint or several) to which a party hereto may become subject under the Securities Act, the Exchange Act, or other federal or state law, insofar as such claim, loss, damage or liability (or any action in respect thereof) arises out of or is based upon (i) any untrue statement or alleged untrue statement of a material fact contained in any registration statement of the Company, including any preliminary prospectus or final prospectus contained therein or any amendments or supplements thereto; (ii) an omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein not misleading; or (iii) any violation or alleged violation by the indemnifying party (or any of its agents or Affiliates) of the Securities Act, the Exchange Act, any state securities law, or any rule or regulation promulgated under the Securities Act, the Exchange Act, or any state securities law.

1.10 “**Derivative Securities**” means any securities or rights convertible into, or exercisable or exchangeable for (in each case, directly or indirectly), Common Stock, including options and warrants.

1.11 “**Exchange Act**” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

1.12 “**Excluded Registration**” means (i) a registration relating to the sale of securities to employees of the Company or an Affiliate pursuant to a stock option, stock purchase, or similar plan; (ii) a registration relating to an SEC Rule 145 transaction; (iii) a registration on any form that does not include substantially the same information as would be required to be included in a registration statement covering the sale of the Registrable Securities; or (iv) a registration in which the only Common Stock being registered is Common Stock issuable upon conversion of debt securities that are also being registered.

1.13 “**Form S-1**” means such form under the Securities Act as in effect on the date hereof or any successor registration form under the Securities Act subsequently adopted by the SEC.

1.14 “**Form S-3**” means such form under the Securities Act as in effect on the date hereof or any registration form under the Securities Act subsequently adopted by the SEC that permits incorporation of substantial information by reference to other documents filed by the Company with the SEC.

1.15 “**GAAP**” means generally accepted accounting principles in the United States.

1.16 “**Google**” means Google LLC, a Delaware limited liability company, together with its subsidiaries and Affiliates.

1.17 “**Holder**” means any holder of Registrable Securities who is a party to this Agreement.

1.18 “**Immediate Family Member**” means a child, stepchild, grandchild, parent, stepparent, grandparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, including adoptive relationships, of a natural person referred to herein.

1.19 “**Initiating Holders**” means, collectively, Holders who properly initiate a registration request under this Agreement.

1.20 “**IPO**” means the Company’s first underwritten public offering of its Common Stock under the Securities Act.

1.21 “**Lightbank**” means, collectively, Innovation Group Investors, L.P., Lightbank Investments 1B, LLC, Gray Media, LLC, Blue Media, LLC, Keeks, LLC, Tempus Series B Investments, LLC, Tempus Series B-1 Investments, LLC, and Tempus Series B-2 Investments, LLC, Tempus Series C Investments, LLC, Tempus Series D Investments, LLC, Tempus Series E Investments, LLC and Tempus Series G Investments, LLC.

1.22 “**Major Investor**” means (i) any Investor or Common Holder that, individually or together with such Investor’s or Common Holder’s Affiliates, holds at least 1,000,000 shares of Registrable Securities (as adjusted for any stock split, stock dividend, combination, or other recapitalization or reclassification effected after the date hereof), (ii) each T. Rowe Price Investor that holds any Registrable Securities, (iii) any Baillie Gifford Investor that holds any Registrable Securities, and (iv) each Neuberger Investor that continues to satisfy the Neuberger Rights Threshold.

1.23 “**NEA**” means, collectively, New Enterprise Associates 16, L.P. and any of its Affiliates.

1.24 “**Neuberger**” means Neuberger Berman Investment Advisers LLC and/or NB Alternatives Advisers LLC and any successor or affiliated registered investment advisor to the Neuberger Investors.

1.25 “**Neuberger Investors**” means Neuberger Berman Principal Strategies PRIMA Fund LP, Neuberger Berman Principal Strategies PRIMA Co-Invest Fund IV LP, PRIMA MLP Fund LP and any other Investors that are investment management or management advisory clients of Neuberger.

1.26 “**Neuberger Rights Threshold**” means, with respect to each Neuberger Investor that such Neuberger Investor continues to hold all of the shares of Preferred Stock initially purchased by such Neuberger Investor or shares of capital stock issued upon conversion of such shares of Preferred Stock (such number subject to appropriate adjustment in the event of any stock split, stock dividend, combination, or other recapitalization or reclassification effected after the date hereof).

1.27 “**New Securities**” means, collectively, equity securities of the Company, whether or not currently authorized, as well as rights, options, or warrants to purchase such equity securities, or securities of any type whatsoever that are, or may become, convertible or exchangeable into or exercisable for such equity securities.

1.28 “**Nonvoting Common Stock**” means the shares of the Company’s Nonvoting Common Stock, \$0.0001 par value per share.

1.29 “**Novo**” means Novo Holdings A/S and any of its Affiliates.

1.30 “**Novo Side Letter**” means that certain letter agreement dated May 29, 2019, by and among the Company, Novo and the Founder Stockholders (as defined therein), a copy of which is attached hereto as Exhibit A.

1.31 “**Person**” means any individual, corporation, partnership, trust, limited liability company, association or other entity.

1.32 “**Preferred Stock**” means, collectively, the shares of the Company’s Series A Preferred Stock, Series B Preferred Stock, Series B-1 Preferred Stock, Series B-2 Preferred Stock, Series C Preferred Stock, Series D Preferred Stock, Series E Preferred Stock, Series F Preferred Stock, Series G Preferred Stock, Series G-2 Preferred Stock and Series G-3 Preferred Stock.

1.33 “**Registrable Securities**” means (a) the Voting Common Stock, (b) the Voting Common Stock issuable or issued upon conversion of the Preferred Stock, (c) any Common Stock, or any Common Stock issued or issuable (directly or indirectly) upon conversion and/or exercise of any other securities of the Company, acquired or held by the Investors or the Common Holders; and (d) any Common Stock issued as (or issuable upon the conversion or exercise of any warrant, right, or other security that is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of, the shares referenced in clauses (a) or (b) above; excluding in all cases, however, (i) any Registrable Securities sold by a Person in a transaction in which the applicable rights under this Agreement are not assigned pursuant to Section 6.1, (ii) excluding for purposes of Section 2 any shares for which registration rights have terminated pursuant to Section 2.13 of this Agreement, and (iii) Voting Common Stock that has been converted from Nonvoting Common Stock and any Common Stock issued as (or issuable upon the conversion or exercise of any warrant, right, or other security that is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of, such Voting Common Stock.

1.34 “**Registrable Securities Then Outstanding**” means the number of shares determined by adding the number of shares of outstanding Common Stock that are Registrable Securities and the number of shares of Common Stock issuable (directly or indirectly) pursuant to then exercisable and/or convertible securities that are Registrable Securities.

1.35 “**Required Approvals**” means all consents, approvals, clearances or other authorizations of, and expiration of waiting periods required by, any governmental authorities required under applicable laws, including the CFIUS Approval.

1.36 “**Restricted Securities**” means the securities of the Company required to bear the legend set forth in Section 2.12(b) hereof.

1.37 “**Revolution**” means, collectively, Revolution Growth III, LP and any of its Affiliates.

1.38 “**SEC**” means the Securities and Exchange Commission.

1.39 “**SEC Rule 144**” means Rule 144 promulgated by the SEC under the Securities Act.

1.40 “**SEC Rule 145**” means Rule 145 promulgated by the SEC under the Securities Act.

1.41 “**Securities Act**” means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

1.42 “**Selling Expenses**” means all underwriting discounts, selling commissions, and stock transfer taxes applicable to the sale of Registrable Securities, and fees and disbursements of counsel for any Holder, except for the fees and disbursements of the Selling Holder Counsel borne and paid by the Company as provided in Section 2.6.

1.43 “**T. Rowe Price**” means T. Rowe Price Associates, Inc. and any successor or affiliated registered investment advisor to the T. Rowe Price Investors.

1.44 “**T. Rowe Price Investors**” means the Investors that are advisory clients of T. Rowe Price.

1.45 “**Voting Common Stock**” means shares of the Class A Common Stock and Class B Common Stock.

2. Registration Rights. The Company covenants and agrees as follows:

2.1 Demand Registration.

(a) If at any time after one hundred eighty (180) days after the effective date of the registration statement for the IPO, the Company receives a request from Holders of at least a majority of the Registrable Securities Then Outstanding that the Company file a Form S-1 registration statement with respect to all or any portion of their Registrable Securities if the anticipated aggregate offering price, net of Selling Expenses, would exceed \$15,000,000, then the Company shall (i) within ten (10) days after the date such request is given, give notice thereof (the “**Demand Notice**”) to all Holders other than the Initiating Holders, and (ii) as soon as practicable, and in any event within sixty (60) days after the date such request is given by the Initiating Holders, file a Form S-1 registration statement under the Securities Act covering all Registrable Securities that the Initiating Holders requested to be registered and any additional Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within twenty (20) days of the date the Demand Notice is given, and in each case, subject to the limitations of Section 2.1(c) and Section 2.3.

(b) If at any time when it is eligible to use a Form S-3 registration statement, the Company receives a request from Holders of at least twenty percent (20%) of the Registrable Securities Then Outstanding that the Company file a Form S-3 registration statement with respect to outstanding Registrable Securities of such Holders having an anticipated aggregate offering price, net of Selling Expenses, of at least \$1,000,000, then the Company shall (i) within ten (10) days after the date such request is given, give a Demand Notice to all Holders other than the Initiating Holders; and (ii) as soon as practicable, and in any event within forty-five (45) days after the date such request is given by the Initiating Holders, file a Form S-3 registration statement under the Securities Act covering all Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within twenty (20) days of the date the Demand Notice is given, and in each case, subject to the limitations of Section 2.1(c) and Section 2.3.

(c) Notwithstanding the foregoing obligations, if the Company furnishes to Holders requesting a registration pursuant to this Section 2.1 a certificate signed by the Company's chief executive officer stating that in the good faith judgment of the Company's Board of Directors it would be materially detrimental to the Company and its stockholders for such registration statement to be filed and it is therefore necessary to defer the filing of such registration statement, then the Company shall have the right to defer taking action with respect to such filing, and any time periods with respect to filing or effectiveness thereof shall be tolled correspondingly, for a period of not more than sixty (60) days after the request of the Initiating Holders is given; *provided, however*, that the Company may not invoke this right more than once in any twelve (12) month period; and *provided further*, that the Company shall not register any securities for its own account or that of any other stockholder during such ninety (90)-day period other than pursuant to any Excluded Registrations.

(d) The Company shall not be obligated to effect, or to take any action to effect, any registration or file any registration statement pursuant to Section 2.1(a) (i) during the period commencing on the date that is ninety (90) days before the Company's good faith estimate of the date of filing of, and ending on a date that is one hundred eighty (180) days after the effective date of, a Company-initiated registration, provided that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; (ii) after the Company has effected two registrations pursuant to Section 2.1(a); or (iii) if the Initiating Holders propose to dispose of shares of Registrable Securities that may be immediately registered on Form S-3 pursuant to a request made pursuant to Section 2.1(b).

(e) The Company shall not be obligated to effect, or to take any action to effect, any registration or file any registration statement pursuant to Section 2.1(b) (i) during the period commencing on the date that is thirty (30) days before the Company's good faith estimate of the date of filing of, and ending on a date that is ninety (90) days after the effective date of, a Company-initiated registration, provided that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; (ii) if the Company has effected two registrations pursuant to Section 2.1(b) within the twelve (12)- month period immediately preceding the date of such request; or (iii) if the Company has effected a registration pursuant to Section 2.1(b) within the six (6)-month period immediately preceding the date of such request. A registration shall not be counted as "effected" for purposes of this Section 2.1(e) until such time as the applicable registration statement has been declared effective by the SEC, unless the Initiating Holders withdraw their request for such registration, elect not to pay the registration expenses therefor, and forfeit their right to one demand registration statement pursuant to Section 2.6, in which case such withdrawn registration statement shall be counted as "effected" for purposes of this Section 2.1(e) except as provided in Section 2.6.

2.2 Company Registration. If the Company proposes to register (including, for this purpose, a registration effected by the Company for stockholders other than the Holders) any of its securities under the Securities Act in connection with the public offering of such securities solely for cash (other than in a registration relating to a demand pursuant to Section 2.1 or an Excluded Registration), the Company shall, at such time, promptly give each Holder notice of such registration. Upon the request of each Holder given within twenty (20) days after such notice is given by the Company, the Company shall, subject to the provisions of Section 2.3, cause to be registered all of the Registrable Securities that each such Holder has requested to be included in

such registration. The Company shall have the right to terminate or withdraw any registration initiated by it under this Section 2.2 before the effective date of such registration, whether or not any Holder has elected to include Registrable Securities in such registration. The expenses (other than Selling Expenses) of such withdrawn registration shall be borne by the Company in accordance with Section 2.6.

2.3 Underwriting Requirements.

(a) If, pursuant to Section 2.1, the Initiating Holders intend to distribute the Registrable Securities covered by their request by means of an underwriting, they shall so advise the Company as a part of their request made pursuant to Section 2.1, and the Company shall include such information in the Demand Notice. The underwriter(s) will be selected by the Company and shall be reasonably acceptable to a majority in interest of the Initiating Holders. In such event, the right of any Holder to include such Holder's Registrable Securities in such registration shall be conditioned upon such Holder's participation in such underwriting and the inclusion of such Holder's Registrable Securities in the underwriting to the extent provided herein. All Holders proposing to distribute their securities through such underwriting shall (together with the Company as provided in Section 2.4(e)) enter into and perform their obligations under an underwriting agreement in customary form with the underwriter(s) selected for such underwriting. Notwithstanding any other provision of this Section 2.3, if the managing underwriter(s) advise(s) the Initiating Holders in writing that marketing factors require a limitation on the number of shares to be underwritten, then the Initiating Holders shall so advise all Holders of Registrable Securities that otherwise would be underwritten pursuant hereto, and the number of Registrable Securities that may be included in the underwriting shall be allocated among such Holders of Registrable Securities, including the Initiating Holders, in proportion (as nearly as practicable) to the number of Registrable Securities owned by each Holder or in such other proportion as shall mutually be agreed to by all such selling Holders; provided, however, that the number of Registrable Securities held by the Holders to be included in such underwriting shall not be reduced unless all other securities are first entirely excluded from the underwriting. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest 100 shares.

(b) In connection with any offering involving an underwriting of shares of the Company's capital stock pursuant to Section 2.2, the Company shall not be required to include any of the Holders' Registrable Securities in such underwriting unless the Holders accept the terms of the underwriting as agreed upon between the Company and its underwriters, and then only in such quantity as the underwriters in their sole discretion determine will not jeopardize the success of the offering by the Company. If the total number of securities, including Registrable Securities, requested by stockholders to be included in such offering exceeds the number of securities to be sold (other than by the Company) that the underwriters in their reasonable discretion determine is compatible with the success of the offering, then the Company shall be required to include in the offering only that number of such securities, including Registrable Securities, which the underwriters and the Company in their sole discretion determine will not jeopardize the success of the offering. If the underwriters determine that less than all of the Registrable Securities requested to be registered can be included in such offering, then the Registrable Securities that are included in such offering shall be allocated among the selling Holders in proportion (as nearly as practicable to) the number of Registrable Securities owned by

each selling Holder or in such other proportions as shall mutually be agreed to by all such selling Holders. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest 100 shares. Notwithstanding the foregoing, in no event shall (i) the number of Registrable Securities included in the offering be reduced unless all other securities (other than securities to be sold by the Company) are first entirely excluded from the offering, (ii) the number of Registrable Securities comprised of shares of Common Stock issued or issuable upon conversion of the Series G-3 Preferred Stock, Series G-2 Preferred Stock, Series G Preferred Stock, Series F Preferred Stock, Series E Preferred Stock, Series D Preferred Stock and Series C Preferred Stock included in the offering be reduced unless all other securities ranking junior to the Series G-3 Preferred Stock, Series G-2 Preferred Stock, Series G Preferred Stock, Series F Preferred Stock, Series E Preferred Stock, Series D Preferred Stock and Series C Preferred Stock in respect of liquidation preferences (other than securities to be sold by the Company) are first entirely excluded from the offering, or (iii) the number of Registrable Securities included in the offering be reduced below twenty-five percent (25%) of the total number of securities included in such offering, unless such offering is the IPO, in which case the selling Holders may be excluded further if the underwriters make the determination described above and no other stockholder's securities are included in such offering. For purposes of the provision in this Section 2.3(b) concerning apportionment, for any selling Holder that is a partnership, limited liability company, or corporation, the partners, members, retired partners, retired members, stockholders, and Affiliates of such Holder, or the estates and Immediate Family Members of any such partners, retired partners, members, and retired members and any trusts for the benefit of any of the foregoing Persons, shall be deemed to be a single "selling Holder," and any pro rata reduction with respect to such "selling Holder" shall be based upon the aggregate number of Registrable Securities owned by all Persons included in such "selling Holder," as defined in this sentence.

(c) For purposes of Subsection 2.1, a registration shall not be counted as "effected" if, as a result of an exercise of the underwriter's cutback provisions in Section 2.3(a), fewer than fifty percent (50%) of the total number of Registrable Securities that Holders have requested to be included in such registration statement are actually included.

2.4 Obligations of the Company. Whenever required under this Section 2 to effect the registration of any Registrable Securities, the Company shall, as expeditiously as reasonably possible:

(a) prepare and file with the SEC a registration statement with respect to such Registrable Securities and use its commercially reasonable efforts to cause such registration statement to become effective and, upon the request of the Holders of a majority of the Registrable Securities registered thereunder, keep such registration statement effective for a period of up to one hundred twenty (120) days or, if earlier, until the distribution contemplated in the registration statement has been completed; *provided, however*, that (i) such one hundred twenty (120) day period shall be extended for a period of time equal to the period the Holder refrains, at the request of an underwriter of Common Stock (or other securities) of the Company, from selling any securities included in such registration, and (ii) in the case of any registration of Registrable Securities on Form S-3 that are intended to be offered on a continuous or delayed basis, subject to compliance with applicable SEC rules, such one hundred twenty (120) day period shall be extended for up to one hundred eighty (180) days, if necessary, to keep the registration statement effective until all such Registrable Securities are sold;

(b) prepare and file with the SEC such amendments and supplements to such registration statement, and the prospectus used in connection with such registration statement, as may be necessary to comply with the Securities Act in order to enable the disposition of all securities covered by such registration statement;

(c) furnish to the selling Holders such numbers of copies of a prospectus, including a preliminary prospectus, as required by the Securities Act, and such other documents as the Holders may reasonably request in order to facilitate their disposition of their Registrable Securities;

(d) use its commercially reasonable efforts to register and qualify the securities covered by such registration statement under such other securities or blue-sky laws of such jurisdictions as shall be reasonably requested by the selling Holders; *provided*, that the Company shall not be required to qualify to do business or to file a general consent to service of process in any such states or jurisdictions, unless the Company is already subject to service in such jurisdiction and except as may be required by the Securities Act;

(e) in the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the underwriter(s) of such offering;

(f) use its commercially reasonable efforts to cause all such Registrable Securities covered by such registration statement to be listed on a national securities exchange or trading system and each securities exchange and trading system (if any) on which similar securities issued by the Company are then listed;

(g) provide a transfer agent and registrar for all Registrable Securities registered pursuant to this Agreement and provide a CUSIP number for all such Registrable Securities, in each case not later than the effective date of such registration;

(h) promptly make available for inspection by the selling Holders, any managing underwriter(s) participating in any disposition pursuant to such registration statement, and any attorney or accountant or other agent retained by any such underwriter or selected by the selling Holders, all financial and other records, pertinent corporate documents, and properties of the Company, and cause the Company's officers, directors, employees, and independent accountants to supply all information reasonably requested by any such seller, underwriter, attorney, accountant, or agent, in each case, as necessary or advisable to verify the accuracy of the information in such registration statement and to conduct appropriate due diligence in connection therewith;

(i) notify each selling Holder, promptly after the Company receives notice thereof, of the time when such registration statement has been declared effective or a supplement to any prospectus forming a part of such registration statement has been filed; and

(j) after such registration statement becomes effective, notify each selling Holder of any request by the SEC that the Company amend or supplement such registration statement or prospectus.

2.5 Furnish Information. It shall be a condition precedent to the obligations of the Company to take any action pursuant to this Section 2 with respect to the Registrable Securities of any selling Holder that such Holder shall furnish to the Company such information regarding itself, the Registrable Securities held by it, and the intended method of disposition of such securities as is reasonably required to effect the registration of such Holder's Registrable Securities.

2.6 Expenses of Registration. All expenses (other than Selling Expenses) incurred in connection with registrations, filings, or qualifications pursuant to Section 2, including all registration, filing, and qualification fees; printers' and accounting fees; fees and disbursements of counsel for the Company; and the reasonable fees and disbursements, not to exceed \$30,000, of one counsel for the selling Holders ("**Selling Holder Counsel**"), shall be borne and paid by the Company; *provided, however*, that the Company shall not be required to pay for any expenses of any registration proceeding begun pursuant to Section 2.1 if the registration request is subsequently withdrawn at the request of the Holders of a majority of the Registrable Securities to be registered (in which case all selling Holders shall bear such expenses pro rata based upon the number of Registrable Securities that were to be included in the withdrawn registration), unless the Holders of a majority of the Registrable Securities agree to forfeit their right to one registration pursuant to Section 2.1(a) or Section 2.1(b), as the case may be; *provided further* that if, at the time of such withdrawal, the Holders shall have learned of a material adverse change in the condition, business, or prospects of the Company from that known to the Holders at the time of their request and have withdrawn the request with reasonable promptness after learning of such information, then the Holders shall not be required to pay any of such expenses and shall not forfeit their right to one registration pursuant to Section 2.1(a) or Section 2.1(b). All Selling Expenses relating to Registrable Securities registered pursuant to this Section 2 shall be borne and paid by the Holders (other than fees and disbursements of counsel to any Holder, other than the Selling Holder Counsel, which shall be borne solely by the Holder engaging such counsel) pro rata on the basis of the number of Registrable Securities registered on their behalf.

2.7 Delay of Registration. No Holder shall have any right to obtain or seek an injunction restraining or otherwise delaying any registration pursuant to this Agreement as the result of any controversy that might arise with respect to the interpretation or implementation of this Section 2.

2.8 Indemnification. If any Registrable Securities are included in a registration statement under this Section 2:

(a) To the extent permitted by law, the Company will indemnify and hold harmless each selling Holder, and the partners, members, officers, directors, and stockholders of each such Holder; legal counsel, accountants and investment advisers for each such Holder; any underwriter (as defined in the Securities Act) for each such Holder; and each Person, if any, who controls such Holder or underwriter within the meaning of the Securities Act or the Exchange Act, against any Damages, and the Company will pay to each such Holder, underwriter, controlling

Person, or other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; *provided, however*, that the indemnity agreement contained in this Section 2.8(a) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Company, which consent shall not be unreasonably withheld, nor shall the Company be liable for any Damages to the extent that they arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of any such Holder, underwriter, controlling Person, or other aforementioned Person expressly for use in connection with such registration.

(b) To the extent permitted by law, each selling Holder, severally and not jointly, will indemnify and hold harmless the Company, and each of its directors, each of its officers who has signed the registration statement, each Person (if any), who controls the Company within the meaning of the Securities Act, legal counsel and accountants for the Company, any underwriter (as defined in the Securities Act), any other Holder selling securities in such registration statement, and any controlling Person of any such underwriter or other Holder, against any Damages, in each case only to the extent that such Damages arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of such selling Holder expressly for use in connection with such registration; and each such selling Holder will pay to the Company and each other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; *provided, however*, that the indemnity agreement contained in this Section 2.8(b) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Holder, which consent shall not be unreasonably withheld; and *provided further*, that in no event shall the aggregate amounts payable by any Holder by way of indemnity or contribution under Sections 2.8(b) and 2.8(d) exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of fraud or willful misconduct by such Holder.

(c) Promptly after receipt by an indemnified party under this Section 2.8 of notice of the commencement of any action (including any governmental action) for which a party may be entitled to indemnification hereunder, such indemnified party will, if a claim in respect thereof is to be made against any indemnifying party under this Section 2.8, give the indemnifying party notice of the commencement thereof. The indemnifying party shall have the right to participate in such action and, to the extent the indemnifying party so desires, participate jointly with any other indemnifying party to which notice has been given, and to assume the defense thereof with counsel mutually satisfactory to the parties; *provided, however*, that an indemnified party (together with all other indemnified parties that may be represented without conflict by one counsel) shall have the right to retain one separate counsel, with the fees and expenses to be paid by the indemnifying party, if representation of such indemnified party by the counsel retained by the indemnifying party would be inappropriate due to actual or potential differing interests between such indemnified party and any other party represented by such counsel in such action. The failure to give notice to the indemnifying party within a reasonable time of the commencement of any such action shall not relieve such indemnifying party of any liability to the indemnified party under this Section 2.8, except to the extent that such failure materially prejudices the indemnifying party's ability to defend such action. The failure to give notice to the indemnifying party will not relieve it of any liability that it may have to any indemnified party otherwise than under this Section 2.8.

(d) To provide for just and equitable contribution to joint liability under the Securities Act in any case in which either (i) any party otherwise entitled to indemnification hereunder makes a claim for indemnification pursuant to this Section 2.8 but it is judicially determined (by the entry of a final judgment or decree by a court of competent jurisdiction and the expiration of time to appeal or the denial of the last right of appeal) that such indemnification may not be enforced in such case, notwithstanding the fact that this Section 2.8 provides for indemnification in such case, or (ii) contribution under the Securities Act may be required on the part of any party hereto for which indemnification is provided under this Section 2.8, then, and in each such case, such parties will contribute to the aggregate losses, claims, damages, liabilities, or expenses to which they may be subject (after contribution from others) in such proportion as is appropriate to reflect the relative fault of each of the indemnifying party and the indemnified party in connection with the statements, omissions, or other actions that resulted in such loss, claim, damage, liability, or expense, as well as to reflect any other relevant equitable considerations. The relative fault of the indemnifying party and of the indemnified party shall be determined by reference to, among other things, whether the untrue or allegedly untrue statement of a material fact, or the omission or alleged omission of a material fact, relates to information supplied by the indemnifying party or by the indemnified party and the parties' relative intent, knowledge, access to information, and opportunity to correct or prevent such statement or omission; *provided, however*, that, in any such case, (x) no Holder will be required to contribute any amount in excess of the public offering price of all such Registrable Securities offered and sold by such Holder pursuant to such registration statement, and (y) no Person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) will be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation; and *provided further*, that in no event shall a Holder's liability pursuant to this Section 2.8(d), when combined with the amounts paid or payable by such Holder pursuant to Section 2.8(b), exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of willful misconduct or fraud by such Holder.

(e) Notwithstanding the foregoing, to the extent that the provisions on indemnification and contribution contained in the underwriting agreement entered into in connection with the underwritten public offering are in conflict with the foregoing provisions, the provisions in the underwriting agreement shall control.

(f) Unless otherwise superseded by an underwriting agreement entered into in connection with the underwritten public offering, the obligations of the Company and Holders under this Section 2.8 shall survive the completion of any offering of Registrable Securities in a registration under this Section 2, and otherwise shall survive the termination of this Agreement.

2.9 Reports Under Exchange Act. With a view to making available to the Holders the benefits of SEC Rule 144 and any other rule or regulation of the SEC that may at any time permit a Holder to sell securities of the Company to the public without registration or pursuant to a registration on Form S-3, the Company shall:

(a) make and keep available adequate current public information, as those terms are understood and defined in SEC Rule 144, at all times after the effective date of the registration statement filed by the Company for the IPO;

(b) use commercially reasonable efforts to file with the SEC in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act (at any time after the Company has become subject to such reporting requirements); and

(c) furnish to any Holder, so long as the Holder owns any Registrable Securities, forthwith upon request (i) to the extent accurate, a written statement by the Company that it has complied with the reporting requirements of SEC Rule 144 (at any time after ninety (90) days after the effective date of the registration statement filed by the Company for the IPO), the Securities Act, and the Exchange Act (at any time after the Company has become subject to such reporting requirements), or that it qualifies as a registrant whose securities may be resold pursuant to Form S-3 (at any time after the Company so qualifies) and (ii) such other information as may be reasonably requested in availing any Holder of any rule or regulation of the SEC that permits the selling of any such securities without registration (at any time after the Company has become subject to the reporting requirements under the Exchange Act) or pursuant to Form S-3 (at any time after the Company so qualifies to use such form).

2.10 Limitations on Subsequent Registration Rights. From and after the date of this Agreement, the Company shall not, without the prior written consent of the Holders of at least a majority of the Registrable Securities Then Outstanding, enter into any agreement with any holder or prospective holder of any securities of the Company that would allow such holder or prospective holder to include such securities in any registration unless (i) such other registration rights are subordinate to the registration rights granted to the Holders hereunder and the inclusion of such securities will not reduce the amount of the Registrable Securities of the Holders that are included in a given registration and (ii) the holders of such rights are subject to market standoff obligations no more favorable to such persons than those contained herein.

2.11 "Market Stand-off" Agreement. Each Holder hereby agrees that it will not, without the prior written consent of the managing underwriter, during the period commencing on the date of the final prospectus relating to the IPO and ending on the date specified by the Company and the managing underwriter (such period not to exceed one hundred eighty (180) days) (i) lend; offer; pledge; sell; contract to sell; sell any option or contract to purchase; purchase any option or contract to sell; grant any option, right, or warrant to purchase; or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into or exercisable or exchangeable (directly or indirectly) for Common Stock held immediately before the effective date of the registration statement for the IPO or (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of such securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Common Stock or other securities, in cash or otherwise. The foregoing provisions of this Section 2.11 (A) shall apply only to the IPO, (B) shall not apply to shares of Common Stock acquired in the IPO or in the open market following the IPO, (C) shall not apply to the sale of any shares to an underwriter pursuant to an underwriting agreement and (D) shall be applicable to the Holders only if all officers and directors are subject to the same restrictions and the Company

obtains a similar agreement from all stockholders individually owning more than one percent (1%) of the outstanding Common Stock (after giving effect to the conversion into Common Stock of all outstanding Preferred Stock). The underwriters in connection with such registration are intended third-party beneficiaries of this Section 2.11 and shall have the right, power and authority to enforce the provisions hereof as though they were a party hereto. Each Holder further agrees to execute such agreements as may be reasonably requested by the underwriters in connection with such registration that are consistent with this Section 2.11 or that are necessary to give further effect thereto. If any of the obligations described in this Section 2.11 are waived or terminated with respect to any of the securities of any such Holder, officer, director or greater than one-percent stockholder (in any such case, the “**Released Securities**”), the foregoing provisions shall be waived or terminated, as applicable, to the same extent and with respect to the same percentage of securities of each Holder as the percentage of Released Securities represent with respect to the securities held by the applicable Holder, officer, director or greater than one-percent stockholder, subject, in the case of an underwritten offering, to any applicable cut-back priority rights set forth in this Agreement.

2.12 Restrictions on Transfer.

(a) The Preferred Stock and the Registrable Securities shall not be sold, pledged, or otherwise transferred, and the Company shall not recognize and shall issue stop-transfer instructions to its transfer agent with respect to any such sale, pledge, or transfer, except upon the conditions specified in this Agreement, which conditions are intended to ensure compliance with the provisions of the Securities Act. A transferring Holder shall cause any proposed purchaser, pledgee, or transferee of the Preferred Stock and the Registrable Securities held by such Holder to agree to take and hold such securities subject to the provisions and upon the conditions specified in this Agreement. Notwithstanding the foregoing, the Company shall not require any transferee of shares pursuant to an effective registration statement or, following the IPO, SEC Rule 144, in each case, to be bound by the terms of this Agreement.

(b) Each certificate or instrument representing (i) the Preferred Stock, (ii) the Registrable Securities, and (iii) any other securities issued in respect of the securities referenced in clauses (i) and (ii), upon any stock split, stock dividend, recapitalization, merger, consolidation, or similar event, shall (unless otherwise permitted by the provisions of Section 2.12(c)) be stamped or otherwise imprinted with a legend substantially in the following form (in addition to any legend required under applicable state securities laws):

THE SECURITIES REPRESENTED HEREBY HAVE BEEN ACQUIRED FOR INVESTMENT AND HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933. SUCH SHARES MAY NOT BE SOLD, PLEDGED, OR TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR A VALID EXEMPTION FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS OF SAID ACT.

THE SECURITIES REPRESENTED HEREBY MAY BE TRANSFERRED ONLY IN ACCORDANCE WITH THE TERMS OF A TENTH AMENDED AND RESTATED INVESTORS’ RIGHTS AGREEMENT BETWEEN THE COMPANY AND THE STOCKHOLDER, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE COMPANY.

The Holders consent to the Company making a notation in its records and giving instructions to any transfer agent of the Restricted Securities in order to implement the restrictions on transfer set forth in this Section 2.12.

(c) The holder of each certificate representing Restricted Securities, by acceptance thereof, agrees to comply in all respects with the provisions of this Section 2. Before any proposed sale, pledge, or transfer of any Restricted Securities, unless there is in effect a registration statement under the Securities Act covering the proposed transaction or, following the IPO, the transfer is made pursuant to SEC Rule 144, the Holder thereof shall give notice to the Company of such Holder's intention to effect such sale, pledge, or transfer. Each such notice shall describe the manner and circumstances of the proposed sale, pledge, or transfer in sufficient detail and, if reasonably requested by the Company, shall be accompanied at such Holder's expense by either (i) a written opinion of legal counsel who shall, and whose legal opinion shall, be reasonably satisfactory to the Company, addressed to the Company, to the effect that the proposed transaction may be effected without registration under the Securities Act; (ii) a "no action" letter from the SEC to the effect that the proposed sale, pledge, or transfer of such Restricted Securities without registration will not result in a recommendation by the staff of the SEC that action be taken with respect thereto; or (iii) any other evidence reasonably satisfactory to counsel to the Company to the effect that the proposed sale, pledge, or transfer of the Restricted Securities may be effected without registration under the Securities Act, whereupon the Holder of such Restricted Securities shall be entitled to sell, pledge, or transfer such Restricted Securities in accordance with the terms of the notice given by the Holder to the Company. The Company will not require such a legal opinion or "no action" letter (x) in any transaction in compliance with SEC Rule 144 or (y) in any transaction in which such Holder distributes Restricted Securities to an Affiliate of such Holder for no consideration; *provided*, that, with respect to transfers under the foregoing clause (y), each transferee agrees in writing to be subject to the terms of this Section 2.12. Each certificate or instrument evidencing the Restricted Securities transferred as above provided shall bear, except if such transfer is made pursuant to SEC Rule 144 or pursuant to an effective registration statement, the appropriate restrictive legend set forth in Section 2.12(b), except that such certificate shall not bear such restrictive legend if, in the opinion of counsel for such Holder and the Company, such legend is not required in order to establish compliance with any provisions of the Securities Act.

2.13 Termination of Registration Rights. The right of any Holder to request registration or inclusion of Registrable Securities in any registration pursuant to Section 2.1 or Section 2.2 shall terminate upon the earliest to occur of (a) the closing of a Deemed Liquidation Event, as such term is defined in the Certificate, (b) such time after the consummation of the IPO as Rule 144 or another similar exemption under the Securities Act is available for the sale of all of such Holder's shares without limitation during a three-month period without registration (and without the requirement for the Company to be in compliance with the current public information required under Rule 144(c)(1)) and such Holder holds less than one percent (1%) of the outstanding capital stock of the Company and (c) the fifth anniversary of the consummation of the IPO (or such later date that is one hundred eighty (180) days following the expiration of all deferrals of the Company's obligations pursuant to Section 2 that remain in effect as of the fifth anniversary of the consummation of the IPO).

3. Information Rights.

3.1 Delivery of Financial Statements. The Company shall deliver to each Major Investor (*provided*, that the Board of Directors has not reasonably determined that such Major Investor is a competitor of the Company; *provided, further*, that none of NEA, Revolution, any T. Rowe Price Investor, any Baillie Gifford Investor or any Neuberger Investor shall be deemed a competitor for purposes of this Agreement solely due to an investment in a portfolio company that is a competitor of the Company; and *provided, further*, that Google LLC shall not be deemed a competitor of the Company):

(a) as soon as practicable, but in any event within ninety (90) days after the end of each fiscal year of the Company, (i) a balance sheet as of the end of such year, (ii) statements of income and of cash flows for such year, and (iii) a statement of stockholders' equity as of the end of such year, all prepared in accordance with GAAP (except that such financial statements may not contain all notes thereto that may be required in accordance with GAAP), which financial statements shall be audited and certified by independent public accountants of nationally recognized standing selected by the Company;

(b) as soon as practicable, but in any event within thirty (30) days after the end of each quarter of each fiscal year of the Company, unaudited statements of income and cash flows for such fiscal quarter and an unaudited balance sheet and a statement of stockholders' equity as of the end of such fiscal quarter, all prepared in accordance with GAAP (except that such financial statements may (i) be subject to normal year-end audit adjustments and (ii) not contain all notes thereto that may be required in accordance with GAAP);

(c) as soon as practicable, but in any event within thirty (30) days after the end of each quarter of each fiscal year of the Company, a detailed capitalization table of the Company as of the end of such fiscal quarter; and

(d) such other information relating to the financial condition, business, prospects or corporate affairs of the Company as any Major Investor may from time to time reasonably request, provided that the Company shall not be obligated under this Section 3.1(c) to provide information (i) that the Company reasonably determines in good faith to be a trade secret or confidential information (unless covered by an enforceable confidentiality agreement, in a form reasonably acceptable to the Company); or (ii) the disclosure of which would adversely affect the attorney-client privilege between the Company and its counsel.

If, for any period, the Company has any subsidiary whose accounts are consolidated with those of the Company, then in respect of such period the financial statements delivered pursuant to the foregoing sections shall be the consolidated and consolidating financial statements of the Company and all such consolidated subsidiaries.

Notwithstanding anything else in this Section 3.1 to the contrary, the Company may cease providing the information set forth in this Section 3.1 during the period starting with the date sixty (60) days before the Company's good-faith estimate of the date of filing of a registration statement if it reasonably concludes it must do so to comply with the SEC rules applicable to such registration statement and related offering; *provided*, that the Company's covenants under this Section 3.1 shall be reinstated at such time as the Company is no longer actively employing its commercially reasonable efforts to cause such registration statement to become effective.

The Company shall promptly and accurately respond, and shall use its commercially reasonable efforts to cause its transfer agent to promptly respond, to reasonable requests for information made on behalf of any T. Rowe Price Investor or any Baillie Gifford Investor relating to (i) accounting or securities law matters required in connection with its audit or (ii) the actual holdings of the T. Rowe Price Investor or any Baillie Gifford Investor, respectively, including in relation to the total outstanding shares; provided, however, that the Company shall not be obligated to provide any such information that could reasonably result in a violation of applicable law or conflict with a confidentiality obligation of the Company. On or immediately prior to the effectiveness of the IPO, the Company shall provide each T. Rowe Price Investor and each Baillie Gifford Investor written confirmation of its equity holdings in the Company (on an as-converted basis).

Notwithstanding anything to the contrary contained in this Agreement, the Company and the Baillie Gifford Investors acknowledge and agree that, absent all Required Approvals, the Baillie Gifford Investors shall not request or obtain and Company shall not grant: (i) control (as defined in 31 C.F.R. § 800.208) of the Company; (ii) access to any material nonpublic technical information (as defined in 31 C.F.R. § 800.232) in the possession of the Company (which shall not include financial information about the Company), including access to any information not already in the public domain that is necessary to design, fabricate, develop, test, produce, or manufacture Company products or services, including processes, techniques, or methods; or (iii) any involvement (other than through voting of shares) in substantive decision making of the Company regarding the use, development, acquisition, or release of any of the Company's critical technologies (as defined in 31 C.F.R. § 800.215).

3.2 Inspection. The Company shall permit each Major Investor, at such Major Investor's expense, to visit and inspect the Company's properties, examine its books of account and records, and discuss the Company's affairs, finances, and accounts with its officers, during normal business hours of the Company as may be reasonably requested by such Major Investor; *provided, however*, that the Company shall not be obligated pursuant to this Section 3.2 to provide access to any information that it reasonably and in good faith considers to be a trade secret or confidential information (unless covered by an enforceable confidentiality agreement, in form reasonably acceptable to the Company) or the disclosure of which would adversely affect the attorney-client privilege between the Company and its counsel.

3.3 Observer Rights.

(a) For so long as the T. Rowe Price Investors own any shares of Preferred Stock or shares of capital stock issued upon conversion of such Preferred Stock, the Company shall give the T. Rowe Price Investors copies of all notices, minutes, consents and other materials that it provides to its directors at the same time and in the same manner as provided to such directors; provided, however, that all information so provided shall be subject to Section 3.5; and provided further, that the Company reserves the right to withhold any information if access to such information could adversely affect the attorney-client privilege between the Company and its counsel or would result in disclosure of trade secrets to the T. Rowe Price Investors.

(b) For so long as a Neuberger Investor satisfies the Neuberger Rights Threshold but ceasing when the Company engages legal counsel to prepare a registration statement on Form S-1 for its IPO, the Company shall give such Neuberger Investor copies of all notices, minutes, consents and other materials that it provides to its directors at the same time and in the same manner as provided to such directors; provided, however, that all information so provided shall be subject to Section 3.5; and provided further, that the Company reserves the right to withhold any information if access to such information could adversely affect the attorney-client privilege between the Company and its counsel or would result in disclosure of trade secrets to such Neuberger Investor.

3.4 Termination of Information Rights. The covenants set forth in Section 3.1, Section 3.2 and Section 3.3 shall terminate and be of no further force or effect (a) immediately before the consummation of the IPO, (b) when the Company first becomes subject to the periodic reporting requirements of Section 12(g) or 15(d) of the Exchange Act or (c) upon a Deemed Liquidation Event, as such term is defined in the Certificate, whichever event occurs first; provided, that with respect to clause (c), the covenants set forth in Section 3.1 shall only terminate if the consideration received by the Investors in such Deemed Liquidation Event is in the form of cash and/or publicly traded securities unless the Investors receive financial information from the acquiring company or other successor to the Company comparable to those set forth in Section 3.1.

3.5 Confidentiality. Each Investor agrees that such Investor will keep confidential and will not disclose, divulge, or use for any purpose (other than to monitor its investment in the Company) any confidential information obtained from the Company pursuant to the terms of this Agreement (including notice of the Company's intention to file a registration statement), unless such confidential information (a) is known or becomes known to the public in general (other than as a result of a breach of this Section 3.5 by such Investor), (b) is or has been independently developed or conceived by the Investor without use of the Company's confidential information, or (c) is or has been made known or disclosed to the Investor by a third party without a breach of any obligation of confidentiality such third party may have to the Company; *provided, however*, that an Investor may disclose confidential information (i) to its attorneys, accountants, consultants, and other professionals to the extent necessary to obtain their services in connection with monitoring its investment in the Company; (ii) to any prospective purchaser of any Registrable Securities from such Investor, if such prospective purchaser agrees to be bound by the provisions of this Section 3.5; (iii) to any Affiliate, partner, partner of a partner, member, director, officer stockholder, or wholly owned subsidiary of such Investor in the ordinary course of business, provided that such Investor informs such Person that such information is confidential and directs such Person to maintain the confidentiality of such information; or (iv) as may otherwise be required by law, court order or an applicable governmental or regulatory body, provided that the Investor promptly notifies the Company of such disclosure and takes reasonable steps to minimize the extent of any such required disclosure. Notwithstanding the foregoing, a T. Rowe Price Investor, a Baillie Gifford Investor or a Neuberger Investor may identify the Company and the value of such T. Rowe Price Investor's, Baillie Gifford Investor's or Neuberger Investor's security holdings in the Company in accordance with applicable investment reporting and disclosure regulations or internal policies and respond to examinations, demands, requests or reporting requirements of a regulatory authority without prior notice to or consent from the Company.

The Company understands and acknowledges that in the regular course of a T. Rowe Price Investor's and a Baillie Gifford Investor's such T. Rowe Price Investor or Baillie Gifford Investor may invest in companies that have issued securities that are publicly traded (each, a "**Public Company**"). Accordingly, the Company covenants and agrees that before providing material non-public information about a Public Company ("**Public Company Information**") to a T. Rowe Price Investor or a Baillie Gifford Investor, the Company will use commercially reasonable efforts to provide prior written notice to the following compliance personnel at such T. Rowe Price Investor or such Baillie Gifford Investor, respectively, describing such information in reasonable detail:

For a T. Rowe Price Investor:

[***]

For a Baillie Gifford Investor:

To the address set forth on Schedule A hereto.

The Company shall not disclose Public Company Information to any T. Rowe Price Investor or Baillie Gifford Investor without written authorization from the applicable compliance personnel listed above, provided, however, that, the Company will be permitted to disclose agreements entered into with Public Companies in the ordinary course of business, such as routine customer, supplier, advertising and publishing agreements without such written authorization.

4. Rights to Future Stock Issuances.

4.1 Right of First Offer. Subject to the terms and conditions of this Section 4.1 and applicable securities laws, if the Company proposes to offer or sell any New Securities, the Company shall first offer such New Securities to each Major Investor. Each Major Investor shall be entitled to apportion among itself and its Affiliates the right of first offer hereby granted to it in such proportions as it deems appropriate; *provided*, that the parties acknowledge and agree that each of Blue Media, LLC, Gray Media, LLC and Keeks, LLC have assigned a portion of their respective rights of first offer hereunder to Novo in accordance with and subject to the terms of Section 4(a) of the Novo Side Letter.

(a) The Company shall give notice (the "**Offer Notice**") to each Major Investor, stating (i) its bona fide intention to offer such New Securities, (ii) the number of such New Securities to be offered, and (iii) the price and terms, if any, upon which it proposes to offer such New Securities.

(b) By notification to the Company within twenty (20) days after the Offer Notice is given, each Major Investor may elect to purchase or otherwise acquire, at the price and on the terms specified in the Offer Notice, up to that portion of such New Securities which equals the proportion that the shares of Common Stock (assuming the conversion, exercise and exchange of all Derivative Securities then held by such Major Investor) then held by such Major Investor bears to the total Common Stock of the Company then outstanding (assuming full conversion, exercise and/or exchange, as applicable, of all Preferred Stock and other Derivative Securities then outstanding) ("**Pro Rata Portion**"). At the expiration of such twenty (20) day

period, the Company shall promptly notify each Major Investor that elects to purchase or acquire all the shares available to it (each, a “**Fully Exercising Investor**”) of any other Major Investor’s failure to do likewise. During the ten (10) day period commencing after the Company has given such notice, each Fully Exercising Investor may, by giving notice to the Company, elect to purchase or acquire, in addition to the number of shares specified above, up to that portion of the New Securities for which Major Investors were entitled to subscribe but that were not subscribed for by the Major Investors which is equal to the proportion that the Common Stock issued and held, or issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of Preferred Stock and any other Derivative Securities then held, by such Fully Exercising Investor bears to the Common Stock issued and held, or issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of the Preferred Stock and any other Derivative Securities then held, by all Fully Exercising Investors who wish to purchase such unsubscribed shares. The closing of any sale pursuant to this Section 4.1(b), shall occur on or before the later of one hundred twenty (120) days after the date that the Offer Notice is given and the date of initial sale of New Securities pursuant to Section 4.1(c).

(c) If all New Securities referred to in the Offer Notice are not elected to be purchased or acquired as provided in Section 4.1(b), the Company may, during the ninety (90) day period following the expiration of the thirty (30) day period provided in Section 4.1(b), offer and sell the remaining unsubscribed portion of such New Securities to any Person or Persons at a price not less than, and upon terms no more favorable to the offeree than, those specified in the Offer Notice. If the Company does not enter into an agreement for the sale of the New Securities within such period, or if such agreement is not consummated within thirty (30) days of the execution thereof, the right provided hereunder shall be deemed to be revived and such New Securities shall not be offered unless first reoffered to the Investors and the Common Holders in accordance with this Section 4.1.

(d) The right of first offer in this Section 4.1 shall not be applicable to (i) Exempted Securities (as defined in the Certificate), (ii) shares of Common Stock issued in the IPO and (iii) the issuance of shares of Series G-3 Preferred Stock to Additional Purchasers pursuant to Section 1.3 of the Series G-3 Purchase Agreement.

4.2 Termination. The covenants set forth in Section 4.1 shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO, (ii) when the Company first becomes subject to the periodic reporting requirements of Section 12(g) or 15(d) of the Exchange Act or (iii) upon a Deemed Liquidation Event, as such term is defined in the Certificate, whichever event occurs first.

5. Additional Covenants.

5.1 Employee Agreements. The Company will cause each Person now or hereafter employed by it or by any subsidiary (or engaged by the Company or any subsidiary as a consultant/independent contractor) to enter into a nondisclosure and proprietary rights assignment agreement, which will provide that such person (i) except as limited by applicable law, is either an at-will employee or a consultant of the Company, as the case may be, (ii) will maintain all proprietary information of the Company in confidence, (iii) will assign to the Company all inventions created by such person as an employee or consultant during the term of such person’s employment with or service to the Company, and (iv) will not disclose any information related to the Company’s workforce and will not solicit any employees from the Company for a period of twelve months should such person’s employment with or service to the Company be terminated for any reason.

5.2 Employee Stock. All grants of options to purchase capital stock, awards of shares of capital stock and grants of other equity incentive awards to the employees and consultants of the Company after the date hereof shall be approved by the Board of Directors. Unless otherwise approved by the Board of Directors, all employees and consultants of the Company who purchase, receive options to purchase, or receive awards of shares of the Company's capital stock after the date hereof shall be required to execute restricted stock or option agreements, as applicable, providing for (i) vesting of shares over a four (4) year period, with the first twenty-five percent (25%) of such shares vesting following twelve (12) months of continued employment or service, and the remaining shares vesting in equal monthly installments over the following thirty- six (36) months, and (ii) a market stand-off provision substantially similar to that in Section 2.11. In addition, unless otherwise approved by the Board of Directors, the Company shall retain a "right of first refusal" on employee transfers until the consummation of the IPO and shall have the right to repurchase unvested shares at cost upon termination of employment of a holder of restricted stock.

5.3 Board Matters. Unless otherwise determined by the vote of a majority of the non-employee directors then in office, the Board of Directors shall meet at least quarterly in accordance with an agreed-upon schedule. The Company shall reimburse all non-employee directors for their actual and reasonable out-of-pocket travel and other expenses incurred in attending meetings of the Board or any committee thereof.

5.4 Successor Indemnification. If the Company or any of its successors or assignees consolidates with or merges into any other Person and is not the continuing or surviving corporation or entity of such consolidation or merger, then to the extent necessary, proper provision shall be made so that the successors and assignees of the Company assume the obligations of the Company with respect to indemnification of members of the Board of Directors as in effect immediately before such transaction, whether such obligations are contained in the Company's Bylaws, its Certificate, or elsewhere, as the case may be.

5.5 Indemnification Matters. The Company hereby acknowledges that one (1) or more of the directors nominated to serve on the Board of Directors by the Investors (each a "**Fund Director**") may have certain rights to indemnification, advancement of expenses and/or insurance provided by one or more of the Investors and certain of their affiliates (collectively, the "**Fund Indemnitors**"). The Company hereby agrees (a) that it is the indemnitor of first resort (*i.e.*, its obligations to any such Fund Director are primary and any obligation of the Fund Indemnitors to advance expenses or to provide indemnification for the same expenses or liabilities incurred by such Fund Director are secondary), (b) that it shall be required to advance the full amount of expenses incurred by such Fund Director and shall be liable for the full amount of all expenses, judgments, penalties, fines and amounts paid in settlement by or on behalf of any such Fund Director to the extent legally permitted and as required by the Company's Certificate of Incorporation or Bylaws of the Company (or any agreement between the Company and such Fund Director), without regard to any rights such Fund Director may have against the Fund Indemnitors,

and, (c) that it irrevocably waives, relinquishes and releases the Fund Indemnitors from any and all claims against the Fund Indemnitors for contribution, subrogation or any other recovery of any kind in respect thereof. The Company further agrees that no advancement or payment by the Fund Indemnitors on behalf of any such Fund Director with respect to any claim for which such Fund Director has sought indemnification from the Company shall affect the foregoing and the Fund Indemnitors shall have a right of contribution and/or be subrogated to the extent of such advancement or payment to all of the rights of recovery of such Fund Director against the Company.

5.6 Right to Conduct Activities. The Company hereby agrees and acknowledges that Lightbank, NEA, Revolution, the T. Rowe Price Investors, the Baillie Gifford Investors, the Neuberger Investors and Google LLC invest in numerous companies, some of which may be deemed competitive with the Company's business (as currently conducted or as currently propose to be conducted). The Company hereby agrees that, to the extent permitted under applicable law, Lightbank, NEA, Revolution, the T. Rowe Price Investors, the Baillie Gifford Investors, the Neuberger Investors and Google LLC shall not be liable to the Company for any claim arising out of, or based upon, (i) the investment or acquisition by Lightbank, NEA, Revolution, the T. Rowe Price Investors, the Baillie Gifford Investors, the Neuberger Investors, Google LLC or any of their respective Affiliates, in any entity competitive with the Company, or (ii) actions taken by any director, officer, stockholder or other representative of Lightbank, NEA, Revolution, the T. Rowe Price Investors, the Baillie Gifford Investors, the Neuberger Investors and Google LLC or any of their respective Affiliates, to assist any such competitive company, whether or not such action was taken as a member of the board of directors of such competitive company or otherwise, and whether or not such action has a detrimental effect on the Company; *provided, however*, that the foregoing shall not relieve (x) any of the Investors from liability associated with the unauthorized disclosure of the Company's confidential information obtained pursuant to this Agreement, or (y) any director or officer of the Company from any liability associated with his or her fiduciary duties to the Company.

5.7 Insurance. The Company shall use its commercially reasonable efforts to maintain Directors and Officers liability insurance from a financially sound and reputable insurer in an amount and on terms and conditions satisfactory to the Board of Directors, until such time as the Board of Directors determines that such insurance should be discontinued. In addition, in the event that the Board of Directors determines that the Company should obtain term "key- person" insurance on Eric Lefkofsky, the Company shall use its commercially reasonable efforts to obtain and maintain such insurance from a financially sound and reputable insurer in an amount and on terms and conditions satisfactory to the Board of Directors, until such time as the Board of Directors, determines that such insurance should be discontinued. The key-person policy shall name the Company as loss payee, and neither policy shall be cancelable by the Company without prior approval by the Board of Directors.

5.8 FIRPTA Compliance. The Company shall provide prompt notice to NEA following any "determination date" (as defined in Treasury Regulation Section 1.897-2(c)(1)) on which the Company becomes a United States real property holding corporation. In addition, upon a written request by NEA made at reasonable intervals, the Company shall provide NEA with a written statement informing NEA whether NEA's interest in the Company constitutes a United States real property interest. The Company's determination shall comply with the requirements of

Treasury Regulation Section 1.897-2(h)(1) or any successor regulation, and the Company shall provide timely notice to the Internal Revenue Service, in accordance with and to the extent required by Treasury Regulation Section 1.897-2(h)(2) or any successor regulation, that such statement has been made. The Company's written statement to NEA shall be delivered to NEA within 10 days of NEA's written request therefor. The Company's obligation to furnish such written statement shall continue notwithstanding the fact that a class of the Company's stock may be regularly traded on an established securities market or the fact that there is no preferred stock then outstanding.

5.9 Matters Requiring Investor Director Approval. So long as the holders of Series C Preferred Stock are entitled to elect a Series C Director, the Company hereby covenants and agrees with each of the Investors that it shall not, without approval of the Board of Directors, enter into or be a party to any transaction with any director, officer, or Affiliate of the Company or any "associate" (as defined in Rule 12b-2 promulgated under the Exchange Act) of any such Person, except for transactions contemplated by this Agreement, the Purchase Agreement, and transactions entered into in the ordinary course of business pursuant to reasonable requirements of the Company's business and upon fair and reasonable terms approved by a majority of the disinterested members of the Board of Directors.

5.10 Termination of Covenants. The covenants set forth in this Section 5, except for Sections 5.4 through 5.8, shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO, (ii) when the Company first becomes subject to the periodic reporting requirements of Section 12(g) or 15(d) of the Exchange Act, or (iii) upon a Deemed Liquidation Event, as such term is defined in the Certificate, whichever event occurs first.

6. Miscellaneous.

6.1 Successors and Assigns. The rights under this Agreement may be assigned (but only with all related obligations) by a Holder to a transferee of Registrable Securities that (a) is an Affiliate, partner or member of a Holder, (b) is a Holder's Immediate Family Member or trust for the benefit of an individual Holder or one or more of such Holder's Immediate Family Members or (c) after such transfer, holds at least 1,000,000 shares of Registrable Securities (subject to appropriate adjustment for stock splits, stock dividends, combinations, and other recapitalizations) or, if less, all of the Registrable Securities held by such Holder; *provided, however*, that (x) the Company is, within a reasonable time after such transfer, furnished with written notice of the name and address of such transferee and the Registrable Securities with respect to which such rights are being transferred and (y) such transferee agrees in a written instrument delivered to the Company to be bound by and subject to the terms and conditions of this Agreement, including the provisions of Section 2.11. For the purposes of determining the number of shares of Registrable Securities held by a transferee, the holdings of a transferee (1) that is an Affiliate or stockholder of a Holder; (2) who is a Holder's Immediate Family Member; or (3) that is a trust for the benefit of an individual Holder or such Holder's Immediate Family Member shall be aggregated together and with those of the transferring Holder; *provided, further*, that all transferees who would not qualify individually for assignment of rights shall have a single attorney-in-fact for the purpose of exercising any rights, receiving notices, or taking any action under this Agreement. The terms and conditions of this Agreement inure to the benefit of and are binding upon the respective successors and permitted assignees of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and permitted assignees any rights, remedies, obligations or liabilities under or by reason of this Agreement, except as expressly provided herein.

6.2 Governing Law. This Agreement and all disputes or controversies arising out of or relating to this Agreement or the transactions contemplated hereby shall be governed by, and construed in accordance with, the internal laws of the State of Delaware, without regard to the laws of any other jurisdiction that might be applied because of the conflicts of laws principles of the State of Delaware.

6.3 Counterparts. This Agreement may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal E-SIGN Act of 2000, e.g., www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

6.4 Interpretation. When a reference is made in this Agreement to a Section, Article or Exhibit such reference shall be to a Section, Article or Exhibit of this Agreement unless otherwise indicated. The table of contents and headings contained in this Agreement or in any Exhibit are for convenience of reference purposes only and shall not affect in any way the meaning or interpretation of this Agreement. All words used in this Agreement will be construed to be of such gender or number as the circumstances require. Any capitalized terms used in any Exhibit but not otherwise defined therein shall have the meaning as defined in this Agreement. All Exhibits annexed hereto or referred to herein are hereby incorporated in and made a part of this Agreement as if set forth herein. The word “including” and words of similar import when used in this Agreement will mean “including, without limitation,” unless otherwise specified.

6.5 Notices; Consent to Electronic Notice.

(a) All notices and other communications hereunder shall be in writing and shall be deemed effectively given upon the earlier of actual receipt or: (a) personal delivery to the party to be notified; (b) when sent, if sent by electronic mail or facsimile during the recipient’s normal business hours, and if not sent during normal business hours, then on the recipient’s next business day; provided, however, that no notice by the Company sent by facsimile only shall be deemed effective or delivered to the Baillie Gifford Investors or Google LLC, regardless of confirmation or receipt; (c) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid; or (d) one (1) business day after the business day of deposit with a nationally recognized overnight courier, freight prepaid, specifying next-day delivery, with written verification of receipt. All communications shall be sent to the respective parties at their addresses as set forth on Schedule A hereto, or to the principal office of the Company and to the attention of the Chief Executive Officer, in the case of the Company, or to such email address, facsimile number, or address as subsequently modified by written notice given in accordance with this Section 6.5. If notice is given to the Company, a copy (which shall not constitute notice) shall also be sent to Cooley, LLP, 110 North Wacker Drive, 42nd Floor, Chicago, IL 60606, Attn: Richard E. Ginsberg (rginsberg@cooley.com).

(b) Each Investor consents to the delivery of any stockholder notice pursuant to the Delaware General Corporation Law (the “*DGCL*”), as amended or superseded from time to time, by electronic transmission pursuant to Section 232 of the *DGCL* (or any successor thereto) at the electronic mail address or the facsimile number as on the books of the Company; provided, however, that no notice by the Company sent by facsimile only shall be deemed effective or delivered to the Baillie Gifford Investors or Google LLC, regardless of confirmation or receipt. Each Investor agrees to promptly notify the Company of any change in such stockholder’s electronic mail address, and that failure to do so shall not affect the foregoing.

6.6 Amendments and Waivers.

(a) Any term of this Agreement may be amended, modified or terminated and the observance of any term of this Agreement may be waived (either generally or in a particular instance, and either retroactively or prospectively) only with the written consent of (i) the Company, (ii) the Common Holders and the Investors then holding a majority of the Voting Common Stock and Preferred Stock (voting together as a single class as measured on the basis of voting power set forth in the Restated Certificate), (iii) the Investors then holding a majority of the shares of Series A Preferred Stock, Series B Preferred Stock, Series B-1 Preferred Stock, and Series B-2 Preferred Stock, voting together as a single class as measured on the basis of voting power set forth in this Restated Certificate, if such amendment, modification, termination or waiver would adversely affect the powers, preferences or rights of such series of Preferred Stock set forth herein (*provided*, that for the avoidance of doubt, the creation, authorization or issuance of any shares of preferred stock with rights senior to or *pari passu* with the powers, preferences or rights of such series of Preferred Stock held by such Investor, or the granting to purchasers of such shares rights senior to or *pari passu* with the powers, preferences or rights of such series of Preferred Stock held by such holders, shall not be deemed to adversely affect the rights or obligations of such holders), (iv) the Investors then holding at least sixty percent (60%) of the shares of Common Stock issued or issuable upon conversion of the Series C Preferred Stock, voting as a separate class, if such amendment, modification, termination or waiver would adversely affect the rights or obligations of the Investors holding Common Stock issued or issuable upon conversion of the Series C Preferred Stock set forth herein (*provided*, that for the avoidance of doubt, the creation, authorization or issuance of any shares of preferred stock with rights senior to or *pari passu* with the powers, preferences or rights of the Series C Preferred Stock held by such Investors, or the granting to purchasers of such shares rights senior to or *pari passu* with the powers, preferences or rights of the Series C Preferred Stock held by such Investors, shall not be deemed to adversely affect the rights or obligations of such Investors), (v) the Investors then holding at least sixty percent (60%) of the shares of Common Stock issued or issuable upon conversion of the Series D Preferred Stock, voting as a separate class, if such amendment, modification, termination or waiver would adversely affect the rights or obligations of the Investors holding Common Stock issued or issuable upon conversion of the Series D Preferred Stock set forth herein (*provided*, that for the avoidance of doubt, the creation, authorization or issuance of any shares of preferred stock with rights senior to or *pari passu* with the powers, preferences or rights of the Series D Preferred Stock held by such Investors, or the granting to purchasers of such shares rights senior to or *pari passu* with the powers, preferences or rights of the Series D Preferred Stock held by such Investors, shall not be deemed to adversely affect the rights or obligations of such Investors), (vi) the Investors then holding a majority of the shares of Common Stock issued or issuable upon conversion of the Series E Preferred Stock, voting as a separate class, if such amendment, modification, termination

or waiver would adversely affect the rights or obligations of the Investors holding Common Stock issued or issuable upon conversion of the Series E Preferred Stock set forth herein (*provided*, that for the avoidance of doubt, the creation, authorization or issuance of any shares of preferred stock with rights senior to or *pari passu* with the powers, preferences or rights of the Series E Preferred Stock held by such Investors, or the granting to purchasers of such shares rights senior to or *pari passu* with the powers, preferences or rights of the Series E Preferred Stock held by such Investors, shall not be deemed to adversely affect the rights or obligations of such Investors), (vii) the Investors then holding a majority of the shares of Common Stock issued or issuable upon conversion of the Series F Preferred Stock, voting as a separate class, if such amendment, modification, termination or waiver would adversely affect the rights or obligations of the Investors holding Common Stock issued or issuable upon conversion of the Series F Preferred Stock set forth herein (*provided*, that for the avoidance of doubt, the creation, authorization or issuance of any shares of preferred stock with rights senior to or *pari passu* with the powers, preferences or rights of the Series F Preferred Stock held by such Investors, or the granting to purchasers of such shares rights senior to or *pari passu* with the powers, preferences or rights of the Series F Preferred Stock held by such Investors, shall not be deemed to adversely affect the rights or obligations of such Investors), (viii) the Investors then holding a majority of the shares of Common Stock issued or issuable upon conversion of the Series G Preferred Stock, voting as a separate class, if such amendment, modification, termination or waiver would adversely affect the rights or obligations of the Investors holding Common Stock issued or issuable upon conversion of the Series G Preferred Stock set forth herein (*provided*, that for the avoidance of doubt, the creation, authorization or issuance of any shares of preferred stock with rights senior to or *pari passu* with the powers, preferences or rights of the Series G Preferred Stock held by such Investors, or the granting to purchasers of such shares rights senior to or *pari passu* with the powers, preferences or rights of the Series G Preferred Stock held by such Investors, shall not be deemed to adversely affect the rights or obligations of such Investors), (ix) the Investors then holding a majority of the shares of Common Stock issued or issuable upon conversion of the Series G-2 Preferred Stock, voting as a separate class, if such amendment, modification, termination or waiver would adversely affect the rights or obligations of the Investors holding Common Stock issued or issuable upon conversion of the Series G-2 Preferred Stock set forth herein (*provided*, that for the avoidance of doubt, the creation, authorization or issuance of any shares of preferred stock with rights senior to or *pari passu* with the powers, preferences or rights of the Series G-2 Preferred Stock held by such Investors, or the granting to purchasers of such shares rights senior to or *pari passu* with the powers, preferences or rights of the Series G-2 Preferred Stock held by such Investors, shall not be deemed to adversely affect the rights or obligations of such Investors) and (x) the Investors then holding a majority of the shares of Common Stock issued or issuable upon conversion of the Series G-3 Preferred Stock, voting as a separate class, if such amendment, modification, termination or waiver would adversely affect the rights or obligations of the Investors holding Common Stock issued or issuable upon conversion of the Series G-3 Preferred Stock set forth herein (*provided*, that for the avoidance of doubt, the creation, authorization or issuance of any shares of preferred stock with rights senior to or *pari passu* with the powers, preferences or rights of the Series G-3 Preferred Stock held by such Investors, or the granting to purchasers of such shares rights senior to or *pari passu* with the powers, preferences or rights of the Series G-3 Preferred Stock held by such Investors, shall not be deemed to adversely affect the rights or obligations of such Investors); *provided*, that (i) Sections 2.11, 3.1, 3.3 and 3.4 shall not be modified, supplemented, amended or waived, in whole or in part, (A) in a manner that adversely

affects the T. Rowe Price Investors, without the prior written consent of the T. Rowe Price Investors holding a majority of the Registrable Securities held by all T. Rowe Price Investors or (B) in a manner that adversely affects the Baillie Gifford Investors, without the prior written consent of the Baillie Gifford Investors holding a majority of the Registrable Securities held by all Baillie Gifford Investors, (ii) Sections 3.1, 3.3 and 3.4 shall not be modified, supplemented, amended or waived, in whole or in part, in a manner that adversely affects the Neuberger Investors, without the prior written consent of the Neuberger Investors holding a majority of the Registrable Securities held by all Neuberger Investors, and (iii) the Company may in its sole discretion waive compliance with Section 2.12(c) (and the Company's failure to object promptly in writing after notification of a proposed assignment allegedly in violation of Section 2.12(c) shall be deemed to be a waiver); *provided, further*, that any provision hereof may be waived by any waiving party on such party's own behalf, without the consent of any other party. Notwithstanding the foregoing, the provisions of Section 4.1 may not be amended, modified, terminated or waived without the written consent of the holders of a majority of the Preferred Stock then outstanding and held by the Major Investors (it being agreed that a waiver of the provisions of Section 4.1 with respect to a particular transaction shall be deemed to apply to all Major Investors in the same fashion if such waiver does so by its terms, notwithstanding the fact that certain Major Investors may nonetheless, by agreement with the Company, purchase securities in such transaction); *provided*, that the proviso in the second sentence of Section 4.1 shall not be modified, supplemented, amended or waived, in whole or in part, without the prior written consent of Novo. Notwithstanding anything to the contrary herein, no amendment or waiver that adversely affects any Investor in a manner disproportionate to any adverse effect such amendment or waiver would have on the rights or obligations of the other Investors holding the same series of Preferred Stock shall be effective against such Investor without such Investor's prior written consent.

(b) The Company shall give prompt notice of any amendment or termination hereof or waiver hereunder to any party hereto that did not consent in writing to such amendment, termination, or waiver. Any amendment, termination, or waiver effected in accordance with this Section 6.6 shall be binding on all parties hereto, regardless of whether any such party has executed such consent or instrument or otherwise consented thereto. No waivers of or exceptions to any term, condition, or provision of this Agreement, in any one or more instances, shall be deemed to be or construed as a further or continuing waiver of any such term, condition, or provision.

6.7 Severability. In case any one or more of the provisions contained in this Agreement is for any reason held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision of this Agreement, and such invalid, illegal, or unenforceable provision shall be reformed and construed so that it will be valid, legal, and enforceable to the maximum extent permitted by law.

6.8 Aggregation of Stock. All shares of Registrable Securities held or acquired by Affiliates shall be aggregated together for the purpose of determining the availability of any rights under this Agreement and such Affiliates may apportion such rights as among themselves in any manner they deem appropriate.

6.9 Entire Agreement. This Agreement (including any Schedules and Exhibits hereto) constitutes the full and entire understanding and agreement among the parties with respect to the subject matter hereof. This Agreement supersedes all prior written agreements, arrangements, communications and understandings, and all prior and contemporaneous oral agreements, arrangements, communications and understandings between the parties with respect to the subject matter hereof, including without limitation, the Prior Agreement.

6.10 Dispute Resolution. The parties (a) hereby irrevocably and unconditionally submit to the jurisdiction of the state courts of Delaware and to the jurisdiction of any United States District Court in the state of Delaware for the purpose of any suit, action or other proceeding arising out of or based upon this Agreement, (b) agree not to commence any suit, action or other proceeding arising out of or based upon this Agreement except in the state courts of Delaware or any United States District Court in the state of Delaware, and (c) hereby waive, and agree not to assert, by way of motion, as a defense, or otherwise, in any such suit, action or proceeding, any claim that it is not subject personally to the jurisdiction of the above-named courts, that its property is exempt or immune from attachment or execution, that the suit, action or proceeding is brought in an inconvenient forum, that the venue of the suit, action or proceeding is improper or that this Agreement or the subject matter hereof may not be enforced in or by such court. The prevailing party shall be entitled to reasonable attorneys' fees, costs, and necessary disbursements in addition to any other relief to which such party may be entitled.

6.11 WAIVER OF JURY TRIAL: EACH PARTY HEREBY WAIVES ITS RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT, THE OTHER TRANSACTION DOCUMENTS, THE SECURITIES OR THE SUBJECT MATTER HEREOF OR THEREOF. THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL-ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE FILED IN ANY COURT AND THAT RELATE TO THE SUBJECT MATTER OF THIS TRANSACTION, INCLUDING, WITHOUT LIMITATION, CONTRACT CLAIMS, TORT CLAIMS (INCLUDING NEGLIGENCE), BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW AND STATUTORY CLAIMS. THIS SECTION HAS BEEN FULLY DISCUSSED BY EACH OF THE PARTIES HERETO AND THESE PROVISIONS WILL NOT BE SUBJECT TO ANY EXCEPTIONS. EACH PARTY HERETO HEREBY FURTHER WARRANTS AND REPRESENTS THAT SUCH PARTY HAS REVIEWED THIS WAIVER WITH ITS LEGAL COUNSEL, AND THAT SUCH PARTY KNOWINGLY AND VOLUNTARILY WAIVES ITS JURY TRIAL RIGHTS FOLLOWING CONSULTATION WITH LEGAL COUNSEL

6.12 Delays or Omissions. No delay or omission to exercise any right, power, or remedy accruing to any party under this Agreement, upon any breach or default of any other party under this Agreement, shall impair any such right, power, or remedy of such nonbreaching or nondefaulting party, nor shall it be construed to be a waiver of or acquiescence to any such breach or default, or to any similar breach or default thereafter occurring, nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. All remedies, whether under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

6.13 Acknowledgment. The Company acknowledges that the Investors are in the business of venture capital investing and therefore review the business plans and related proprietary information of many enterprises, including enterprises which may have products or services which compete directly or indirectly with those of the Company. Nothing in this Agreement shall preclude or in any way restrict the Investors from investing or participating in any particular enterprise whether or not such enterprise has products or services which compete with those of the Company.

6.14 Amendment and Restatement of Prior Agreement. The Prior Agreement is hereby amended in its entirety and restated herein. Such amendment and restatement is effective upon the execution of this Agreement by the Company and the holders of a majority of the Registrable Securities (as defined in the Prior Agreement), regardless of whether any other party has executed this Agreement. Upon such execution, all provisions of, rights granted and covenants made in the Prior Agreement are hereby waived, released and superseded in their entirety and shall have no further force or effect, including, without limitation, all rights of first refusal and any notice period associated therewith otherwise applicable to the transactions contemplated by the Series G-3 Purchase Agreement.

[Remainder of this page intentionally left blank.]

IN WITNESS WHEREOF, the parties hereto have executed this Tenth Amended and Restated Investors' Rights Agreement as of the date first written above.

COMPANY:

TEMPUS LABS, INC.

By: /s/ Ryan Fukushima

Name: Ryan Fukushima

Title: Chief Operating Officer

SIGNATURE PAGE TO TENTH AMENDED & RESTATED INVESTORS' RIGHTS AGREEMENT (TEMPUS LABS, INC.)

IN WITNESS WHEREOF, the parties hereto have executed this Tenth Amended and Restated Investors' Rights Agreement as of the date first written above.

INVESTORS:

SCOTTISH MORTGAGE INVESTMENT TRUST PLC

Executed for and on behalf of Scottish Mortgage Investment Trust plc, acting through its agent, Baillie Gifford & Co

By: /s/ Tom Slater

Name: Tom Slater

Title: Partner of Baillie Gifford & Co.

THE SCHIEHALLION FUND LIMITED

Executed for and on behalf of The Schiehallion Fund Limited, acting through its agent, Baillie Gifford Overseas Limited

By: /s/ Tom Slater

Name: Tom Slater

Title: Authorised Signatory of Baillie Gifford Overseas Limited

SIGNATURE PAGE TO TENTH AMENDED & RESTATED INVESTORS' RIGHTS AGREEMENT (TEMPUS LABS, INC.)

IN WITNESS WHEREOF, the parties hereto have executed this Tenth Amended and Restated Investors' Rights Agreement as of the date first written above.

INVESTORS:

**NEUBERGER BERMAN PRINCIPAL STRATEGIES
PRIMA FUND LP**

By: Neuberger Berman Investment Advisers LLC, its
investment manager

By: /s/ Gabe Cahill

Name: Gabe Cahill

Title: Managing Director

**NEUBERGER BERMAN PRINCIPAL STRATEGIES
PRIMA CO-INVEST FUND IV LP**

By: Neuberger Berman Investment Advisers LLC, its
investment manager

By: /s/ Gabe Cahill

Name: Gabe Cahill

Title: Managing Director

SIGNATURE PAGE TO TENTH AMENDED & RESTATED INVESTORS' RIGHTS AGREEMENT (TEMPUS LABS, INC.)

IN WITNESS WHEREOF, the parties hereto have executed this Tenth Amended and Restated Investors' Rights Agreement as of the date first written above.

INVESTORS:

BLUE MEDIA, LLC

By: /s/ Eric Lefkofsky

Name: Eric Lefkofsky Title: Manager

Title: Manager

SIGNATURE PAGE TO TENTH AMENDED & RESTATED INVESTORS' RIGHTS AGREEMENT (TEMPUS LABS, INC.)

IN WITNESS WHEREOF, the parties hereto have executed this Tenth Amended and Restated Investors' Rights Agreement as of the date first written above.

INVESTORS:

**INNOVATION GROUP INVESTORS, L.P.
– 2011 SERIES**

By: Innovation Group, LLC, its General Partner

By: /s/ Eric Lefkofsky
Name: Eric Lefkofsky Title: Manager
Title: Manager

LIGHTBANK INVESTMENTS 1B, LLC

By: Lightbank, LLC, its Manager

By: /s/ Eric Lefkofsky
Name: Eric Lefkofsky Title: Manager
Title: Manager

**INNOVATION GROUP INVESTORS, L.P.
– SERIES 1B**

By: Innovation Group, LLC, its General Partner

By: /s/ Eric Lefkofsky
Name: Eric Lefkofsky Title: Manager
Title: Manager

SIGNATURE PAGE TO TENTH AMENDED & RESTATED INVESTORS' RIGHTS AGREEMENT (TEMPUS LABS, INC.)

IN WITNESS WHEREOF, the parties hereto have executed this Tenth Amended and Restated Investors' Rights Agreement as of the date first written above.

INVESTORS:

TEMPUS SERIES A INVESTMENTS, LLC

By: Lightbank, LLC, its Manager

By: /s/ Eric Lefkofsky

Name: Eric Lefkofsky

Title: Manager

TEMPUS SERIES B INVESTMENTS, LLC

By: Lightbank, LLC, its Manager

By: /s/ Eric Lefkofsky

Name: Eric Lefkofsky

Title: Manager

TEMPUS SERIES B-1 INVESTMENTS, LLC

By: Lightbank, LLC, its Manager

By: /s/ Eric Lefkofsky

Name: Eric Lefkofsky

Title: Manager

SIGNATURE PAGE TO TENTH AMENDED & RESTATED INVESTORS' RIGHTS AGREEMENT (TEMPUS LABS, INC.)

TEMPUS SERIES B-2 INVESTMENTS, LLC

By: Blue Media, LLC, its Manager

By: /s/ Eric Lefkofsky

Name: Eric Lefkofsky

Title: Manager

TEMPUS SERIES C INVESTMENTS, LLC

By: Blue Media, LLC, its Manager

By: /s/ Eric Lefkofsky

Name: Eric Lefkofsky

Title: Manager

TEMPUS SERIES D INVESTMENTS, LLC

By: Blue Media, LLC, its Manager

By: /s/ Eric Lefkofsky

Name: Eric Lefkofsky

Title: Manager

TEMPUS SERIES E INVESTMENTS, LLC

By: Blue Media, LLC, its Manager

By: /s/ Eric Lefkofsky

Name: Eric Lefkofsky

Title: Manager

SIGNATURE PAGE TO TENTH AMENDED & RESTATED INVESTORS' RIGHTS AGREEMENT (TEMPUS LABS, INC.)

TEMPUS SERIES G INVESTMENTS, LLC

By: Blue Media, LLC, its Manager

By: /s/ Eric Lefkofsky

Name: Eric Lefkofsky

Title: Manager

SIGNATURE PAGE TO TENTH AMENDED & RESTATED INVESTORS' RIGHTS AGREEMENT (TEMPUS LABS, INC.)

IN WITNESS WHEREOF, the parties hereto have executed this Tenth Amended and Restated Investors' Rights Agreement as of the date first written above.

COMMON HOLDERS:

GRAY MEDIA, LLC

By: /s/ Eric Lefkofsky _____

Name: Eric Lefkofsky

Title: Manager

BLUE MEDIA, LLC

By: /s/ Eric Lefkofsky _____

Name: Eric Lefkofsky

Title: Manager

SIGNATURE PAGE TO TENTH AMENDED & RESTATED INVESTORS' RIGHTS AGREEMENT (TEMPUS LABS, INC.)

SCHEDULE A

Investors

Blue Media, LLC

600 West Chicago Avenue
Suite 510
Chicago, IL 60654
Attn: Eric Lefkofsky

Innovation Group Investors, L.P. – Series 2011

c/o Lightbank
600 West Chicago Avenue
Suite 510
Chicago, IL 60654
Attn: Mike Mauceri

Lightbank Investments 1B, LLC

c/o Lightbank
600 West Chicago Avenue
Suite 510
Chicago, IL 60654
Attn: Mike Mauceri

Innovation Group Investors, L.P. – Series 1B

c/o Lightbank
600 West Chicago Avenue
Suite 510
Chicago, IL 60654
Attn: Mike Mauceri

Highland Alternative III, LLC

GCM Progress, LLC

c/o Grosvenor Holdings, LLC
900 North Michigan Avenue
Suite 1100
Chicago, IL 60611
Attention: Michael Sacks/Adam Pollock

James and Wendy Abrams

Tempus Series A Investments, LLC

c/o Lightbank
600 West Chicago Avenue
Suite 510
Chicago, IL 60654
Attn: Mike Mauceri

Tempus Series B Investments, LLC

c/o Lightbank
600 West Chicago Avenue
Suite 510
Chicago, IL 60654
Attn: Mike Mauceri

Tempus Series B-1 Investments, LLC

c/o Lightbank
600 West Chicago Avenue
Suite 510
Chicago, IL 60654
Attn: Mike Mauceri

Tempus Series B-2 Investments, LLC

c/o Lightbank
600 West Chicago Avenue
Suite 510
Chicago, IL 60654
Attn: Mike Mauceri

Tempus Series C Investments, LLC

c/o Lightbank
600 West Chicago Avenue
Suite 510
Chicago, IL 60654
Attn: Mike Mauceri

Tempus Series D Investments, LLC

c/o Lightbank
600 West Chicago Avenue
Suite 510
Chicago, IL 60654
Attn: Mike Mauceri

Tempus Series E Investments, LLC

c/o Lightbank
600 West Chicago Avenue
Suite 510
Chicago, IL 60654
Attn: Mike Mauceri

Tempus Series G Investments, LLC

c/o Lightbank
600 West Chicago Avenue
Suite 510
Chicago, IL 60654
Attn: Mike Mauceri

New Enterprise Associates 16, L.P.

1954 Greenspring Drive
Suite 600
Timonium, Maryland 21093
Attention: General Counsel

NEA Ventures 2017, L.P.

1954 Greenspring Drive
Suite 600
Timonium, Maryland 21093
Attention: General Counsel

T. Rowe Price New Horizons Fund, Inc.

T. Rowe Price New Horizons Trust

T. Rowe Price U.S. Equities Trust

MassMutual Select Funds - MassMutual Select T. Rowe Price Small and Mid Cap Blend Fund

T. Rowe Price Health Sciences Fund, Inc.

TD Mutual Funds - TD Health Sciences Fund

VALIC Company I - Science & Technology Fund

T. Rowe Price Health Sciences Portfolio

c/o T. Rowe Price Associates, Inc.

100 East Pratt Street
Baltimore, MD 21202

Attn: Andrew Baek, Vice President

Revolution Growth III, LP

1717 Rhode Island Ave. NW
Suite 1000
Washington, D.C. 20036
Attention: General Counsel

Praxitela Ventures LLC

751 Laurel Street, No. 717
San Carlos, California 94070
Attention: Barbara S. Hager

SFT Private Equity LLC (2016) SCT 2018 LLC

John G. Searle Charitable Trusts Partnership

Frances C. Searle Charitable Trusts Partnership

KTC Alternatives Fund IV LLC

KTC Alternatives Fund V LLC

c/o Kinship Trust Company, LLC

225 West Washington, 28th Floor

Chicago, Illinois 60606

Attn: Chris Lucchetti

Scottish Mortgage Investment Trust plc

The Schiehallion Fund Limited

c/o Baillie Gifford & Co.

Calton Square, 1 Greenside Row

Edinburgh EH1 3AN

Scotland, the United Kingdom

Teacher Retirement System of Texas, a public pension fund and entity of the State of Texas

1000 Red River Street

Austin, Texas 78701-2698

Novo Holdings A/S

Tuborg Havnevej 19

DK-2900 Hellerup

Denmark

Attention: Robert Ghenchev

Franklin Strategic Series – Franklin Growth Opportunities Fund

Franklin Templeton Investment Funds – Franklin U.S. Opportunities Fund

Franklin Templeton Investment Funds – Franklin Technology Fund

One Franklin Parkway, Building 920

San Mateo, California 94403

RFG-Sunflower LLC

c/o RFG Financial Group, Inc.

1250 Fourth Street, 5th Floor

Santa Monica, CA 90401

RFG-Hazel LLC

c/o RFG Financial Group, Inc.

1250 Fourth Street, 5th Floor

Santa Monica, CA 90401

Google LLC

1600 Amphitheatre Parkway

Mountain View, California 94043

Attention: _____

Neuberger Berman Principal Strategies PRIMA Fund LP
Neuberger Berman Principal Strategies PRIMA Co-Invest Fund IV LP
PRIMA MLP Fund LP
190 S. LaSalle Street
24th Floor
Chicago, Illinois 60603

Schedule A-5

SCHEDULE B

Common Holders

Gray Media, LLC

600 West Chicago Avenue
Suite 510
Chicago, IL 60654
Attn: Eric Lefkofsky

Blue Media, LLC

600 West Chicago Avenue
Suite 510
Chicago, IL 60654
Attn: Eric Lefkofsky

Keeks, LLC

600 West Chicago Avenue
Suite 510
Chicago, IL 60654
Attn: Brad Keywell

RFG-Sunflower LLC

c/o RFG Financial Group, Inc.
1250 Fourth Street, 5th Floor
Santa Monica, CA 90401

RFG-Hazel LLC

c/o RFG Financial Group, Inc.
1250 Fourth Street, 5th Floor
Santa Monica, CA 90401

Exhibit A

Novo Side Letter

**THIRD AMENDED AND RESTATED TEMPUS LABS, INC.
2015 STOCK PLAN**

1. ESTABLISHMENT, PURPOSE AND TERM OF PLAN.

1.1 **Establishment.** The Tempus Labs, Inc. 2015 Stock Plan (the "**Plan**") was established effective as of September 21, 2015 (the "**Effective Date**"). The Plan was amended and restated as of September 8, 2017, and further amended and restated as of March 16, 2018 and as of October 16, 2019.

1.2 **Purpose.** The purpose of the Plan is to advance the interests of the Participating Company Group and its stockholders by providing an incentive to attract, retain and reward persons performing services for the Participating Company Group and by motivating such persons to contribute to the growth and profitability of the Participating Company Group. The Plan seeks to achieve this purpose by providing for Awards in the form of Options, Restricted Stock Awards and Restricted Stock Unit Awards.

1.3 **Term of Plan.** The Plan shall continue in effect until its termination by the Board; provided, however, that all Awards shall be granted, if at all, within ten (10) years from the earlier of the date the Plan is adopted by the Board or the date the Plan is duly approved by the stockholders of the Company.

2. DEFINITIONS AND CONSTRUCTION.

2.1 **Definitions.** Whenever used herein, the following terms shall have their respective meanings set forth below:

(a) "**Award**" means an Option, Restricted Stock Purchase Right, Restricted Stock Bonus or Restricted Stock Unit Award granted under the Plan.

(b) "**Award Agreement**" means a written or electronic agreement between the Company and a Participant setting forth the terms, conditions and restrictions applicable to an Award.

(c) "**Board**" means the Board of Directors of the Company. If one or more Committees have been appointed by the Board to administer the Plan, "**Board**" also means such Committee(s).

(d) "**Cause**" means, unless such term or an equivalent term is otherwise defined by the applicable Award Agreement or other written agreement between a Participant and a Participating Company applicable to an Award, any of the following: (i) the Participant's theft, dishonesty, willful misconduct, breach of fiduciary duty for personal profit, or falsification of any Participating Company documents or records; (ii) the Participant's material failure to abide by a Participating Company's code of conduct or other policies (including, without limitation, policies relating to confidentiality and reasonable workplace conduct); (iii) the Participant's unauthorized use, misappropriation, destruction or diversion of any tangible or intangible asset or corporate opportunity of a Participating Company (including, without

limitation, the Participant's improper use or disclosure of a Participating Company's confidential or proprietary information); (iv) any intentional act by the Participant which has a material detrimental effect on a Participating Company's reputation or business; (v) the Participant's repeated failure or inability to perform any reasonable assigned duties after written notice from a Participating Company of, and a reasonable opportunity to cure, such failure or inability; (vi) any material breach by the Participant of any employment or service agreement between the Participant and a Participating Company, which breach is not cured pursuant to the terms of such agreement; or (vii) the Participant's conviction (including any plea of guilty or nolo contendere) of any criminal act involving fraud, dishonesty, misappropriation or moral turpitude, or which impairs the Participant's ability to perform his or her duties with a Participating Company.

(e) "**Change in Control**" means, unless such term or an equivalent term is otherwise defined by the applicable Award Agreement or other written agreement between the Participant and a Participating Company applicable to an Award, the occurrence of any one or a combination of the following:

(i) an Ownership Change Event or a series of related Ownership Change Events (collectively, a "**Transaction**") in which the stockholders of the Company immediately before the Transaction do not retain immediately after the Transaction direct or indirect beneficial ownership of more than fifty percent (50%) of the total combined voting power of the outstanding securities entitled to vote generally in the election of Directors or, in the case of an Ownership Change Event described in Section 2.1(v)(iii), the entity to which the assets of the Company were transferred (the "**Transferee**"), as the case may be; or

(ii) a date specified by the Board following approval by the stockholders of a plan of complete liquidation or dissolution of the Company;

provided, however, that a Change in Control shall be deemed not to include a transaction described in subsection (i) of this Section 2.1(e) in which a majority of the members of the board of directors of the continuing, surviving or successor entity, or parent thereof, immediately after such transaction is comprised of Incumbent Directors.

For purposes of the preceding sentence, indirect beneficial ownership shall include, without limitation, an interest resulting from ownership of the voting securities of one or more corporations or other business entities which own the Company or the Transferee, as the case may be, either directly or through one or more subsidiary corporations or other business entities. The Board shall determine whether multiple events described in subsections (i) and (ii) of this Section 2.1(e) are related and to be treated in the aggregate as a single Change in Control, and its determination shall be final, binding and conclusive.

(f) "**Code**" means the Internal Revenue Code of 1986, as amended, and any applicable regulations and administrative guidelines promulgated thereunder.

(g) "**Committee**" means the compensation committee or other committee or subcommittee of the Board duly appointed to administer the Plan and having such powers as specified by the Board. Unless the powers of the Committee have been specifically limited, the Committee shall have all of the powers of the Board granted herein, including, without limitation, the power to amend or terminate the Plan at any time, subject to the terms of the Plan and any applicable limitations imposed by law.

(h) “**Company**” means Tempus Labs, Inc., a Delaware corporation, and any successor thereto.

(i) “**Consultant**” means a person engaged to provide consulting or advisory services (other than as an Employee or a Director) to a Participating Company, provided that the identity of such person, the nature of such services or the entity to which such services are provided would not preclude the Company from offering or selling securities to such person pursuant to the Plan in reliance on either the exemption from registration provided by Rule 701 under the Securities Act or, if the Company is required to file reports pursuant to Section 13 or 15(d) of the Exchange Act, registration on a Form S-8 Registration Statement under the Securities Act.

(j) “**Director**” means a member of the Board.

(k) “**Disability**” means the inability of the Participant, in the opinion of a qualified physician acceptable to the Company, to perform the major duties of the Participant’s position with the Participating Company Group because of the sickness or injury of the Participant.

(l) “**Dividend Equivalent Right**” means the right of a Participant, granted at the discretion of the Board or as otherwise provided by the Plan, to receive a credit for the account of such Participant in an amount equal to the cash dividends paid on one share of Stock for each share of Stock represented by an Award held by such Participant.

(m) “**Employee**” means any person treated as an employee (including an Officer or a Director who is also treated as an employee) in the records of a Participating Company and, with respect to any Incentive Stock Option granted to such person, who is an employee for purposes of Section 422 of the Code; provided, however, that neither service as a Director nor payment of a director’s fee shall be sufficient to constitute employment for purposes of the Plan. The Company shall determine in good faith and in the exercise of its discretion whether an individual has become or has ceased to be an Employee and the effective date of such individual’s employment or termination of employment, as the case may be. For purposes of an individual’s rights, if any, under the terms of the Plan as of the time of the Company’s determination of whether or not the individual is an Employee, all such determinations by the Company shall be final, binding and conclusive as to such rights, if any, notwithstanding that the Company or any court of law or governmental agency subsequently makes a contrary determination as to such individual’s status as an Employee.

(n) “**Exchange Act**” means the Securities Exchange Act of 1934, as amended.

(o) “**Fair Market Value**” means, as of any date, the value of a share of Stock or other property as determined by the Board, in its discretion, or by the Company, in its discretion, if such determination is expressly allocated to the Company herein, subject to the following:

(i) If, on such date, the Stock is listed or quoted on a national or regional securities exchange or quotation system, the Fair Market Value of a share of Stock shall be the closing price of a share of Stock as quoted on the national or regional securities exchange or quotation system constituting the primary market for the Stock, as reported in *The Wall Street Journal* or such other source as the Company deems reliable. If the relevant date does not fall on a day on which the Stock has traded on such securities exchange or quotation system, the date on which the Fair Market Value shall be established shall be the last day on which the Stock was so traded or quoted prior to the relevant date, or such other appropriate day as shall be determined by the Board, in its discretion.

(ii) If, on such date, the Stock is not listed or quoted on a national or regional securities exchange or quotation system, the Fair Market Value of a share of Stock shall be as determined by the Board in good faith without regard to any restriction other than a restriction which, by its terms, will never lapse, and in a manner consistent with the requirements of Section 409A.

(p) "**Incentive Stock Option**" means an Option intended to be (as set forth in the Award Agreement) and which qualifies as an incentive stock option within the meaning of Section 422(b) of the Code.

(q) "**Incumbent Director**" means a director who either (i) is a member of the Board as of the Effective Date or (ii) is elected, or nominated for election, to the Board with the affirmative votes of at least a majority of the Incumbent Directors at the time of such election or nomination (but excluding a director who was elected or nominated in connection with an actual or threatened proxy contest relating to the election of directors of the Company).

(r) "**Insider**" means an Officer, a Director or other person whose transactions in Stock are subject to Section 16 of the Exchange Act.

(s) "**Nonstatutory Stock Option**" means an Option not intended to be (as set forth in the Award Agreement) or which does not qualify as an incentive stock option within the meaning of Section 422(b) of the Code.

(t) "**Officer**" means any person designated by the Board as an officer of the Company.

(u) "**Option**" means an Incentive Stock Option or a Nonstatutory Stock Option granted pursuant to the Plan.

(v) "**Ownership Change Event**" means the occurrence of any of the following with respect to the Company: (i) the direct or indirect sale or exchange in a single or series of related transactions by the stockholders of the Company of securities of the Company representing more than fifty percent (50%) of the total combined voting power of the Company's then outstanding securities entitled to vote generally in the election of Directors; (ii) a merger or consolidation in which the Company is a party; or (iii) the sale, exchange, or transfer of all or substantially all of the assets of the Company (other than a sale, exchange or transfer to one or more subsidiaries of the Company).

Code.

(w) “**Parent Corporation**” means any present or future “parent corporation” of the Company, as defined in Section 424(e) of the

(x) “**Participant**” means any eligible person who has been granted one or more Awards.

(y) “**Participating Company**” means the Company or any Parent Corporation or Subsidiary Corporation.

(z) “**Participating Company Group**” means, at any point in time, all entities collectively which are then Participating Companies.

(aa) “**Restricted Stock Award**” means an Award in the form of a Restricted Stock Bonus or a Restricted Stock Purchase Right.

(bb) “**Restricted Stock Bonus**” means Stock granted to a Participant pursuant to Section 7.

(cc) “**Restricted Stock Purchase Right**” means a right to purchase Stock granted to a Participant pursuant to Section 7.

(dd) “**Restricted Stock Unit**” means a right granted to a Participant pursuant to Section 8 to receive on a future date or event a share of Stock or cash in lieu thereof, as determined by the Board.

(ee) “**Rule 16b-3**” means Rule 16b-3 under the Exchange Act, as amended from time to time, or any successor rule or regulation.

(ff) “**Section 409A**” means Section 409A of the Code.

(gg) “**Securities Act**” means the Securities Act of 1933, as amended.

(hh) “**Service**” means a Participant’s employment or service with the Participating Company Group, whether as an Employee, a Director or a Consultant. Unless otherwise provided by the Board, a Participant’s Service shall not be deemed to have terminated merely because of a change in the capacity in which the Participant renders Service or a change in the Participating Company for which the Participant renders Service, provided that there is no interruption or termination of the Participant’s Service. Furthermore, a Participant’s Service shall not be deemed to have been interrupted or terminated if the Participant takes any military leave, sick leave, or other bona fide leave of absence approved by the Company. However, unless otherwise provided by the Board, if any such leave taken by a Participant exceeds ninety (90) days, then on the ninety-first (91st) day following the commencement of such leave the Participant’s Service shall be deemed to have terminated, unless the Participant’s right to return to Service is guaranteed by statute or contract. Notwithstanding the foregoing, unless otherwise designated by the Company or required by law, an unpaid leave of absence shall not be treated as Service for purposes of determining vesting under the Participant’s Award Agreement. A Participant’s Service shall be deemed to have terminated either upon an actual termination of Service or upon the business entity for which the Participant performs Service ceasing to be a

Participating Company. Subject to the foregoing, the Company, in its discretion, shall determine whether the Participant's Service has terminated and the effective date of and reason for such termination.

(i) "**Stock**" means the non-voting common stock of the Company, as adjusted from time to time in accordance with Section 4.3.

(j) "**Subsidiary Corporation**" means any present or future "subsidiary corporation" of the Company, as defined in Section 424(f) of the Code.

(k) "**Ten Percent Stockholder**" means a person who, at the time an Award is granted to such person, owns stock possessing more than ten percent (10%) of the total combined voting power of all classes of stock of a Participating Company within the meaning of Section 422(b)(6) of the Code.

(l) "**Trading Compliance Policy**" means the written policy of the Company pertaining to the purchase, sale, transfer or other disposition of the Company's equity securities by Directors, Officers, Employees or other service providers who may possess material, nonpublic information regarding the Company or its securities.

(m) "**Vesting Conditions**" mean those conditions established in accordance with the Plan prior to the satisfaction of which an Award or shares subject to an Award remain subject to forfeiture or a repurchase option in favor of the Company exercisable for the Participant's monetary purchase price, if any, for such shares upon the Participant's termination of Service or failure of a performance condition to be satisfied.

2.2 Construction. Captions and titles contained herein are for convenience only and shall not affect the meaning or interpretation of any provision of the Plan. Except when otherwise indicated by the context, the singular shall include the plural and the plural shall include the singular. Use of the term "or" is not intended to be exclusive, unless the context clearly requires otherwise.

3. ADMINISTRATION.

3.1 Administration by the Board. The Plan shall be administered by the Board. All questions of interpretation of the Plan, of any Award Agreement or of any other form of agreement or other document employed by the Company in the administration of the Plan or of any Award shall be determined by the Board, and such determinations shall be final, binding and conclusive upon all persons having an interest in the Plan or such Award, unless fraudulent or made in bad faith. Any and all actions, decisions and determinations taken or made by the Board in the exercise of its discretion pursuant to the Plan or Award Agreement or other agreement thereunder (other than determining questions of interpretation pursuant to the preceding sentence) shall be final, binding and conclusive upon all persons having an interest therein. All expenses incurred in connection with the administration of the Plan shall be paid by the Company.

3.2 Authority of Officers. Any Officer shall have the authority to act on behalf of the Company with respect to any matter, right, obligation, determination or election that is the responsibility of or that is allocated to the Company herein, provided that the Officer has apparent authority with respect to such matter, right, obligation, determination or election.

3.3 Powers of the Board. In addition to any other powers set forth in the Plan and subject to the provisions of the Plan, the Board shall have the full and final power and authority, in its discretion:

(a) to determine the persons to whom, and the time or times at which, Awards shall be granted and the number of shares of Stock or units to be subject to each Award;

(b) to determine the type of Award granted;

(c) to determine the Fair Market Value of shares of Stock or other property;

(d) to determine the terms, conditions and restrictions applicable to each Award (which need not be identical) and any shares acquired pursuant thereto, including, without limitation, (i) the exercise or purchase price of shares pursuant to any Award, (ii) the method of payment for shares purchased pursuant to any Award, (iii) the method for satisfaction of any tax withholding obligation arising in connection with any Award, including by the withholding or delivery of shares of Stock, (iv) the timing, terms and conditions of the exercisability or vesting of any Award or any shares acquired pursuant thereto, (v) the time of expiration of any Award, (vi) the effect of any Participant's termination of Service on any of the foregoing, and (vii) all other terms, conditions and restrictions applicable to any Award or shares acquired pursuant thereto not inconsistent with the terms of the Plan;

(e) to determine whether an Award will be settled in shares of Stock, cash, other property or in any combination thereof;

(f) to approve one or more forms of Award Agreement;

(g) to amend, modify, extend, cancel or renew any Award or to waive any restrictions or conditions applicable to any Award or any shares acquired pursuant thereto;

(h) to reprice or otherwise adjust the exercise price of any Option, or to grant in substitution for any Option a new Award covering the same or different number of shares of Stock;

(i) to accelerate, continue, extend or defer the exercisability or vesting of any Award or any shares acquired pursuant thereto, including with respect to the period following a Participant's termination of Service;

(j) to prescribe, amend or rescind rules, guidelines and policies relating to the Plan, or to adopt sub-plans or supplements to, or alternative versions of, the Plan, including, without limitation, as the Board deems necessary or desirable to comply with the laws of, or to accommodate the tax policy, accounting principles or custom of, foreign jurisdictions whose residents may be granted Awards; and

(k) to correct any defect, supply any omission or reconcile any inconsistency in the Plan or any Award Agreement and to make all other determinations and take such other actions with respect to the Plan or any Award as the Board may deem advisable to the extent not inconsistent with the provisions of the Plan or applicable law.

3.4 Administration with Respect to Insiders. With respect to participation by Insiders in the Plan, at any time that any class of equity security of the Company is registered pursuant to Section 12 of the Exchange Act, the Plan shall be administered in compliance with the requirements, if any, of Rule 16b-3.

3.5 Indemnification. In addition to such other rights of indemnification as they may have as members of the Board or as officers or employees of the Participating Company Group, to the extent permitted by applicable law, members of the Board and any officers or employees of the Participating Company Group to whom authority to act for the Board or the Company is delegated shall be indemnified by the Company against all reasonable expenses, including attorneys' fees, actually and necessarily incurred in connection with the defense of any action, suit or proceeding, or in connection with any appeal therein, to which they or any of them may be a party by reason of any action taken or failure to act under or in connection with the Plan, or any right granted hereunder, and against all amounts paid by them in settlement thereof (provided such settlement is approved by independent legal counsel selected by the Company) or paid by them in satisfaction of a judgment in any such action, suit or proceeding, except in relation to matters as to which it shall be adjudged in such action, suit or proceeding that such person is liable for gross negligence, bad faith or intentional misconduct in duties; provided, however, that within sixty (60) days after the institution of such action, suit or proceeding, such person shall offer to the Company, in writing, the opportunity at its own expense to handle and defend the same.

4. SHARES SUBJECT TO PLAN.

4.1 Maximum Number of Shares Issuable. Subject to adjustment as provided in Sections 4.2 and 4.3, the maximum aggregate number of shares of Stock that may be issued under the Plan shall be 12,615,750 and shall consist of authorized but unissued or reacquired shares of Stock or any combination thereof.

4.2 Share Counting. If an outstanding Award for any reason expires or is terminated or canceled without having been exercised or settled in full, or if shares of Stock acquired pursuant to an Award subject to forfeiture or repurchase are forfeited or repurchased by the Company for an amount not greater than the Participant's exercise or purchase price, the shares of Stock allocable to the terminated portion of such Award or such forfeited or repurchased shares of Stock shall again be available for issuance under the Plan. Shares of Stock shall not be deemed to have been issued pursuant to the Plan (a) with respect to any portion of an Award that is settled in cash or (b) to the extent such shares are withheld or reacquired by the Company in satisfaction of tax withholding obligations pursuant to Section 11.2. If the exercise price of an Option is paid by tender to the Company, or attestation to the ownership, of shares of Stock owned by the Participant, or by means of a Net Exercise, the number of shares available for issuance under the Plan shall be reduced by the net number of shares issued upon the exercise of the Option.

4.3 Adjustments for Changes in Capital Structure. Subject to any required action by the stockholders of the Company and the requirements of Sections 409A and 424 of the Code to the extent applicable, in the event of any change in the Stock effected without receipt of consideration by the Company, whether through merger, consolidation, reorganization, reincorporation, recapitalization, reclassification, stock dividend, stock split, reverse stock split, split-up, split-off, spin-off, combination of shares, exchange of shares, or similar change in the capital structure of the Company, or in the event of payment of a dividend or distribution to the stockholders of the Company in a form other than Stock (excepting regular, periodic cash dividends) that has a material effect on the Fair Market Value of shares of Stock, appropriate and proportionate adjustments shall be made in the number and kind of shares subject to the Plan and to any outstanding Awards, in the ISO Share Limit set forth in Section 5.3(a), and in the exercise or purchase price per share under any outstanding Awards in order to prevent dilution or enlargement of Participants' rights under the Plan. For purposes of the foregoing, conversion of any convertible securities of the Company shall not be treated as "effected without receipt of consideration by the Company." If a majority of the shares which are of the same class as the shares that are subject to outstanding Awards are exchanged for, converted into, or otherwise become (whether or not pursuant to an Ownership Change Event) shares of another corporation (the "**New Shares**"), the Board may unilaterally amend the outstanding Awards to provide that such Awards are for New Shares. In the event of any such amendment, the number of shares subject to, and the exercise or purchase price per share of, the outstanding Awards shall be adjusted in a fair and equitable manner as determined by the Board, in its discretion. Any fractional share resulting from an adjustment pursuant to this Section shall be rounded down to the nearest whole number, and the exercise or purchase price per share shall be rounded up to the nearest whole cent. In no event may the exercise or purchase price, if any, under any Award be decreased to an amount less than the par value, if any, of the stock subject to the Award. Such adjustments shall be determined by the Board, and its determination shall be final, binding and conclusive.

4.4 Assumption or Substitution of Awards. The Board may, without affecting the number of shares of Stock available pursuant to Section 4.1, authorize the issuance or assumption of benefits under this Plan in connection with any merger, consolidation, acquisition of property or stock, or reorganization upon such terms and conditions as it may deem appropriate, subject to compliance with Section 409A and any other applicable provisions of the Code.

5. ELIGIBILITY, PARTICIPATION AND OPTION LIMITATIONS.

5.1 Persons Eligible for Awards. Awards may be granted only to Employees, Consultants and Directors.

5.2 Participation in the Plan. Awards are granted solely at the discretion of the Board. Eligible persons may be granted more than one Award. However, eligibility in accordance with this Section shall not entitle any person to be granted an Award, or, having been granted an Award, to be granted an additional Award.

5.3 Incentive Stock Option Limitations.

(a) **Maximum Number of Shares Issuable Pursuant to Incentive Stock Options.** Subject to Section 4.1 and adjustment as provided in Sections 4.2 and 4.3, the maximum aggregate number of shares of Stock that may be issued under the Plan pursuant to the exercise of Incentive Stock Options shall not exceed 12,615,750 shares (the "**ISO Share Limit**"). The maximum aggregate number of shares of Stock that may be issued under the Plan pursuant to all Awards other than Incentive Stock Options shall be the number of shares determined in accordance with Section 4.1, subject to adjustment as provided in Sections 4.2 and 4.3.

(b) **Persons Eligible.** An Incentive Stock Option may be granted only to a person who, on the effective date of grant, is an Employee. Any person who is not an Employee on the effective date of the grant of an Option to such person may be granted only a Nonstatutory Stock Option.

(c) **Fair Market Value Limitation.** To the extent that options designated as Incentive Stock Options (granted under all stock plans of the Participating Company Group, including the Plan) become exercisable by a Participant for the first time during any calendar year for stock having a Fair Market Value greater than One Hundred Thousand Dollars (\$100,000), the portion of such options which exceeds such amount shall be treated as Nonstatutory Stock Options. For purposes of this Section, options designated as Incentive Stock Options shall be taken into account in the order in which they were granted, and the Fair Market Value of stock shall be determined as of the time the option with respect to such stock is granted. If the Code is amended to provide for a limitation different from that set forth in this Section, such different limitation shall be deemed incorporated herein effective as of the date and with respect to such Options as required or permitted by such amendment to the Code. If an Option is treated as an Incentive Stock Option in part and as a Nonstatutory Stock Option in part by reason of the limitation set forth in this Section, the Participant may designate which portion of such Option the Participant is exercising. In the absence of such designation, the Participant shall be deemed to have exercised the Incentive Stock Option portion of the Option first. Upon exercise of the Option, shares issued pursuant to each such portion shall be separately identified.

6. STOCK OPTIONS.

Options shall be evidenced by Award Agreements specifying the number of shares of Stock covered thereby, in such form as the Board shall establish. Such Award Agreements may incorporate all or any of the terms of the Plan by reference and shall comply with and be subject to the following terms and conditions:

6.1 **Exercise Price.** The exercise price for each Option shall be established in the discretion of the Board; provided, however, that (a) the exercise price per share for an Option shall be not less than the Fair Market Value of a share of Stock on the effective date of grant of the Option and (b) no Incentive Stock Option granted to a Ten Percent Stockholder shall have an exercise price per share less than one hundred ten percent (110%) of the Fair Market Value of a share of Stock on the effective date of grant of the Option. Notwithstanding the foregoing, an Option (whether an Incentive Stock Option or a Nonstatutory Stock Option) may be granted with an exercise price less than the minimum exercise price set forth above if such Option is granted pursuant to an assumption or substitution for another option in a manner that would qualify under the provisions of Section 409A or Section 424(a) of the Code, as applicable.

6.2 Exercisability and Term of Options. Options shall be exercisable at such time or times, or upon such event or events, and subject to such terms, conditions, performance criteria and restrictions as shall be determined by the Board and set forth in the Award Agreement evidencing such Option; provided, however, that (a) no Option shall be exercisable after the expiration of ten (10) years after the effective date of grant of such Option, (b) no Incentive Stock Option granted to a Ten Percent Stockholder shall be exercisable after the expiration of five (5) years after the effective date of grant of such Option, and (c) no Option granted to an Employee who is a non-exempt employee for purposes of the Fair Labor Standards Act of 1938, as amended, shall be first exercisable until at least six (6) months following the date of grant of such Option (except in the event of such Employee's death, disability or retirement, upon a Change in Control, or as otherwise permitted by the Worker Economic Opportunity Act). Subject to the foregoing, unless otherwise specified by the Board in the grant of an Option, each Option shall terminate ten (10) years after the effective date of grant of the Option, unless earlier terminated in accordance with its provisions.

6.3 Payment of Exercise Price.

(a) **Forms of Consideration Authorized.** Except as otherwise provided below, payment of the exercise price for the number of shares of Stock being purchased pursuant to any Option shall be made (i) in cash, by check or in cash equivalent, (ii) if permitted by the Company and subject to the limitations contained in Section 6.3(b), by means of (1) a Stock Tender Exercise, (2) a Cashless Exercise or (3) a Net Exercise; (iii) by such other consideration as may be approved by the Board from time to time to the extent permitted by applicable law, or (iv) by any combination thereof. The Board may at any time or from time to time grant Options which do not permit all of the foregoing forms of consideration to be used in payment of the exercise price or which otherwise restrict one or more forms of consideration.

(b) **Limitations on Forms of Consideration.**

(i) **Stock Tender Exercise.** A "**Stock Tender Exercise**" means the delivery of a properly executed exercise notice accompanied by a Participant's tender to the Company, or attestation to the ownership, in a form acceptable to the Company of whole shares of Stock owned by the Participant having a Fair Market Value that does not exceed the aggregate exercise price for the shares with respect to which the Option is exercised. A Stock Tender Exercise shall not be permitted if it would constitute a violation of the provisions of any law, regulation or agreement restricting the redemption of the Company's stock. If required by the Company, an Option may not be exercised by tender to the Company, or attestation to the ownership, of shares of Stock unless such shares either have been owned by the Participant for a period of time required by the Company (and not used for another option exercise by attestation during such period) or were not acquired, directly or indirectly, from the Company.

(ii) **Cashless Exercise.** A Cashless Exercise shall be permitted only upon the class of shares subject to the Option becoming publicly traded in an established securities market. A "**Cashless Exercise**" means the delivery of a properly executed exercise

notice together with irrevocable instructions to a broker providing for the assignment to the Company of the proceeds of a sale or loan with respect to some or all of the shares being acquired upon the exercise of the Option (including, without limitation, through an exercise complying with the provisions of Regulation T as promulgated from time to time by the Board of Governors of the Federal Reserve System). The Company reserves, at any and all times, the right, in the Company's sole and absolute discretion, to establish, decline to approve or terminate any program or procedures for the exercise of Options by means of a Cashless Exercise, including with respect to one or more Participants specified by the Company notwithstanding that such program or procedures may be available to other Participants.

(iii) **Net Exercise.** A "*Net Exercise*" means the delivery of a properly executed exercise notice followed by a procedure pursuant to which (1) the Company will reduce the number of shares otherwise issuable to a Participant upon the exercise of an Option by the largest whole number of shares having a Fair Market Value that does not exceed the aggregate exercise price for the shares with respect to which the Option is exercised, and (2) the Participant shall pay to the Company in cash the remaining balance of such aggregate exercise price not satisfied by such reduction in the number of whole shares to be issued.

6.4 Effect of Termination of Service.

(a) **Option Exercisability.** Subject to earlier termination of the Option as otherwise provided by this Plan and unless a longer exercise period is provided by the Board, an Option shall terminate immediately upon the Participant's termination of Service to the extent that it is then unvested and shall be exercisable after the Participant's termination of Service to the extent it is then vested only during the applicable time period determined in accordance with this Section and thereafter shall terminate:

(i) **Disability.** If the Participant's Service terminates because of the Disability of the Participant, the Option, to the extent unexercised and exercisable for vested shares on the date on which the Participant's Service terminated, may be exercised by the Participant (or the Participant's guardian or legal representative) at any time prior to the expiration of twelve (12) months (or such longer or shorter period (but not less than six (6) months) provided by the Award Agreement) after the date on which the Participant's Service terminated, but in any event no later than the date of expiration of the Option's term as set forth in the Award Agreement evidencing such Option (the "*Option Expiration Date*").

(ii) **Death.** If the Participant's Service terminates because of the death of the Participant, the Option, to the extent unexercised and exercisable for vested shares on the date on which the Participant's Service terminated, may be exercised by the Participant's legal representative or other person who acquired the right to exercise the Option by reason of the Participant's death at any time prior to the expiration of twelve (12) months (or such longer or shorter period (but not less than six (6) months) provided by the Award Agreement) after the date on which the Participant's Service terminated, but in any event no later than the Option Expiration Date. The Participant's Service shall be deemed to have terminated on account of death if the Participant dies within thirty (30) days (or such longer period provided by the Board) after the Participant's termination of Service.

(iii) **Termination for Cause.** Notwithstanding any other provision of the Plan to the contrary, if the Participant's Service is terminated for Cause, the Option shall terminate in its entirety and cease to be exercisable immediately upon such termination of Service.

(iv) **Other Termination of Service.** If the Participant's Service terminates for any reason, except Disability, death or Cause, the Option, to the extent unexercised and exercisable for vested shares on the date on which the Participant's Service terminated, may be exercised by the Participant at any time prior to the expiration of three (3) months (or such longer or shorter period (but not less than thirty (30) days) provided by the Award Agreement) after the date on which the Participant's Service terminated, but in any event no later than the Option Expiration Date.

(b) **Extension if Exercise Prevented by Law.** Notwithstanding the foregoing other than termination of Service for Cause, if the exercise of an Option within the applicable time periods set forth in Section 6.4(a) is prevented by the provisions of Section 12 below, the Option shall remain exercisable until the later of (i) thirty (30) days after the date such exercise first would no longer be prevented by such provisions or (ii) the end of the applicable time period under Section 6.4(a), but in any event no later than the Option Expiration Date.

6.5 Transferability of Options. During the lifetime of the Participant, an Option shall be exercisable only by the Participant or the Participant's guardian or legal representative. An Option shall not be subject in any manner to anticipation, alienation, sale, exchange, transfer, assignment, pledge, encumbrance, or garnishment by creditors of the Participant or the Participant's beneficiary, except transfer by will or by the laws of descent and distribution; provided, however, that to the extent permitted by the Board, in its discretion, and set forth in the Award Agreement evidencing such Option, an Option shall be assignable or transferable subject to the applicable limitations, if any, described in Rule 701 under the Securities Act and the General Instructions to Form S-8 Registration Statement under the Securities Act or, in the case of an Incentive Stock Option, only as permitted by applicable regulations under Section 421 of the Code in a manner that does not disqualify such Option as an Incentive Stock Option. Notwithstanding the foregoing, for so long as the Company is relying on the exemption provided by Rule 12h-1(f) under the Exchange Act, no Option or, prior to its exercise, the shares to be issued upon the exercise of the Option, shall be transferred except in compliance with the restrictions on transfer under Rule 12h-1(f) (including the requirement under such rule that any permitted transferee may not further transfer the Option) or be made subject to any short position, "put equivalent position" or "call equivalent position" by the Participant, as such terms are defined in Rule 16a-1 of the Exchange Act.

7. RESTRICTED STOCK AWARDS.

Restricted Stock Awards shall be evidenced by Award Agreements specifying whether the Award is a Restricted Stock Bonus or a Restricted Stock Purchase Right and the number of shares of Stock subject to the Award, in such form as the Board shall establish. Such Award Agreements may incorporate all or any of the terms of the Plan by reference and shall comply with and be subject to the following terms and conditions:

7.1 Types of Restricted Stock Awards Authorized. Restricted Stock Awards may be granted in the form of either a Restricted Stock Bonus or a Restricted Stock Purchase Right. Restricted Stock Awards may be granted upon such conditions as the Board shall determine, including, without limitation, upon the attainment of one or more performance goals.

7.2 Purchase Price. The purchase price for shares of Stock issuable under each Restricted Stock Purchase Right shall be established by the Board in its discretion. No monetary payment (other than applicable tax withholding) shall be required as a condition of receiving shares of Stock pursuant to a Restricted Stock Bonus, the consideration for which shall be services actually rendered to a Participating Company or for its benefit. Notwithstanding the foregoing, if required by applicable state corporate law, the Participant shall furnish consideration in the form of cash or past services rendered to a Participating Company or for its benefit having a value not less than the par value of the shares of Stock subject to a Restricted Stock Award.

7.3 Purchase Period. A Restricted Stock Purchase Right shall be exercisable within a period established by the Board, which shall in no event exceed thirty (30) days from the effective date of the grant of the Restricted Stock Purchase Right.

7.4 Payment of Purchase Price. Except as otherwise provided below, payment of the purchase price for the number of shares of Stock being purchased pursuant to any Restricted Stock Purchase Right shall be made (a) in cash, by check or in cash equivalent, (b) by such other consideration as may be approved by the Board from time to time to the extent permitted by applicable law, or (c) by any combination thereof.

7.5 Vesting and Restrictions on Transfer. Shares issued pursuant to any Restricted Stock Award may (but need not) be made subject to Vesting Conditions based upon the satisfaction of such Service requirements, conditions, restrictions or performance criteria, as shall be established by the Board and set forth in the Award Agreement evidencing such Award. During any period in which shares acquired pursuant to a Restricted Stock Award remain subject to Vesting Conditions, such shares may not be sold, exchanged, transferred, pledged, assigned or otherwise disposed of other than pursuant to an Ownership Change Event or as provided in Section 7.8. The Board, in its discretion, may provide in any Award Agreement evidencing a Restricted Stock Award that, if the satisfaction of Vesting Conditions with respect to any shares subject to such Restricted Stock Award would otherwise occur on a day on which the sale of such shares would violate the provisions of the Trading Compliance Policy, then satisfaction of the Vesting Conditions automatically shall be determined on the next trading day on which the sale of such shares would not violate the Trading Compliance Policy. Upon request by the Company, each Participant shall execute any agreement evidencing such transfer restrictions prior to the receipt of shares of Stock hereunder and shall promptly present to the Company any and all certificates representing shares of Stock acquired hereunder for the placement on such certificates of appropriate legends evidencing any such transfer restrictions.

7.6 Voting Rights; Dividends and Distributions. Except as provided in this Section, Section 7.5 and any Award Agreement, during any period in which shares acquired pursuant to a Restricted Stock Award remain subject to Vesting Conditions, the Participant shall

have all of the rights of a stockholder of the Company holding shares of Stock, including the right to vote such shares and to receive all dividends and other distributions paid with respect to such shares; provided, however, that if so determined by the Board and provided by the Award Agreement, such dividends and distributions shall be subject to the same Vesting Conditions as the shares subject to the Restricted Stock Award with respect to which such dividends or distributions were paid, and otherwise shall be paid no later than the end of the calendar year in which such dividends or distributions are paid to stockholders (or, if later, the 15th day of the third month following the date such dividends or distributions are paid to stockholders). In the event of a dividend or distribution paid in shares of Stock or other property or any other adjustment made upon a change in the capital structure of the Company as described in Section 4.3, any and all new, substituted or additional securities or other property (other than regular, periodic cash dividends) to which the Participant is entitled by reason of the Participant's Restricted Stock Award shall be immediately subject to the same Vesting Conditions as the shares subject to the Restricted Stock Award with respect to which such dividends or distributions were paid or adjustments were made.

7.7 Effect of Termination of Service. Unless otherwise provided by the Board in the Award Agreement evidencing a Restricted Stock Award, if a Participant's Service terminates for any reason, whether voluntary or involuntary (including the Participant's death or disability), then (a) the Company shall have the option to repurchase for the purchase price paid by the Participant any shares acquired by the Participant pursuant to a Restricted Stock Purchase Right which remain subject to Vesting Conditions as of the date of the Participant's termination of Service and (b) the Participant shall forfeit to the Company any shares acquired by the Participant pursuant to a Restricted Stock Bonus which remain subject to Vesting Conditions as of the date of the Participant's termination of Service. The Company shall have the right to assign at any time any repurchase right it may have, whether or not such right is then exercisable, to one or more persons as may be selected by the Company.

7.8 Nontransferability of Restricted Stock Award Rights. Rights to acquire shares of Stock pursuant to a Restricted Stock Award shall not be subject in any manner to anticipation, alienation, sale, exchange, transfer, assignment, pledge, encumbrance or garnishment by creditors of the Participant or the Participant's beneficiary, except transfer by will or the laws of descent and distribution. All rights with respect to a Restricted Stock Award granted to a Participant hereunder shall be exercisable during his or her lifetime only by such Participant or the Participant's guardian or legal representative.

8. RESTRICTED STOCK UNITS.

Restricted Stock Unit Awards shall be evidenced by Award Agreements specifying the number of Restricted Stock Units subject to the Award, in such form as the Board shall establish. Award Agreements evidencing Restricted Stock Units may incorporate all or any of the terms of the Plan by reference and shall comply with and be subject to the following terms and conditions:

8.1 Grant of Restricted Stock Unit Awards. Restricted Stock Unit Awards may be granted upon such conditions as the Board shall determine, including, without limitation, upon the attainment of one or more performance goals established by the Board.

8.2 Purchase Price. No monetary payment (other than applicable tax withholding, if any) shall be required as a condition of receiving a Restricted Stock Unit Award, the consideration for which shall be services actually rendered to a Participating Company or for its benefit. Notwithstanding the foregoing, if required by applicable state corporate law, the Participant shall furnish consideration in the form of cash or past services rendered to a Participating Company or for its benefit having a value not less than the par value of the shares of Stock issued upon settlement of the Restricted Stock Unit Award.

8.3 Vesting. Restricted Stock Unit Awards may (but need not) be made subject to Vesting Conditions based upon the satisfaction of such Service requirements, conditions, restrictions or performance criteria as shall be established by the Board and set forth in the Award Agreement evidencing such Award. The Board, in its discretion, may provide in any Award Agreement evidencing a Restricted Stock Unit Award that, if the satisfaction of Vesting Conditions with respect to any shares subject to the Award would otherwise occur on a day on which the sale of such shares would violate the provisions of the Trading Compliance Policy, then the satisfaction of the Vesting Conditions automatically shall be determined on the first to occur of (a) the next trading day on which the sale of such shares would not violate the Trading Compliance Policy or (b) the last day of the calendar year in which the original vesting date occurred.

8.4 Voting Rights, Dividend Equivalent Rights and Distributions. Participants shall have no voting rights with respect to shares of Stock represented by Restricted Stock Units until the date of the issuance of such shares (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company). However, the Board, in its discretion, may provide in the Award Agreement evidencing any Restricted Stock Unit Award that the Participant shall be entitled to Dividend Equivalent Rights with respect to the payment of cash dividends on Stock during the period beginning on the date such Award is granted and ending, with respect to each share subject to the Award, on the earlier of the date the Award is settled or the date on which it is terminated. Dividend Equivalent Rights, if any, shall be paid by crediting the Participant with a cash amount or with additional whole Restricted Stock Units as of the date of payment of such cash dividends on Stock, as determined by the Board. The number of additional Restricted Stock Units (rounded to the nearest whole number), if any, to be credited shall be determined by dividing (a) the amount of cash dividends paid on the dividend payment date with respect to the number of shares of Stock represented by the Restricted Stock Units previously credited to the Participant by (b) the Fair Market Value per share of Stock on such date. Such cash amount or additional Restricted Stock Units shall be subject to the same terms and conditions and shall be settled in the same manner and at the same time as the Restricted Stock Units originally subject to the Restricted Stock Unit Award. In the event of a dividend or distribution paid in shares of Stock or other property or any other adjustment made upon a change in the capital structure of the Company as described in Section 4.3, appropriate adjustments shall be made in the Participant's Restricted Stock Unit Award so that it represents the right to receive upon settlement any and all new, substituted or additional securities or other property (other than regular, periodic cash dividends) to which the Participant would be entitled by reason of the shares of Stock issuable upon settlement of the Award, and all such new, substituted or additional securities or other property shall be immediately subject to the same Vesting Conditions as are applicable to the Award.

8.5 Effect of Termination of Service. Unless otherwise provided by the Board and set forth in the Award Agreement evidencing a Restricted Stock Unit Award, if a Participant's Service terminates for any reason, whether voluntary or involuntary (including the Participant's death or disability), then the Participant shall forfeit to the Company any Restricted Stock Units pursuant to the Award which remain subject to Vesting Conditions as of the date of the Participant's termination of Service.

8.6 Settlement of Restricted Stock Unit Awards. The Company shall issue to a Participant on the date on which Restricted Stock Units subject to the Participant's Restricted Stock Unit Award vest or on such other date determined by the Board in compliance with Section 409A, if applicable, and set forth in the Award Agreement one (1) share of Stock (and/or any other new, substituted or additional securities or other property pursuant to an adjustment described in [Section 8.4](#)) for each Restricted Stock Unit then becoming vested or otherwise to be settled on such date, subject to the withholding of applicable taxes, if any. If permitted by the Board, the Participant may elect, consistent with the requirements of Section 409A, to defer receipt of all or any portion of the shares of Stock or other property otherwise issuable to the Participant pursuant to this Section, and such deferred issuance date(s) and amount(s) elected by the Participant shall be set forth in the Award Agreement. Notwithstanding the foregoing, the Board, in its discretion, may provide for settlement of any Restricted Stock Unit Award by payment to the Participant in cash of an amount equal to the Fair Market Value on the payment date of the shares of Stock or other property otherwise issuable to the Participant pursuant to this Section.

8.7 Nontransferability of Restricted Stock Unit Awards. The right to receive shares pursuant to a Restricted Stock Unit Award shall not be subject in any manner to anticipation, alienation, sale, exchange, transfer, assignment, pledge, encumbrance, or garnishment by creditors of the Participant or the Participant's beneficiary, except transfer by will or by the laws of descent and distribution. For so long as the Company is relying on an order of the Securities and Exchange Commission (the "**SEC**") under Section 12(h) of the Exchange Act or a no-action position of the Staff of the SEC relieving the Company from registration under Section 12(g) of the Exchange Act of the Units and the shares of Stock subject thereto, no Restricted Stock Unit Award, or prior to its settlement, shares of Stock underlying such Award, shall be transferred except in compliance with the restrictions on transfer under Rule 12h-1(f) under the Exchange Act that would apply were the Restricted Stock Units subject to such rule (including the requirement under such rule that any permitted transferee may not further transfer the securities) or be made subject to any short position, "put equivalent position" or "call equivalent position" by the Participant, as such terms are defined in Rule 16a-1 under the Exchange Act. All rights with respect to a Restricted Stock Unit Award granted to a Participant hereunder shall be exercisable during his or her lifetime only by such Participant or the Participant's guardian or legal representative.

9. STANDARD FORMS OF AWARD AGREEMENTS.

9.1 Award Agreements. Each Award shall comply with and be subject to the terms and conditions set forth in the appropriate form of Award Agreement approved by the Board and as amended from time to time. No Award or purported Award shall be a valid and binding obligation of the Company unless evidenced by a fully executed Award Agreement, which execution may be evidenced by electronic means.

9.2 Authority to Vary Terms. The Board shall have the authority from time to time to vary the terms of any standard form of Award Agreement either in connection with the grant or amendment of an individual Award or in connection with the authorization of a new standard form or forms; provided, however, that the terms and conditions of any such new, revised or amended standard form or forms of Award Agreement are not inconsistent with the terms of the Plan.

10. CHANGE IN CONTROL.

10.1 Effect of Change in Control on Awards. Subject to the requirements and limitations of Section 409A, if applicable, the Board may provide for any one or more of the following:

(a) **Accelerated Vesting.** In its discretion, the Board may provide in the grant of any Award or at any other time may take action it deems appropriate to provide for acceleration of the exercisability, vesting and/or settlement in connection with a Change in Control of each or any outstanding Award or portion thereof and shares acquired pursuant thereto upon such conditions, including termination of the Participant's Service prior to, upon, or following the Change in Control, and to such extent as the Board determines.

(b) **Assumption, Continuation or Substitution of Awards.** In the event of a Change in Control, the surviving, continuing, successor, or purchasing corporation or other business entity or parent thereof, as the case may be (the "**Acquiror**"), may, without the consent of any Participant, assume or continue the Company's rights and obligations under each or any Award or portion thereof outstanding immediately prior to the Change in Control or substitute for each or any such outstanding Award or portion thereof a substantially equivalent award with respect to the Acquiror's stock. For purposes of this Section, if so determined by the Board, in its discretion, an Award or any portion thereof shall be deemed assumed if, following the Change in Control, the Award confers the right to receive, subject to the terms and conditions of the Plan and the applicable Award Agreement, for each share of Stock subject to such portion of the Award immediately prior to the Change in Control, the consideration (whether stock, cash, other securities or property or a combination thereof) to which a holder of a share of Stock on the effective date of the Change in Control was entitled (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding shares of Stock); provided, however, that if such consideration is not solely common stock of the Acquiror, the Board may, with the consent of the Acquiror, provide for the consideration to be received upon the exercise or settlement of the Award, for each share of Stock subject to the Award, solely common stock of the Acquiror equal in Fair Market Value to the per share consideration received by holders of Stock pursuant to the Change in Control. If any portion of such consideration may be received by holders of Stock pursuant to the Change in Control on a contingent or delayed basis, the Board may, in its discretion, determine such Fair Market Value per share as of the time of the Change in Control on the basis of the Board's good faith estimate of the present value of the probable future payment of such consideration. Any Award or portion thereof which is neither assumed or continued by the Acquiror in connection with the Change in

Control nor exercised as of the time of consummation of the Change in Control shall terminate and cease to be outstanding effective as of the time of consummation of the Change in Control. Notwithstanding the foregoing, shares acquired upon exercise of an Award prior to the Change in Control and any consideration received pursuant to the Change in Control with respect to such shares shall continue to be subject to all applicable provisions of the Award Agreement evidencing such Award except as otherwise provided in such Award Agreement.

(c) **Cash-Out of Outstanding Awards.** The Board may, in its discretion and without the consent of any Participant, determine that, upon the occurrence of a Change in Control, each or any Award or portion thereof outstanding immediately prior to the Change in Control and not previously exercised or settled shall be canceled in exchange for a payment with respect to each vested share (and each unvested share, if so determined by the Board) of Stock subject to such canceled Award in (i) cash, (ii) stock of the Company or of a corporation or other business entity a party to the Change in Control, or (iii) other property which, in any such case, shall be in an amount having a Fair Market Value equal to the Fair Market Value of the consideration to be paid per share of Stock in the Change in Control, reduced (but not below zero) by the exercise or purchase price per share, if any, under such Award. If any portion of such consideration may be received by holders of Stock pursuant to the Change in Control on a contingent or delayed basis, the Board may, in its sole discretion, determine such Fair Market Value per share as of the time of the Change in Control on the basis of the Board's good faith estimate of the present value of the probable amount of future payment of such consideration. In the event such determination is made by the Board, an Award having an exercise or purchase price per share equal to or greater than the Fair Market Value of the consideration to be paid per share of Stock in the Change in Control may be canceled without payment of consideration to the holder thereof. Payment pursuant to this Section (reduced by applicable withholding taxes, if any) shall be made to Participants in respect of the vested portions of their canceled Awards as soon as practicable following the date of the Change in Control and in respect of the unvested portions of their canceled Awards in accordance with the vesting schedules applicable to such Awards.

10.2 Federal Excise Tax Under Section 4999 of the Code.

(a) **Excess Parachute Payment.** If any acceleration of vesting pursuant to an Award and any other payment or benefit received or to be received by a Participant would subject the Participant to any excise tax pursuant to Section 4999 of the Code due to the characterization of such acceleration of vesting, payment or benefit as an "excess parachute payment" under Section 280G of the Code, then, provided such election would not subject the Participant to taxation under Section 409A, the Participant may elect to reduce the amount of any acceleration of vesting called for under the Award in order to avoid such characterization.

(b) **Determination by Tax Firm.** To aid the Participant in making any election called for under Section 10.2(a), no later than the date of the occurrence of any event that might reasonably be anticipated to result in an "excess parachute payment" to the Participant as described in Section 10.2(a), the Company shall request a determination in writing by the professional firm engaged by the Company for general tax purposes, or, if the tax firm so engaged by the Company is serving as accountant or auditor for the Acquiror, the Company will

appoint a nationally recognized tax firm to make the determinations required by this Section (the "**Tax Firm**"). As soon as practicable thereafter, the Tax Firm shall determine and report to the Company and the Participant the amount of such acceleration of vesting, payments and benefits which would produce the greatest after-tax benefit to the Participant. For the purposes of such determination, the Tax Firm may rely on reasonable, good faith interpretations concerning the application of Sections 280G and 4999 of the Code. The Company and the Participant shall furnish to the Tax Firm such information and documents as the Tax Firm may reasonably request in order to make its required determination. The Company shall bear all fees and expenses the Tax Firm may charge in connection with its services contemplated by this Section.

11. TAX WITHHOLDING.

11.1 Tax Withholding in General. The Company shall have the right to deduct from any and all payments made under the Plan, or to require the Participant, through payroll withholding, cash payment or otherwise, to make adequate provision for, the federal, state, local and foreign taxes (including social insurance), if any, required by law to be withheld by any Participating Company with respect to an Award or the shares acquired pursuant thereto. The Company shall have no obligation to deliver shares of Stock, to release shares of Stock from an escrow established pursuant to an Award Agreement, or to make any payment in cash under the Plan until the Participating Company Group's tax withholding obligations have been satisfied by the Participant.

11.2 Withholding in or Directed Sale of Shares. The Company shall have the right, but not the obligation, to deduct from the shares of Stock issuable to a Participant upon the exercise, vesting or settlement of an Award, or to accept from the Participant the tender of, a number of whole shares of Stock having a Fair Market Value, as determined by the Company, equal to all or any part of the tax withholding obligations of any Participating Company. The Fair Market Value of any shares of Stock withheld or tendered to satisfy any such tax withholding obligations shall not exceed the amount determined by the applicable minimum statutory withholding rates. The Company may require a Participant to direct a broker, upon the vesting, exercise or settlement of an Award, to sell a portion of the shares subject to the Award determined by the Company in its discretion to be sufficient to cover the tax withholding obligations of any Participating Company and to remit an amount equal to such tax withholding obligations to the Participating Company in cash.

12. COMPLIANCE WITH SECTION 409A.

12.1 In General. The Plan and all Awards granted hereunder are intended to comply with, or otherwise be exempt from, Section 409A. The Plan and all Awards granted under the Plan shall be administered, interpreted, and construed in a manner consistent with Section 409A, as determined by the Company in good faith, to the extent necessary to avoid the imposition of additional taxes under Section 409A(a)(1)(B) of the Code. It is intended that any election, payment or benefit which is made or provided pursuant to or in connection with any Award that may result in deferred compensation within the meaning of Section 409A shall comply in all respects with the applicable requirements of Section 409A.

12.2 Certain Limitations. With respect to any Award that is subject to Section 409A, the following shall apply, as applicable:

(a) Notwithstanding anything to the contrary in the Plan or any Award Agreement, to the extent required to avoid tax penalties under Section 409A, amounts that would otherwise be payable and benefits that would otherwise be provided pursuant to the Plan on account of, and during the six (6) month period immediately following, the Participant's termination of Service shall instead be paid on the first payroll date after the six-month anniversary of the Participant's separation from service (or the Participant's death, if earlier).

(b) Neither any Participant nor the Company shall take any action to accelerate or delay the payment of any amount or benefits under an Award in any manner which would not be in compliance with Section 409A.

(c) Notwithstanding anything to the contrary in the Plan or any Award Agreement, to the extent that any amount constituting deferred compensation subject to Section 409A would become payable under the Plan by reason of a Change in Control, such amount shall become payable only if the event constituting the Change in Control would also constitute a change in ownership or effective control of the Company or a change in the ownership of a substantial portion of the assets of the Company within the meaning of Section 409A. Any Award which constitutes deferred compensation subject to Section 409A and which would vest and otherwise become payable upon a Change in Control as a result of the failure of the Acquiror to assume, continue or substitute for such Award in accordance with Section 10.1(b) shall vest to the extent provided by such Award but shall be converted automatically at the effective time of such Change in Control into a right to receive, in cash on the date or dates such award would have been settled in accordance with its then existing settlement schedule, an amount or amounts equal in the aggregate to the intrinsic value of the Award at the time of the Change in Control.

(d) Should any provision of the Plan, any Award Agreement, or any other agreement or arrangement contemplated by the Plan be found not to comply with, or otherwise be exempt from, the provisions of Section 409A, such provision shall be modified and given effect (retroactively if necessary), in the sole discretion of the Board, and without the consent of the holder of the Award, in such manner as the Board determines to be necessary or appropriate to comply with, or to effectuate an exemption from, Section 409A.

(e) Notwithstanding the foregoing, neither the Company nor the Board shall have any obligation to take any action to prevent the assessment of any tax or penalty on any Participant under Section 409A, and neither the Company nor the Board will have any liability to any Participant for such tax or penalty.

13. COMPLIANCE WITH SECURITIES LAW.

The grant of Awards and the issuance of shares of Stock pursuant to any Award shall be subject to compliance with all applicable requirements of federal, state and foreign law with respect to such securities and the requirements of any stock exchange or market system upon which the Stock may then be listed. In addition, no Award may be exercised or shares

issued pursuant to an Award unless (a) a registration statement under the Securities Act shall at the time of such exercise or issuance be in effect with respect to the shares issuable pursuant to the Award or (b) in the opinion of legal counsel to the Company, the shares issuable pursuant to the Award may be issued in accordance with the terms of an applicable exemption from the registration requirements of the Securities Act. Except as otherwise determined by the Board, the Company intends that securities issued pursuant to the Plan be exempt from requirements of registration and qualification of such securities pursuant to the exemptions afforded by Rule 701 promulgated under the Securities Act and any other applicable exemptions, and the Plan shall be so construed. The inability of the Company to obtain from any regulatory body having jurisdiction the authority, if any, deemed by the Company's legal counsel to be necessary to the lawful issuance and sale of any shares hereunder shall relieve the Company of any liability in respect of the failure to issue or sell such shares as to which such requisite authority shall not have been obtained. As a condition to issuance of any Stock, the Company may require the Participant to satisfy any qualifications that may be necessary or appropriate, to evidence compliance with any applicable law or regulation and to make any representation or warranty with respect thereto as may be requested by the Company.

14. AMENDMENT OR TERMINATION OF PLAN.

The Board may amend, suspend or terminate the Plan at any time. However, without the approval of the Company's stockholders, there shall be (a) no increase in the maximum aggregate number of shares of Stock that may be issued under the Plan (except by operation of the provisions of Sections 4.2 and 4.3), (b) no change in the class of persons eligible to receive Incentive Stock Options, and (c) no other amendment of the Plan that would require approval of the Company's stockholders under any applicable law, regulation or rule, including the rules of any stock exchange or quotation system upon which the Stock may then be listed or quoted. No amendment, suspension or termination of the Plan shall affect any then outstanding Award unless expressly provided by the Board. Except as provided by the next sentence, no amendment, suspension or termination of the Plan may have a materially adverse effect on any then outstanding Award without the consent of the Participant. Notwithstanding any other provision of the Plan or any Award Agreement to the contrary, the Board may, in its sole and absolute discretion and without the consent of any Participant, amend the Plan or any Award Agreement, to take effect retroactively or otherwise, as it deems necessary or advisable for the purpose of conforming the Plan or such Award Agreement to any present or future law, regulation or rule applicable to the Plan, including, but not limited to, Section 409A.

15. MISCELLANEOUS PROVISIONS.

15.1 Restrictions on Transfer of Shares.

(a) Shares issued under the Plan may be subject to a right of first refusal, one or more repurchase options, or other conditions and restrictions as determined by the Board in its discretion at the time the Award is granted. The Company shall have the right to assign at any time any repurchase right it may have, whether or not such right is then exercisable, to one or more persons as may be selected by the Company. Upon request by the Company, each Participant shall execute any agreement evidencing such transfer restrictions prior to the receipt of shares of Stock hereunder and shall promptly present to the Company any and all certificates representing shares of Stock acquired hereunder for the placement on such certificates of appropriate legends evidencing any such transfer restrictions.

(b) Notwithstanding the provisions of any Award Agreement to the contrary, at any time prior to the date on which the Stock is listed on a national securities exchange (as such term is used in the Exchange Act) or is traded on the over-the-counter market and prices therefore are published daily on business days in a recognized financial journal, the Board may prohibit any Participant who acquires shares of Stock pursuant to the Plan or any transferee of such Participant from selling, transferring, assigning, pledging, or otherwise disposing of or encumbering any such shares (each, a “*Transfer*”) without the prior written consent of the Board. The Board may withhold consent to any Transfer for any reason, including without limitation any Transfer (i) to any individual or entity identified by the Company as a potential competitor or considered by the Company to be unfriendly, or (ii) if such Transfer increases the risk of the Company having a class of security held of record by such number of persons as would require the Company to register any class of securities under the Exchange Act; or (iii) if such Transfer would result in the loss of any federal or state securities law exemption relied upon by the Company in connection with the initial issuance of such shares or the issuance of any other securities; or (iv) if such Transfer is facilitated in any manner by any public posting, message board, trading portal, Internet site, or similar method of communication, including without limitation any trading portal or Internet site intended to facilitate secondary transfers of securities; or (v) if such Transfer is to be effected in a brokered transaction; or (vi) if such Transfer would be of less than all of the shares of Stock then held by the stockholder and its affiliates or is to be made to more than a single transferee.

15.2 Forfeiture Events. The Board may determine that the Participant’s rights, payments, and benefits with respect to an Award shall be subject to reduction, cancellation, forfeiture, or recoupment upon the occurrence of specified events, in addition to any otherwise applicable vesting or performance conditions of an Award. Such events may include, but shall not be limited to, termination of Service for Cause, any act by a Participant, whether before or after termination of Service, that would constitute Cause for termination of Service, or any accounting restatement due to material noncompliance of the Company with any financial reporting requirements of securities laws as a result of which, and to the extent that, such reduction, cancellation, forfeiture, or recoupment is required by applicable securities laws.

15.3 Provision of Information. At least annually, copies of the Company’s balance sheet and income statement for the just completed fiscal year shall be made available to each Participant and purchaser of shares of Stock upon the exercise of an Award; provided, however, that this requirement shall not apply if all offers and sales of securities pursuant to the Plan comply with all applicable conditions of Rule 701 under the Securities Act. The Company shall not be required to provide such information to key persons whose duties in connection with the Company assure them access to equivalent information. The Company shall deliver to each Participant such disclosures as are required in accordance with Rule 701 under the Securities Act. Notwithstanding the foregoing, at any time the Company is relying on the exemption provided by Rule 12h-1(f) under the Exchange Act, the Company shall provide to the applicable Participants the information described in Securities Act Rules 701(e)(3), (4) and (5) by a method allowed under Rule 12h-1(f)(1)(vi) and in accordance with the requirements of Rule 12h-1(f)(1)(vi), provided that the Participant agrees to keep the information confidential until the Company becomes subject to the reporting requirements of Section 13 or Section 15(d) of the Exchange Act.

15.4 Rights as Employee, Consultant or Director. No person, even though eligible pursuant to Section 5, shall have a right to be selected as a Participant, or, having been so selected, to be selected again as a Participant. Nothing in the Plan or any Award granted under the Plan shall confer on any Participant a right to remain an Employee, Consultant or Director or interfere with or limit in any way any right of a Participating Company to terminate the Participant's Service at any time. To the extent that an Employee of a Participating Company other than the Company receives an Award under the Plan, that Award shall in no event be understood or interpreted to mean that the Company is the Employee's employer or that the Employee has an employment relationship with the Company.

15.5 Rights as a Stockholder. A Participant shall have no rights as a stockholder with respect to any shares covered by an Award until the date of the issuance of such shares (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company). No adjustment shall be made for dividends, distributions or other rights for which the record date is prior to the date such shares are issued, except as provided in Section 4.3 or another provision of the Plan.

15.6 Delivery of Title to Shares. Subject to any governing rules or regulations, the Company shall issue or cause to be issued the shares of Stock acquired pursuant to an Award and shall deliver such shares to or for the benefit of the Participant by means of one or more of the following: (a) by delivering to the Participant evidence of book entry shares of Stock credited to the account of the Participant, (b) by depositing such shares of Stock for the benefit of the Participant with any broker with which the Participant has an account relationship, or (c) by delivering such shares of Stock to the Participant in certificate form.

15.7 Fractional Shares. The Company shall not be required to issue fractional shares upon the exercise or settlement of any Award.

15.8 Retirement and Welfare Plans. Neither Awards made under this Plan nor shares of Stock or cash paid pursuant to such Awards may be included as "compensation" for purposes of computing the benefits payable to any Participant under any Participating Company's retirement plans (both qualified and non-qualified) or welfare benefit plans unless such other plan expressly provides that such compensation shall be taken into account in computing a Participant's benefits.

15.9 Severability. If any one or more of the provisions (or any part thereof) of this Plan shall be held invalid, illegal or unenforceable in any respect, such provision shall be modified so as to make it valid, legal and enforceable, and the validity, legality and enforceability of the remaining provisions (or any part thereof) of the Plan shall not in any way be affected or impaired thereby.

15.10 No Constraint on Corporate Action. Nothing in this Plan shall be construed to: (a) limit, impair, or otherwise affect the Company's or another Participating Company's right or power to make adjustments, reclassifications, reorganizations, or changes of

its capital or business structure, or to merge or consolidate, or dissolve, liquidate, sell, or transfer all or any part of its business or assets; or (b) limit the right or power of the Company or another Participating Company to take any action which such entity deems to be necessary or appropriate.

15.11 Unfunded Obligation. Participants shall have the status of general unsecured creditors of the Company. Any amounts payable to Participants pursuant to the Plan shall be considered unfunded and unsecured obligations for all purposes, including, without limitation, Title I of the Employee Retirement Income Security Act of 1974. No Participating Company shall be required to segregate any monies from its general funds, or to create any trusts, or establish any special accounts with respect to such obligations. The Company shall retain at all times beneficial ownership of any investments, including trust investments, which the Company may make to fulfill its payment obligations hereunder. Any investments or the creation or maintenance of any trust or any Participant account shall not create or constitute a trust or fiduciary relationship between the Board or any Participating Company and a Participant, or otherwise create any vested or beneficial interest in any Participant or the Participant's creditors in any assets of any Participating Company. The Participants shall have no claim against any Participating Company for any changes in the value of any assets which may be invested or reinvested by the Company with respect to the Plan.

15.12 Choice of Law. Except to the extent governed by applicable federal law, the validity, interpretation, construction and performance of the Plan and each Award Agreement shall be governed by the laws of the State of Delaware, without regard to its conflict of law rules.

15.13 Stockholder Approval. The Plan or any increase in the maximum aggregate number of shares of Stock issuable thereunder as provided in Section 4.1 (the "*Authorized Shares*") shall be approved by a majority of the outstanding securities of the Company entitled to vote by the later of (a) a period beginning twelve (12) months before and ending twelve (12) months after the date of adoption thereof by the Board or (b) the first issuance of any security pursuant to the Plan in the State of California (within the meaning of Section 25008 of the California Corporations Code). Awards granted prior to security holder approval of the Plan or in excess of the Authorized Shares previously approved by the security holders shall become exercisable no earlier than the date of security holder approval of the Plan or such increase in the Authorized Shares, as the case may be, and such Awards shall be rescinded if such security holder approval is not received in the manner described in the preceding sentence.

PLAN HISTORY

September 21, 2015	Board adopts Plan, with an initial reserve of 7,500,000 shares.
September 21, 2015	Stockholders of the Company approve Plan.
September 8, 2017	Board adopts the amended and restated Plan and Stockholders of the Company approve the amendment and restatement of Plan for a new reserve of 10,415,750 shares.
March 16, 2018	Board adopts the amended and restated Plan and Stockholders of the Company approve the amendment and restatement of Plan for a new reserve of 12,615,750 shares.
October 16, 2019	Board adopts the amended and restated Plan and Stockholders of the Company approve the amendment and restatement of Plan for a new reserve of 14,115,750 shares.

APPENDIX A
TO THIRD AMENDED AND RESTATED TEMPUS LABS, INC.
2015 STOCK PLAN

Provisions For California Residents

With respect to Awards granted to California residents prior to a public offering of capital stock of the Company that is effected pursuant to a registration statement filed with, and declared effective by, the Securities and Exchange Commission under the Securities Act of 1933, as amended, and only to the extent required by applicable law, the following provisions shall apply notwithstanding anything in the Plan or an Award Agreement to the contrary:

1. With respect to any Award granted in the form of a stock option pursuant to Section 6 of the Plan:

(a) The exercise period shall be no more than 120 months from the date the Option is granted.

(b) The Options shall be non-transferable other than by will, by the laws of descent and distribution, or, if and to the extent permitted under the Award Agreement, to a revocable trust or as permitted by Rule 701 of the Securities Act of 1933, as amended (17 C.F.R. 230.701).

(c) Unless Service is terminated for “cause” as defined by applicable law, the terms of the Plan or Award Agreement, or a contract of employment or other service, the right to exercise the Option in the event of termination of Service, to the extent that the Award recipient is entitled to exercise on the date employment terminates, will continue until the earlier of the Option expiration date, or:

(1) At least 6 months from the date of termination if termination was caused by death or Disability.

(2) At least 30 days from the date of termination if termination was caused by other than death or Disability.

2. With respect to an Award, granted pursuant to of Section 7 the Plan, that provides the Award recipient the right to purchase stock, the Award shall be non-transferable other than by will, by the laws of descent and distribution, or, if and to the extent permitted under the Award Agreement, to a revocable trust or as permitted by Rule 701 of the Securities Act of 1933, as amended (17 C.F.R. 230.701).

3. The Plan shall have a termination date of not more than 10 years from the date the Plan is adopted by the Board or the date the Plan is approved by the security holders, whichever is earlier.

4. Security holders representing a majority of the Company's outstanding securities entitled to vote must approve the Plan by the later of (a) 12 months after the date the Plan is adopted or (b) 12 months after the granting of any Award to a resident of California. Any Option exercised or any securities purchased before security holder approval is obtained must be rescinded if security holder approval is not obtained within the period described in the preceding sentence. Such securities shall not be counted in determining whether such approval is obtained.

5. The Company will provide financial statements to each Award recipient annually during the period such individual has Awards outstanding, or as otherwise required under section 260.140.46 of Title 10 of the California Code of Regulations. Notwithstanding the foregoing, the Company will not be required to provide such financial statements to Award recipients when the Plan complies with all conditions of Rule 701 of the Securities Act of 1933, as amended (17 C.F.R. 230.701); provided that for purposes of determining such compliance, any registered domestic partner shall be considered a "family member" as that term is defined in Rule 701.

6. The Plan is intended to comply with section 25102(o) of the California Corporations Code. Any provision of this Plan which is inconsistent with section 25102(o), including without limitation any provision of this Plan that is more restrictive than would be permitted by section 25102(o) as amended from time to time, shall, without further act or amendment by the Board, be reformed to comply with the provisions of section 25102(o). If at any time the Board determines that the delivery of Stock under the Plan is or may be unlawful under the laws of any applicable jurisdiction, or federal or state securities laws, the right to exercise an Award or receive shares of Stock pursuant to an Award shall be suspended until the Board determines that such delivery is lawful. The Company shall have no obligation to effect any registration or qualification of the Stock under federal or state laws.

TABLE OF CONTENTS

	Page
1. Establishment, Purpose and Term of Plan	1
1.1 Establishment	1
1.2 Purpose	1
1.3 Term of Plan	1
2. Definitions and Construction	1
2.1 Definitions	1
2.2 Construction	6
3. Administration	6
3.1 Administration by the Board	6
3.2 Authority of Officers	6
3.3 Powers of the Board	7
3.4 Administration with Respect to Insiders	8
3.5 Indemnification	8
4. Shares Subject to Plan	8
4.1 Maximum Number of Shares Issuable	8
4.2 Share Counting	8
4.3 Adjustments for Changes in Capital Structure	9
4.4 Assumption or Substitution of Awards	9
5. Eligibility, Participation and Option Limitations	9
5.1 Persons Eligible for Awards	9
5.2 Participation in the Plan	9
5.3 Incentive Stock Option Limitations	10
6. Stock Options	10
6.1 Exercise Price	10
6.2 Exercisability and Term of Options	11
6.3 Payment of Exercise Price	11
6.4 Effect of Termination of Service	12
6.5 Transferability of Options	13

TABLE OF CONTENTS

(continued)

	Page
7. Restricted Stock Awards	13
7.1 Types of Restricted Stock Awards Authorized	14
7.2 Purchase Price	14
7.3 Purchase Period	14
7.4 Payment of Purchase Price	14
7.5 Vesting and Restrictions on Transfer	14
7.6 Voting Rights; Dividends and Distributions	14
7.7 Effect of Termination of Service	15
7.8 Nontransferability of Restricted Stock Award Rights	15
8. Restricted Stock Units	15
8.1 Grant of Restricted Stock Unit Awards	15
8.2 Purchase Price	16
8.3 Vesting	16
8.4 Voting Rights, Dividend Equivalent Rights and Distributions	16
8.5 Effect of Termination of Service	17
8.6 Settlement of Restricted Stock Unit Awards	17
8.7 Nontransferability of Restricted Stock Unit Awards	17
9. Standard Forms of Award Agreements	17
9.1 Award Agreements	17
9.2 Authority to Vary Terms	18
10. Change in Control	18
10.1 Effect of Change in Control on Awards	18
10.2 Federal Excise Tax Under Section 4999 of the Code	19
11. Tax Withholding	20
11.1 Tax Withholding in General	20
11.2 Withholding in or Directed Sale of Shares	20
12. Compliance with Section 409A	20
12.1 In General	20
12.2 Certain Limitations	21
13. Compliance with Securities Law	21
14. Amendment or Termination of Plan	22

TABLE OF CONTENTS
(continued)

	Page
15. Miscellaneous Provisions	22
15.1 Restrictions on Transfer of Shares	22
15.2 Forfeiture Events	23
15.3 Provision of Information	23
15.4 Rights as Employee, Consultant or Director	24
15.5 Rights as a Stockholder	24
15.6 Delivery of Title to Shares	24
15.7 Fractional Shares	24
15.8 Retirement and Welfare Plans	24
15.9 Severability	24
15.10 No Constraint on Corporate Action	24
15.11 Unfunded Obligation	25
15.12 Choice of Law	25
15.13 Stockholder Approval	25

**AMENDMENT TO
THIRD AMENDED AND RESTATED
TEMPUS LABS, INC.
2015 STOCK PLAN**

This Amendment (this "Amendment") to the Third Amended and Restated Tempus Labs, Inc. 2015 Stock Plan (as amended, the "Plan") was adopted by the Board of Directors (the "Board") of Tempus Labs, Inc. (the "Company") on June 24, 2020, subject to approval by the Company's stockholders.

WHEREAS, the Company maintains the Plan;

WHEREAS, pursuant to Section 14 of the Plan, the Board may amend the Plan at any time, subject to approval by the Company's stockholders in accordance with Section 15.13 of the Plan;

WHEREAS, the Board deems it to be in the best interests of the Company and its stockholders to amend the Plan in order to increase the aggregate number of authorized shares that may be issued pursuant to Section 4.1 of the Plan; and

WHEREAS, the Board reviewed, and adopted, this Amendment June 24, 2020, subject to approval by the Company's stockholders in accordance with Section 15.13 of the Plan.

NOW, THEREFORE, the following amendments and modifications are hereby made a part of the Plan, subject to, and effective as of the date of, the approval of this Amendment by the Company's stockholders:

1. Section 4.1 of the Plan is amended by replacing the reference to "14,115,750" with "20,115,750" in order to reflect an increase in the aggregate number of authorized shares that may be issued pursuant to Section 4.1 of the Plan.
2. All other terms and conditions of the Plan not otherwise amended or modified by this Amendment, either expressly or by necessary implication, shall remain in full force and effect.

**AMENDMENT TO
THIRD AMENDED AND RESTATED
TEMPUS LABS, INC.
2015 STOCK PLAN**

This Amendment (this "Amendment") to the Third Amended and Restated Tempus Labs, Inc. 2015 Stock Plan (as amended, the "Plan") was adopted by the Board of Directors (the "Board") of Tempus Labs, Inc. (the "Company") on November 16, 2020, subject to approval by the Company's stockholders.

WHEREAS, the Company maintains the Plan;

WHEREAS, pursuant to Section 14 of the Plan, the Board may amend the Plan at any time, subject to approval by the Company's stockholders in accordance with Section 15.13 of the Plan;

WHEREAS, the Board deems it to be in the best interests of the Company and its stockholders to amend the Plan in order to increase the aggregate number of authorized shares that may be issued pursuant to Section 4.1 of the Plan; and

WHEREAS, the Board reviewed, and adopted, this Amendment on November 16, 2020, subject to approval by the Company's stockholders in accordance with Section 15.13 of the Plan.

NOW, THEREFORE, the following amendments and modifications are hereby made a part of the Plan, subject to, and effective as of the date of, the approval of this Amendment by the Company's stockholders:

1. Section 4.1 of the Plan is amended by replacing the reference to "20,115,750" with "22,115,750" in order to reflect an increase in the aggregate number of authorized shares that may be issued pursuant to Section 4.1 of the Plan.
2. All other terms and conditions of the Plan not otherwise amended or modified by this Amendment, either expressly or by necessary implication, shall remain in full force and effect.

**AMENDMENT TO
THIRD AMENDED AND RESTATED
TEMPUS LABS, INC.
2015 STOCK PLAN**

This Amendment (this "Amendment") to the Third Amended and Restated Tempus Labs, Inc. 2015 Stock Plan (as amended, the "Plan") was adopted by the Board of Directors (the "Board") of Tempus Labs, Inc. (the "Company") on April 27, 2021, subject to approval by the Company's stockholders.

WHEREAS, the Company maintains the Plan;

WHEREAS, pursuant to Section 14 of the Plan, the Board may amend the Plan at any time;

WHEREAS, the Board deems it to be in the best interests of the Company and its stockholders to amend the Plan in order to permit the grant of awards to be made under the Plan to participants outside of the United States; and

WHEREAS, the Board has reviewed, and adopted, this Amendment, effective as of April 27, 2021.

NOW, THEREFORE, the following amendments and modifications are hereby made a part of the Plan, effective as of April 27, 2021:

1. The following paragraph is hereby added to the Plan as a new Section 3.6:
"3.6 **Non-United States Participants**. Without amending the Plan, the Board may grant Awards to Employees, Consultants and Directors residing in non-United States jurisdictions on such terms and conditions different from those specified in the Plan, including the terms of any Award Agreement or plan, adopted by the Company or any Subsidiary Corporation to comply with, or take advantage of favorable tax or other treatment available under, the laws of any non-United States jurisdiction, as may in the judgment of the Board be necessary or desirable to foster and promote achievement of the purposes of the Plan and, in furtherance of such purposes the Board may make such modifications, amendments, procedures, subplans and the like as may be necessary or advisable to comply with provisions of laws in other countries or jurisdictions in which the Company or its Subsidiary Corporations operates or has employees."
2. All other terms and conditions of the Plan not otherwise amended or modified by this Amendment, either expressly or by necessary implication, shall remain in full force and effect.

**AMENDMENT TO
THIRD AMENDED AND RESTATED
TEMPUS LABS, INC.
2015 STOCK PLAN**

This Amendment (this "Amendment") to the Third Amended and Restated Tempus Labs, Inc. 2015 Stock Plan (as amended, the "Plan") was adopted by the Board of Directors (the "Board") of Tempus Labs, Inc. (the "Company") on January 27, 2022, subject to approval by the Company's stockholders.

WHEREAS, the Company maintains the Plan;

WHEREAS, pursuant to Section 14 of the Plan, the Board may amend the Plan at any time, subject to approval by the Company's stockholders in accordance with Section 15.13 of the Plan;

WHEREAS, the Board deems it to be in the best interests of the Company and its stockholders to amend the Plan in order to increase the aggregate number of authorized shares that may be issued pursuant to Section 4.1 of the Plan; and

WHEREAS, the Board reviewed, and adopted, this Amendment on January 27, 2022, subject to approval by the Company's stockholders in accordance with Section 15.13 of the Plan.

NOW, THEREFORE, the following amendments and modifications are hereby made a part of the Plan, subject to, and effective as of the date of, the approval of this Amendment by the Company's stockholders:

1. Section 4.1 of the Plan is amended by replacing the reference to "22,115,750" with "25,115,750" in order to reflect an increase in the aggregate number of authorized shares that may be issued pursuant to Section 4.1 of the Plan.
2. All other terms and conditions of the Plan not otherwise amended or modified by this Amendment, either expressly or by necessary implication, shall remain in full force and effect.

TEMPUS LABS, INC.
2022 EQUITY INCENTIVE PLAN

Adopted by the Board of Directors: December 18, 2021
APPROVED BY THE STOCKHOLDERS: JANUARY 3, 2022

1. GENERAL.

(a) Successor to and Continuation of Prior Plan. The Plan is the successor to and continuation of the Prior Plan. As of the Effective Date, (i) no additional awards may be granted under the Prior Plan; (ii) any Returning Shares will become available for issuance pursuant to Awards granted under this Plan; and (iii) all outstanding awards granted under the Prior Plan will remain subject to the terms of the Prior Plan (except to the extent such outstanding awards result in Returning Shares that become available for issuance pursuant to Awards granted under this Plan). All Awards granted under this Plan will be subject to the terms of this Plan.

(b) Plan Purpose. The Company, by means of the Plan, seeks to secure and retain the services of Employees, Directors and Consultants, to provide incentives for such persons to exert maximum efforts for the success of the Company and any Affiliate and to provide a means by which such persons may be given an opportunity to benefit from increases in value of the Common Stock through the granting of Awards.

(c) Available Awards. The Plan provides for the grant of the following Awards: (i) Incentive Stock Options; (ii) Nonstatutory Stock Options; (iii) SARs; (iv) Restricted Stock Awards; (v) RSU Awards; (vi) Performance Awards; and (vii) Other Awards.

(d) Adoption Date; Effective Date. The Plan will come into existence on the Adoption Date, but no Award may be granted prior to the Effective Date.

2. SHARES SUBJECT TO THE PLAN.

(a) Share Reserve. Subject to adjustment in accordance with Section 2(c) and any adjustments as necessary to implement any Capitalization Adjustments, the aggregate number of shares of Common Stock that may be issued pursuant to Awards will not exceed 10,000,000 shares, provided that such aggregate number of shares of Common Stock will automatically increase on January 1 of each year for a period of ten years commencing on January 1, 2023 and ending on (and including) January 1, 2032, in an amount equal to three percent (3%) of the total number of shares of Combined Common Stock outstanding on December 31 of the preceding year; provided, however, that the Board may act prior to January 1st of a given year to provide that the increase for such year will be a lesser number of shares of Common Stock.

(b) Aggregate Incentive Stock Option Limit. Notwithstanding anything to the contrary in Section 2(a) and subject to any adjustments as necessary to implement any Capitalization Adjustments, the aggregate maximum number of shares of Common Stock that may be issued pursuant to the exercise of Incentive Stock Options is 30,000,000 shares.

(c) Share Reserve Operation.

(i) Limit Applies to Common Stock Issued Pursuant to Awards. For clarity, the Share Reserve is a limit on the number of shares of Common Stock that may be issued pursuant to Awards and does not limit the granting of Awards, except that the Company will keep available at all times the number of shares of Common Stock reasonably required to satisfy its obligations to issue shares pursuant to such Awards. Shares may be issued in connection with a merger or acquisition as permitted by, as applicable, Nasdaq Listing Rule 5635(c), NYSE Listed Company Manual Section 303A.08, NYSE American Company Guide Section 711 or other applicable rule, and such issuance will not reduce the number of shares available for issuance under the Plan.

(ii) Actions that Do Not Constitute Issuance of Common Stock and Do Not Reduce Share Reserve. The following actions do not result in an issuance of shares under the Plan and accordingly do not reduce the number of shares subject to the Share Reserve and available for issuance under the Plan: (1) the expiration or termination of any portion of an Award without the shares covered by such portion of the Award having been issued; (2) the settlement of any portion of an Award in cash (*i.e.*, the Participant receives cash rather than Common Stock); (3) the withholding of shares that would otherwise be issued by the Company to satisfy the exercise, strike or purchase price of an Award; or (4) the withholding of shares that would otherwise be issued by the Company to satisfy a tax withholding obligation in connection with an Award.

(iii) Reversion of Previously Issued Shares of Common Stock to Share Reserve. The following shares of Common Stock previously issued pursuant to an Award and accordingly initially deducted from the Share Reserve will be added back to the Share Reserve and again become available for issuance under the Plan: (1) any shares that are forfeited back to or repurchased by the Company because of a failure to meet a contingency or condition required for the vesting of such shares; (2) any shares that are reacquired by the Company to satisfy the exercise, strike or purchase price of an Award; and (3) any shares that are reacquired by the Company to satisfy a tax withholding obligation in connection with an Award.

3. ELIGIBILITY AND LIMITATIONS.

(a) Eligible Award Recipients. Subject to the terms of the Plan, Employees, Directors and Consultants are eligible to receive Awards.

(b) Specific Award Limitations.

(i) Limitations on Incentive Stock Option Recipients. Incentive Stock Options may be granted only to Employees of the Company or a “parent corporation” or “subsidiary corporation” thereof (as such terms are defined in Sections 424(e) and (f) of the Code).

(ii) Incentive Stock Option \$100,000 Limitation. To the extent that the aggregate Fair Market Value (determined at the time of grant) of Common Stock with respect to which Incentive Stock Options are exercisable for the first time by any Optionholder during any calendar year (under all plans of the Company and any Affiliates) exceeds \$100,000 (or such

other limit established in the Code) or otherwise does not comply with the rules governing Incentive Stock Options, the Options or portions thereof that exceed such limit (according to the order in which they were granted) or otherwise do not comply with such rules will be treated as Nonstatutory Stock Options, notwithstanding any contrary provision of the applicable Option Agreement(s).

(iii) Limitations on Incentive Stock Options Granted to Ten Percent Stockholders. A Ten Percent Stockholder may not be granted an Incentive Stock Option unless (1) the exercise price of such Option is at least 110% of the Fair Market Value on the date of grant of such Option and (2) the Option is not exercisable after the expiration of five years from the date of grant of such Option.

(iv) Limitations on Nonstatutory Stock Options and SARs. Nonstatutory Stock Options and SARs may not be granted to Employees, Directors and Consultants unless the stock underlying such Awards is treated as “service recipient stock” under Section 409A or unless such Awards otherwise comply with the requirements of Section 409A.

(c) Aggregate Incentive Stock Option Limit. The aggregate maximum number of shares of Common Stock that may be issued pursuant to the exercise of Incentive Stock Options is the number of shares specified in Section 2(b).

(d) Non-Employee Director Compensation Limit. The aggregate value of all compensation granted or paid, as applicable, to any individual for service as a Non-Employee Director with respect to any calendar year, including Awards granted and cash fees paid by the Company to such Non-Employee Director, will not exceed (1) \$750,000 in total value or (2) in the event such Non-Employee Director is first appointed or elected to the Board during such calendar year, \$1,000,000 in total value, in each case, calculating the value of any equity awards based on the grant date fair value of such equity awards for financial reporting purposes. The limitations in this Section 3(d) shall apply commencing with the first calendar year that begins following the Effective Date.

4. OPTIONS AND STOCK APPRECIATION RIGHTS.

Each Option and SAR will have such terms and conditions as determined by the Board. Each Option will be designated in writing as an Incentive Stock Option or Nonstatutory Stock Option at the time of grant; provided, however, that if an Option is not so designated or if an Option designated as an Incentive Stock Option fails to qualify as an Incentive Stock Option, then such Option will be a Nonstatutory Stock Option, and the shares purchased upon exercise of each type of Option will be separately accounted for. Each SAR will be denominated in shares of Common Stock equivalents. The terms and conditions of separate Options and SARs need not be identical; provided, however, that each Option Agreement and SAR Agreement will conform (through incorporation of provisions hereof by reference in the Award Agreement or otherwise) to the substance of each of the following provisions:

(a) Term. Subject to Section 3(b) regarding Ten Percent Stockholders, no Option or SAR will be exercisable after the expiration of ten years from the date of grant of such Award or such shorter period specified in the Award Agreement.

(b) Exercise or Strike Price. Subject to Section 3(b) regarding Ten Percent Stockholders, the exercise or strike price of each Option or SAR will not be less than 100% of the Fair Market Value on the date of grant of such Award. Notwithstanding the foregoing, an Option or SAR may be granted with an exercise or strike price lower than 100% of the Fair Market Value on the date of grant of such Award if such Award is granted pursuant to an assumption of or substitution for another option or stock appreciation right pursuant to a Corporate Transaction and in a manner consistent with the provisions of Sections 409A and, if applicable, 424(a) of the Code.

(c) Exercise Procedure and Payment of Exercise Price for Options. In order to exercise an Option, the Participant must provide notice of exercise to the Plan Administrator in accordance with the procedures specified in the Option Agreement or otherwise provided by the Company. The Board has the authority to grant Options that do not permit all of the following methods of payment (or otherwise restrict the ability to use certain methods) and to grant Options that require the consent of the Company to utilize a particular method of payment. The exercise price of an Option may be paid, to the extent permitted by Applicable Law and as determined by the Board, by one or more of the following methods of payment to the extent set forth in the Option Agreement:

(i) by cash or check, bank draft or money order payable to the Company;

(ii) pursuant to a “cashless exercise” program developed under Regulation T as promulgated by the Federal Reserve Board that, prior to the issuance of the Common Stock subject to the Option, results in either the receipt of cash (or check) by the Company or the receipt of irrevocable instructions to pay the exercise price to the Company from the sales proceeds;

(iii) by delivery to the Company (either by actual delivery or attestation) of shares of Common Stock that are already owned by the Participant free and clear of any liens, claims, encumbrances or security interests, with a Fair Market Value on the date of exercise that does not exceed the exercise price, provided that (1) at the time of exercise the Common Stock is publicly traded, (2) any remaining balance of the exercise price not satisfied by such delivery is paid by the Participant in cash or other permitted form of payment, (3) such delivery would not violate any Applicable Law or agreement restricting the redemption of the Common Stock, (4) any certificated shares are endorsed or accompanied by an executed assignment separate from certificate, and (5) such shares have been held by the Participant for any minimum period necessary to avoid adverse accounting treatment as a result of such delivery;

(iv) if the Option is a Nonstatutory Stock Option, by a “net exercise” arrangement pursuant to which the Company will reduce the number of shares of Common Stock issuable upon exercise by the largest whole number of shares with a Fair Market Value on the date of exercise that does not exceed the exercise price, provided that (1) such shares used to pay the exercise price will not be exercisable thereafter and (2) any remaining balance of the exercise price not satisfied by such net exercise is paid by the Participant in cash or other permitted form of payment; or

(v) in any other form of consideration that may be acceptable to the Board and permissible under Applicable Law.

(d) Exercise Procedure and Payment of Appreciation Distribution for SARs. In order to exercise any SAR, the Participant must provide notice of exercise to the Plan Administrator in accordance with the SAR Agreement. The appreciation distribution payable to a Participant upon the exercise of a SAR will not be greater than an amount equal to the excess of (i) the aggregate Fair Market Value on the date of exercise of a number of shares of Common Stock equal to the number of Common Stock equivalents that are vested and being exercised under such SAR, over (ii) the strike price of such SAR. Such appreciation distribution may be paid to the Participant in the form of Common Stock or cash (or any combination of Common Stock and cash) or in any other form of payment, as determined by the Board and specified in the SAR Agreement.

(e) Transferability. Options and SARs may not be transferred to third party financial institutions for value. The Board may impose such additional limitations on the transferability of an Option or SAR as it determines. In the absence of any such determination by the Board, the following restrictions on the transferability of Options and SARs will apply, provided that except as explicitly provided herein, neither an Option nor a SAR may be transferred for consideration and *provided, further*, that if an Option is an Incentive Stock Option, such Option may be deemed to be a Nonstatutory Stock Option as a result of such transfer:

(i) Restrictions on Transfer. An Option or SAR will not be transferable, except by will or by the laws of descent and distribution, and will be exercisable during the lifetime of the Participant only by the Participant; provided, however, that the Board may permit transfer of an Option or SAR in a manner that is not prohibited by applicable tax and securities laws upon the Participant's request, including to a trust if the Participant is considered to be the sole beneficial owner of such trust (as determined under Section 671 of the Code and applicable state law) while such Option or SAR is held in such trust, provided that the Participant and the trustee enter into a transfer and other agreements required by the Company.

(ii) Domestic Relations Orders. Notwithstanding the foregoing, subject to the execution of transfer documentation in a format acceptable to the Company and subject to the approval of the Board or a duly authorized Officer, an Option or SAR may be transferred pursuant to a domestic relations order.

(f) Vesting. The Board may impose such restrictions on or conditions to the vesting and/or exercisability of an Option or SAR as determined by the Board. Except as otherwise provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate, vesting of Options and SARs will cease upon termination of the Participant's Continuous Service.

(g) Termination of Continuous Service for Cause. Except as explicitly otherwise provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate, if a Participant's Continuous Service is terminated for Cause, the Participant's Options and SARs will terminate and be forfeited immediately upon such termination of Continuous Service, and the Participant will be prohibited from exercising any portion (including any vested portion) of such Awards on and after the date of such termination of Continuous Service and the Participant will have no further right, title or interest in such forfeited Award, the shares of Common Stock subject to the forfeited Award, or any consideration in respect of the forfeited Award.

(h) Post-Termination Exercise Period Following Termination of Continuous Service for Reasons Other than Cause. Subject to Section 4(i), if a Participant's Continuous Service terminates for any reason other than for Cause, the Participant may exercise his or her Option or SAR to the extent vested, but only within the following period of time or, if applicable, such other period of time provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate; provided, however, that in no event may such Award be exercised after the expiration of its maximum term (as set forth in Section 4(a)):

(i) three months following the date of such termination if such termination is a termination without Cause (other than any termination due to the Participant's Disability or death);

(ii) 12 months following the date of such termination if such termination is due to the Participant's Disability;

(iii) 18 months following the date of such termination if such termination is due to the Participant's death; or

(iv) 18 months following the date of the Participant's death if such death occurs following the date of such termination but during the period such Award is otherwise exercisable (as provided in (i) or (ii) above).

Following the date of such termination, to the extent the Participant does not exercise such Award within the applicable Post-Termination Exercise Period (or, if earlier, prior to the expiration of the maximum term of such Award), such unexercised portion of the Award will terminate, and the Participant will have no further right, title or interest in the terminated Award, the shares of Common Stock subject to the terminated Award, or any consideration in respect of the terminated Award.

(i) Restrictions on Exercise; Extension of Exercisability. A Participant may not exercise an Option or SAR at any time that the issuance of shares of Common Stock upon such exercise would violate Applicable Law. Except as otherwise provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate, if a Participant's Continuous Service terminates for any reason other than for Cause and, at any time during the last thirty days of the applicable Post-Termination Exercise Period: (i) the exercise of the Participant's Option or SAR would be prohibited solely because the issuance of shares of Common Stock upon such exercise would violate Applicable Law, or (ii) the immediate sale of any shares of Common Stock issued upon such exercise would violate the Company's Trading Policy, then the applicable Post-Termination Exercise Period will be extended to the last day of the calendar month that commences following the date the Award would otherwise expire, with an additional extension of the exercise period to the last day of the next calendar month to apply if any of the foregoing restrictions apply at any time during such extended exercise period, generally without limitation as to the maximum permitted number of extensions); provided, however, that in no event may such Award be exercised after the expiration of its maximum term (as set forth in Section 4(a)).

(j) Non-Exempt Employees. No Option or SAR, whether or not vested, granted to an Employee who is a non-exempt employee for purposes of the Fair Labor Standards Act of 1938, as amended, will be first exercisable for any shares of Common Stock until at least six months following the date of grant of such Award. Notwithstanding the foregoing, in accordance with the provisions of the Worker Economic Opportunity Act, any vested portion of such Award may be exercised earlier than six months following the date of grant of such Award in the event of (i) such Participant's death or Disability, (ii) a Corporate Transaction in which such Award is not assumed, continued or substituted, (iii) a Change in Control, or (iv) such Participant's retirement (as such term may be defined in the Award Agreement or another applicable agreement or, in the absence of any such definition, in accordance with the Company's then current employment policies and guidelines). This Section 4(j) is intended to operate so that any income derived by a non-exempt employee in connection with the exercise or vesting of an Option or SAR will be exempt from his or her regular rate of pay.

(k) Whole Shares. Options and SARs may be exercised only with respect to whole shares of Common Stock or their equivalents.

5. AWARDS OTHER THAN OPTIONS AND STOCK APPRECIATION RIGHTS.

(a) Restricted Stock Awards and RSU Awards. Each Restricted Stock Award and RSU Award will have such terms and conditions as determined by the Board; provided, however, that each Restricted Stock Award Agreement and RSU Award Agreement will conform (through incorporation of the provisions hereof by reference in the Award Agreement or otherwise) to the substance of each of the following provisions:

(i) Form of Award.

(1) Restricted Stock Awards: To the extent consistent with the Company's Bylaws, at the Board's election, shares of Common Stock subject to a Restricted Stock Award may be (A) held in book entry form subject to the Company's instructions until such shares become vested or any other restrictions lapse, or (B) evidenced by a certificate, which certificate will be held in such form and manner as determined by the Board. Unless otherwise determined by the Board, a Participant will have voting and other rights as a stockholder of the Company with respect to any shares subject to a Restricted Stock Award.

(2) RSU Awards: An RSU Award represents a Participant's right to be issued on a future date the number of shares of Common Stock that is equal to the number of restricted stock units subject to the RSU Award. As a holder of an RSU Award, a Participant is an unsecured creditor of the Company with respect to the Company's unfunded obligation, if any, to issue shares of Common Stock in settlement of such Award and nothing contained in the Plan or any RSU Agreement, and no action taken pursuant to its provisions, will create or be construed to create a trust of any kind or a fiduciary relationship between a Participant and the Company or an Affiliate or any other person. A Participant will not have voting or any other rights as a stockholder of the Company with respect to any RSU Award (unless and until shares are actually issued in settlement of a vested RSU Award).

(ii) Consideration.

(1) Restricted Stock Awards: A Restricted Stock Award may be granted in consideration for (A) cash or check, bank draft or money order payable to the Company, (B) services to the Company or an Affiliate, or (C) any other form of consideration as the Board may determine and permissible under Applicable Law.

(2) RSU Awards: Unless otherwise determined by the Board at the time of grant, an RSU Award will be granted in consideration for the Participant's services to the Company or an Affiliate, such that the Participant will not be required to make any payment to the Company (other than such services) with respect to the grant or vesting of the RSU Award, or the issuance of any shares of Common Stock pursuant to the RSU Award. If, at the time of grant, the Board determines that any consideration must be paid by the Participant (in a form other than the Participant's services to the Company or an Affiliate) upon the issuance of any shares of Common Stock in settlement of the RSU Award, such consideration may be paid in any form of consideration as the Board may determine and permissible under Applicable Law.

(iii) Vesting. The Board may impose such restrictions on or conditions to the vesting of a Restricted Stock Award or RSU Award as determined by the Board. Except as otherwise provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate, vesting of Restricted Stock Awards and RSU Awards will cease upon termination of the Participant's Continuous Service.

(iv) Termination of Continuous Service. Except as otherwise provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate, if a Participant's Continuous Service terminates for any reason, (1) the Company may receive through a forfeiture condition or a repurchase right any or all of the shares of Common Stock held by the Participant under his or her Restricted Stock Award that have not vested as of the date of such termination as set forth in the Restricted Stock Award Agreement and the Participant will have no further right, title or interest in the Restricted Stock Award, the shares of Common Stock subject to the Restricted Stock Award, or any consideration in respect of the Restricted Stock Award and (2) any portion of his or her RSU Award that has not vested will be forfeited upon such termination and the Participant will have no further right, title or interest in the RSU Award, the shares of Common Stock issuable pursuant to the RSU Award, or any consideration in respect of the RSU Award.

(v) Dividends and Dividend Equivalents. Dividends or dividend equivalents may be paid or credited, as applicable, with respect to any shares of Common Stock subject to a Restricted Stock Award or RSU Award, as determined by the Board and specified in the Award Agreement.

(vi) Settlement of RSU Awards. An RSU Award may be settled by the issuance of shares of Common Stock or cash (or any combination thereof) or in any other form of payment, as determined by the Board and specified in the RSU Award Agreement. At the time of grant, the Board may determine to impose such restrictions or conditions that delay such delivery to a date following the vesting of the RSU Award.

(b) Performance Awards. With respect to any Performance Award, the length of any Performance Period, the Performance Goals to be achieved during the Performance Period, the other terms and conditions of such Award, and the measure of whether and to what degree such Performance Goals have been attained will be determined by the Board.

(c) Other Awards. Other forms of Awards valued in whole or in part by reference to, or otherwise based on, Common Stock, including the appreciation in value thereof, may be granted either alone or in addition to Awards provided for under Section 4 and the preceding provisions of this Section 5. Subject to the provisions of the Plan, the Board will have sole and complete discretion to determine the persons to whom and the time or times at which such Other Awards will be granted, the number of shares of Common Stock (or the cash equivalent thereof) to be granted pursuant to such Other Awards and all other terms and conditions of such Other Awards.

6. ADJUSTMENTS UPON CHANGES IN COMMON STOCK; OTHER CORPORATE EVENTS.

(a) Capitalization Adjustments. In the event of a Capitalization Adjustment, the Board shall appropriately and proportionately adjust: (i) the class(es) and maximum number of shares of Common Stock subject to the Plan and the maximum number of shares by which the Share Reserve may annually increase pursuant to Section 2(a); (ii) the class(es) and maximum number of shares that may be issued pursuant to the exercise of Incentive Stock Options pursuant to Section 2(b); and (iii) the class(es) and number of securities and exercise price, strike price or purchase price of Common Stock subject to outstanding Awards. The Board shall make such adjustments, and its determination shall be final, binding and conclusive. Notwithstanding the foregoing, no fractional shares or rights for fractional shares of Common Stock shall be created in order to implement any Capitalization Adjustment. The Board shall determine an appropriate equivalent benefit, if any, for any fractional shares or rights to fractional shares that might be created by the adjustments referred to in the preceding provisions of this Section.

(b) Dissolution or Liquidation. Except as otherwise provided in the Award Agreement, in the event of a dissolution or liquidation of the Company, all outstanding Awards (other than Awards consisting of vested and outstanding shares of Common Stock not subject to a forfeiture condition or the Company's right of repurchase) will terminate immediately prior to the completion of such dissolution or liquidation, and the shares of Common Stock subject to the Company's repurchase rights or subject to a forfeiture condition may be repurchased or reacquired by the Company notwithstanding the fact that the holder of such Award is providing Continuous Service, provided, however, that the Board may determine to cause some or all Awards to become fully vested, exercisable and/or no longer subject to repurchase or forfeiture (to the extent such Awards have not previously expired or terminated) before the dissolution or liquidation is completed but contingent on its completion.

(c) Corporate Transaction. The following provisions will apply to Awards in the event of a Corporate Transaction, except as set forth in Section 11, unless otherwise provided in the instrument evidencing the Award or any other written agreement between the Company or any Affiliate and the Participant or unless otherwise expressly provided by the Board at the time of grant of an Award.

(i) Awards May Be Assumed. In the event of a Corporate Transaction, any surviving corporation or acquiring corporation (or the surviving or acquiring corporation's parent company) may assume or continue any or all Awards outstanding under the Plan or may substitute similar awards for Awards outstanding under the Plan (including but not limited to, awards to acquire the same consideration paid to the stockholders of the Company pursuant to the Corporate Transaction), and any reacquisition or repurchase rights held by the Company in respect of Common Stock issued pursuant to Awards may be assigned by the Company to the successor of the Company (or the successor's parent company, if any), in connection with such Corporate Transaction. A surviving corporation or acquiring corporation (or its parent) may choose to assume or continue only a portion of an Award or substitute a similar award for only a portion of an Award, or may choose to assume or continue the Awards held by some, but not all Participants. The terms of any assumption, continuation or substitution will be set by the Board.

(ii) Awards Held by Current Participants. In the event of a Corporate Transaction in which the surviving corporation or acquiring corporation (or its parent company) does not assume or continue such outstanding Awards or substitute similar awards for such outstanding Awards, then with respect to Awards that have not been assumed, continued or substituted and that are held by Participants whose Continuous Service has not terminated prior to the effective time of the Corporate Transaction (referred to as the "**Current Participants**"), the vesting of such Awards (and, with respect to Options and Stock Appreciation Rights, the time when such Awards may be exercised) will be accelerated in full to a date prior to the effective time of such Corporate Transaction (contingent upon the effectiveness of the Corporate Transaction) as the Board determines (or, if the Board does not determine such a date, to the date that is five days prior to the effective time of the Corporate Transaction), and such Awards will terminate if not exercised (if applicable) at or prior to the effective time of the Corporate Transaction, and any reacquisition or repurchase rights held by the Company with respect to such Awards will lapse (contingent upon the effectiveness of the Corporate Transaction). With respect to the vesting of Performance Awards that will accelerate upon the occurrence of a Corporate Transaction pursuant to this subsection (ii) and that have multiple vesting levels depending on the level of performance, unless otherwise provided in the Award Agreement, the vesting of such Performance Awards will accelerate at 100% of the target level upon the occurrence of the Corporate Transaction in which the Awards are not assumed, continued or substituted in accordance with Section 6(c)(i). With respect to the vesting of Awards that will accelerate upon the occurrence of a Corporate Transaction pursuant to this subsection (ii) and are settled in the form of a cash payment, such cash payment will be made no later than 30 days following the occurrence of the Corporate Transaction or such later date as required to comply with Section 409A of the Code.

(iii) Awards Held by Persons other than Current Participants. In the event of a Corporate Transaction in which the surviving corporation or acquiring corporation (or its parent company) does not assume or continue such outstanding Awards or substitute similar awards for such outstanding Awards, then with respect to Awards that have not been assumed, continued or substituted and that are held by persons other than Current Participants, such Awards will terminate if not exercised (if applicable) prior to the occurrence of the Corporate Transaction; provided, however, that any reacquisition or repurchase rights held by the Company with respect to such Awards will not terminate and may continue to be exercised notwithstanding the Corporate Transaction.

(iv) Payment for Awards in Lieu of Exercise. Notwithstanding the foregoing, in the event an Award will terminate if not exercised prior to the effective time of a Corporate Transaction, the Board may provide, in its sole discretion, that the holder of such Award may not exercise such Award but will receive a payment, in such form as may be determined by the Board, equal in value, at the effective time, to the excess, if any, of (1) the value of the property the Participant would have received upon the exercise of the Award (including, at the discretion of the Board, any unvested portion of such Award), over (2) any exercise price payable by such holder in connection with such exercise.

(d) Appointment of Stockholder Representative. As a condition to the receipt of an Award under this Plan, a Participant will be deemed to have agreed that the Award will be subject to the terms of any agreement governing a Corporate Transaction involving the Company, including, without limitation, a provision for the appointment of a stockholder representative that is authorized to act on the Participant's behalf with respect to any escrow, indemnities and any contingent consideration.

(e) No Restriction on Right to Undertake Transactions. The grant of any Award under the Plan and the issuance of shares pursuant to any Award does not affect or restrict in any way the right or power of the Company or the stockholders of the Company to make or authorize any adjustment, recapitalization, reorganization or other change in the Company's capital structure or its business, any merger or consolidation of the Company, any issue of stock or of options, rights or options to purchase stock or of bonds, debentures, preferred or prior preference stocks whose rights are superior to or affect the Common Stock or the rights thereof or which are convertible into or exchangeable for Common Stock, or the dissolution or liquidation of the Company, or any sale or transfer of all or any part of its assets or business, or any other corporate act or proceeding, whether of a similar character or otherwise.

7. ADMINISTRATION.

(a) Administration by Board. The Board will administer the Plan unless and until the Board delegates administration of the Plan to a Committee or Committees, as provided in subsection (c) below.

(b) Powers of Board. The Board will have the power, subject to, and within the limitations of, the express provisions of the Plan:

(i) To determine from time to time (1) which of the persons eligible under the Plan will be granted Awards; (2) when and how each Award will be granted; (3) what type or combination of types of Award will be granted; (4) the provisions of each Award granted (which need not be identical), including the time or times when a person will be permitted to receive an issuance of Common Stock or other payment pursuant to an Award; (5) the number of shares of Common Stock or cash equivalent with respect to which an Award will be granted to each such person; (6) the Fair Market Value applicable to an Award; and (7) the terms of any Performance Award that is not valued in whole or in part by reference to, or otherwise based on, the Common Stock, including the amount of cash payment or other property that may be earned and the timing of payment.

(ii) To construe and interpret the Plan and Awards granted under it, and to establish, amend and revoke rules and regulations for its administration. The Board, in the exercise of this power, may correct any defect, omission or inconsistency in the Plan or in any Award Agreement, in a manner and to the extent it deems necessary or expedient to make the Plan or Award fully effective.

(iii) To settle all controversies regarding the Plan and Awards granted under it.

(iv) To accelerate the time at which an Award may first be exercised or the time during which an Award or any part thereof will vest, notwithstanding the provisions in the Award Agreement stating the time at which it may first be exercised or the time during which it will vest.

(v) To prohibit the exercise of any Option, SAR or other exercisable Award during a period of up to 30 days prior to the consummation of any pending stock dividend, stock split, combination or exchange of shares, merger, consolidation or other distribution (other than normal cash dividends) of Company assets to stockholders, or any other change affecting the shares of Common Stock or the share price of the Common Stock including any Corporate Transaction, for reasons of administrative convenience.

(vi) To suspend or terminate the Plan at any time. Suspension or termination of the Plan will not Materially Impair rights and obligations under any Award granted while the Plan is in effect except with the written consent of the affected Participant.

(vii) To amend the Plan in any respect the Board deems necessary or advisable; provided, however, that stockholder approval will be required for any amendment to the extent required by Applicable Law. Except as provided above, rights under any Award granted before amendment of the Plan will not be Materially Impaired by any amendment of the Plan unless (1) the Company requests the consent of the affected Participant, and (2) such Participant consents in writing.

(viii) To submit any amendment to the Plan for stockholder approval.

(ix) To approve forms of Award Agreements for use under the Plan and to amend the terms of any one or more Awards, including, but not limited to, amendments to provide terms more favorable to the Participant than previously provided in the Award Agreement, subject to any specified limits in the Plan that are not subject to Board discretion; *provided however*, that, a Participant's rights under any Award will not be Materially Impaired by any such amendment unless (1) the Company requests the consent of the affected Participant, and (2) such Participant consents in writing.

(x) Generally, to exercise such powers and to perform such acts as the Board deems necessary or expedient to promote the best interests of the Company and that are not in conflict with the provisions of the Plan or Awards.

(xi) To adopt such procedures and sub-plans as are necessary or appropriate to permit and facilitate participation in the Plan by, or take advantage of specific tax treatment for Awards granted to, Employees, Directors or Consultants who are foreign nationals or employed outside the United States (provided that Board approval will not be necessary for immaterial modifications to the Plan or any Award Agreement to ensure or facilitate compliance with the laws of the relevant foreign jurisdiction).

(xii) To effect, at any time and from time to time, subject to the consent of any Participant whose Award is Materially Impaired by such action, (1) the reduction of the exercise price (or strike price) of any outstanding Option or SAR; (2) the cancellation of any outstanding Option or SAR and the grant in substitution therefor of (A) a new Option, SAR, Restricted Stock Award, RSU Award or Other Award, under the Plan or another equity plan of the Company, covering the same or a different number of shares of Common Stock, (B) cash and/or (C) other valuable consideration (as determined by the Board); or (3) any other action that is treated as a repricing under generally accepted accounting principles.

(c) Delegation to Committee.

(i) General. The Board may delegate some or all of the administration of the Plan to a Committee or Committees. If administration of the Plan is delegated to a Committee, the Committee will have, in connection with the administration of the Plan, the powers theretofore possessed by the Board that have been delegated to the Committee, including the power to delegate to another Committee or a subcommittee of the Committee any of the administrative powers the Committee is authorized to exercise (and references in this Plan to the Board will thereafter be to the Committee or subcommittee), subject, however, to such resolutions, not inconsistent with the provisions of the Plan, as may be adopted from time to time by the Board. Each Committee may retain the authority to concurrently administer the Plan with Committee or subcommittee to which it has delegated its authority hereunder and may, at any time, revert in such Committee some or all of the powers previously delegated. The Board may retain the authority to concurrently administer the Plan with any Committee and may, at any time, revert in the Board some or all of the powers previously delegated.

(ii) Rule 16b-3 Compliance. To the extent an Award is intended to qualify for the exemption from Section 16(b) of the Exchange Act that is available under Rule 16b-3 of the Exchange Act, the Award will be granted by the Board or a Committee that consists solely of two or more Non-Employee Directors, as determined under Rule 16b-3(b)(3) of the Exchange Act and thereafter any action establishing or modifying the terms of the Award will be approved by the Board or a Committee meeting such requirements to the extent necessary for such exemption to remain available.

(d) Effect of Board's Decision. All determinations, interpretations and constructions made by the Board or any Committee in good faith will not be subject to review by any person and will be final, binding and conclusive on all persons.

(e) Delegation to an Officer. The Board or any Committee may delegate to one or more Officers the authority to do one or both of the following (i) designate Employees who are not Officers to be recipients of Options and SARs (and, to the extent permitted by Applicable Law, other types of Awards) and, to the extent permitted by Applicable Law, the terms thereof, and (ii) determine the number of shares of Common Stock to be subject to such Awards granted to such Employees; provided, however, that the resolutions or charter adopted by the Board or any Committee evidencing such delegation will specify the total number of shares of Common Stock that may be subject to the Awards granted by such Officer and that such Officer may not grant an Award to himself or herself. Any such Awards will be granted on the applicable form of Award Agreement most recently approved for use by the Board or the Committee, unless otherwise

provided in the resolutions approving the delegation authority. Notwithstanding anything to the contrary herein, neither the Board nor any Committee may delegate to an Officer who is acting solely in the capacity of an Officer (and not also as a Director) the authority to determine the Fair Market Value.

8. TAX WITHHOLDING

(a) Withholding Authorization. As a condition to acceptance of any Award under the Plan, a Participant authorizes withholding from payroll and any other amounts payable to such Participant, and otherwise agrees to make adequate provision for (including), any sums required to satisfy any U.S. federal, state, local and/or foreign tax or social insurance contribution withholding obligations of the Company or an Affiliate, if any, which arise in connection with the exercise, vesting or settlement of such Award, as applicable. Accordingly, a Participant may not be able to exercise an Award even though the Award is vested, and the Company shall have no obligation to issue shares of Common Stock subject to an Award, unless and until such obligations are satisfied.

(b) Satisfaction of Withholding Obligation. To the extent permitted by the terms of an Award Agreement, the Company may, in its sole discretion, satisfy any U.S. federal, state, local and/or foreign tax or social insurance withholding obligation relating to an Award by any of the following means or by a combination of such means: (i) causing the Participant to tender a cash payment; (ii) withholding shares of Common Stock from the shares of Common Stock issued or otherwise issuable to the Participant in connection with the Award; (iii) withholding cash from an Award settled in cash; (iv) withholding payment from any amounts otherwise payable to the Participant; (v) by allowing a Participant to effectuate a “cashless exercise” pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board; or (vi) by such other method as may be set forth in the Award Agreement.

(c) No Obligation to Notify or Minimize Taxes; No Liability to Claims. Except as required by Applicable Law the Company has no duty or obligation to any Participant to advise such holder as to the time or manner of exercising such Award. Furthermore, the Company has no duty or obligation to warn or otherwise advise such holder of a pending termination or expiration of an Award or a possible period in which the Award may not be exercised. The Company has no duty or obligation to minimize the tax consequences of an Award to the holder of such Award and will not be liable to any holder of an Award for any adverse tax consequences to such holder in connection with an Award. As a condition to accepting an Award under the Plan, each Participant (i) agrees to not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates related to tax liabilities arising from such Award or other Company compensation and (ii) acknowledges that such Participant was advised to consult with his or her own personal tax, financial and other legal advisors regarding the tax consequences of the Award and has either done so or knowingly and voluntarily declined to do so. Additionally, each Participant acknowledges any Option or SAR granted under the Plan is exempt from Section 409A only if the exercise or strike price is at least equal to the “fair market value” of the Common Stock on the date of grant as determined by the Internal Revenue Service and there is no other impermissible deferral of compensation associated with the Award. Additionally, as a condition to accepting an Option or SAR granted under the Plan, each Participant agrees not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates in the event that the Internal Revenue Service asserts that such exercise price or strike price is less than the “fair market value” of the Common Stock on the date of grant as subsequently determined by the Internal Revenue Service.

(d) Withholding Indemnification. As a condition to accepting an Award under the Plan, in the event that the amount of the Company's and/or its Affiliate's withholding obligation in connection with such Award was greater than the amount actually withheld by the Company and/or its Affiliates, each Participant agrees to indemnify and hold the Company and/or its Affiliates harmless from any failure by the Company and/or its Affiliates to withhold the proper amount.

9. MISCELLANEOUS.

(a) Source of Shares. The stock issuable under the Plan will be shares of authorized but unissued or reacquired Common Stock, including shares repurchased by the Company on the open market or otherwise.

(b) Use of Proceeds from Sales of Common Stock. Proceeds from the sale of shares of Common Stock pursuant to Awards will constitute general funds of the Company.

(c) Corporate Action Constituting Grant of Awards. Corporate action constituting a grant by the Company of an Award to any Participant will be deemed completed as of the date of such corporate action, unless otherwise determined by the Board, regardless of when the instrument, certificate, or letter evidencing the Award is communicated to, or actually received or accepted by, the Participant. In the event that the corporate records (e.g., Board consents, resolutions or minutes) documenting the corporate action approving the grant contain terms (e.g., exercise price, vesting schedule or number of shares) that are inconsistent with those in the Award Agreement or related grant documents as a result of a clerical error in the Award Agreement or related grant documents, the corporate records will control and the Participant will have no legally binding right to the incorrect term in the Award Agreement or related grant documents.

(d) Stockholder Rights. No Participant will be deemed to be the holder of, or to have any of the rights of a holder with respect to, any shares of Common Stock subject to such Award unless and until (i) such Participant has satisfied all requirements for exercise of the Award pursuant to its terms, if applicable, and (ii) the issuance of the Common Stock subject to such Award is reflected in the records of the Company.

(e) No Employment or Other Service Rights. Nothing in the Plan, any Award Agreement or any other instrument executed thereunder or in connection with any Award granted pursuant thereto will confer upon any Participant any right to continue to serve the Company or an Affiliate in the capacity in effect at the time the Award was granted or affect the right of the Company or an Affiliate to terminate at will and without regard to any future vesting opportunity that a Participant may have with respect to any Award (i) the employment of an Employee with or without notice and with or without cause, (ii) the service of a Consultant pursuant to the terms of such Consultant's agreement with the Company or an Affiliate, or (iii) the service of a Director pursuant to the Bylaws of the Company or an Affiliate, and any applicable provisions of the corporate law of the state or foreign jurisdiction in which the Company or the Affiliate is

incorporated, as the case may be. Further, nothing in the Plan, any Award Agreement or any other instrument executed thereunder or in connection with any Award will constitute any promise or commitment by the Company or an Affiliate regarding the fact or nature of future positions, future work assignments, future compensation or any other term or condition of employment or service or confer any right or benefit under the Award or the Plan unless such right or benefit has specifically accrued under the terms of the Award Agreement and/or Plan.

(f) Change in Time Commitment. In the event a Participant's regular level of time commitment in the performance of his or her services for the Company and any Affiliates is reduced (for example, and without limitation, if the Participant is an Employee of the Company and the Employee has a change in status from a full-time Employee to a part-time Employee or takes an extended leave of absence) after the date of grant of any Award to the Participant, the Board may determine, to the extent permitted by Applicable Law, to (i) make a corresponding reduction in the number of shares or cash amount subject to any portion of such Award that is scheduled to vest or become payable after the date of such change in time commitment, and (ii) in lieu of or in combination with such a reduction, extend the vesting or payment schedule applicable to such Award. In the event of any such reduction, the Participant will have no right with respect to any portion of the Award that is so reduced or extended.

(g) Execution of Additional Documents. As a condition to accepting an Award under the Plan, the Participant agrees to execute any additional documents or instruments necessary or desirable, as determined in the Plan Administrator's sole discretion, to carry out the purposes or intent of the Award, or facilitate compliance with securities and/or other regulatory requirements, in each case at the Plan Administrator's request.

(h) Electronic Delivery and Participation. Any reference herein or in an Award Agreement to a "written" agreement or document will include any agreement or document delivered electronically, filed publicly at www.sec.gov (or any successor website thereto) or posted on the Company's intranet (or other shared electronic medium controlled by the Company to which the Participant has access). By accepting any Award the Participant consents to receive documents by electronic delivery and to participate in the Plan through any on-line electronic system established and maintained by the Plan Administrator or another third party selected by the Plan Administrator. The form of delivery of any Common Stock (e.g., a stock certificate or electronic entry evidencing such shares) shall be determined by the Company.

(i) Clawback/Recovery. All Awards granted under the Plan will be subject to recoupment in accordance with any clawback policy that the Company is required to adopt pursuant to the listing standards of any national securities exchange or association on which the Company's securities are listed or as is otherwise required by the Dodd-Frank Wall Street Reform and Consumer Protection Act or other Applicable Law and any clawback policy that the Company otherwise adopts, to the extent applicable and permissible under Applicable Law. In addition, the Board may impose such other clawback, recovery or recoupment provisions in an Award Agreement as the Board determines necessary or appropriate, including but not limited to a reacquisition right in respect of previously acquired shares of Common Stock or other cash or property upon the occurrence of Cause. No recovery of compensation under such a clawback policy will be an event giving rise to a Participant's right to voluntarily terminate employment upon a "resignation for good reason," or for a "constructive termination" or any similar term under any plan of or agreement with the Company.

(j) Securities Law Compliance. A Participant will not be issued any shares in respect of an Award unless either (i) the shares are registered under the Securities Act; or (ii) the Company has determined that such issuance would be exempt from the registration requirements of the Securities Act. Each Award also must comply with other Applicable Law governing the Award, and a Participant will not receive such shares if the Company determines that such receipt would not be in material compliance with Applicable Law.

(k) Transfer or Assignment of Awards; Issued Shares. Except as expressly provided in the Plan or the form of Award Agreement, Awards granted under the Plan may not be transferred or assigned by the Participant. After the vested shares subject to an Award have been issued, or in the case of Restricted Stock and similar awards, after the issued shares have vested, the holder of such shares is free to assign, hypothecate, donate, encumber or otherwise dispose of any interest in such shares provided that any such actions are in compliance with the provisions herein, the terms of the Trading Policy and Applicable Law.

(l) Effect on Other Employee Benefit Plans. The value of any Award granted under the Plan, as determined upon grant, vesting or settlement, shall not be included as compensation, earnings, salaries, or other similar terms used when calculating any Participant's benefits under any employee benefit plan sponsored by the Company or any Affiliate, except as such plan otherwise expressly provides. The Company expressly reserves its rights to amend, modify, or terminate any of the Company's or any Affiliate's employee benefit plans.

(m) Deferrals. To the extent permitted by Applicable Law, the Board, in its sole discretion, may determine that the delivery of Common Stock or the payment of cash, upon the exercise, vesting or settlement of all or a portion of any Award may be deferred and may also establish programs and procedures for deferral elections to be made by Participants. Deferrals will be made in accordance with the requirements of Section 409A.

(n) Section 409A. Unless otherwise expressly provided for in an Award Agreement, the Plan and Award Agreements will be interpreted to the greatest extent possible in a manner that makes the Plan and the Awards granted hereunder exempt from Section 409A, and, to the extent not so exempt, in compliance with the requirements of Section 409A. If the Board determines that any Award granted hereunder is not exempt from and is therefore subject to Section 409A, the Award Agreement evidencing such Award will incorporate the terms and conditions necessary to avoid the consequences specified in Section 409A(a)(1) of the Code, and to the extent an Award Agreement is silent on terms necessary for compliance, such terms are hereby incorporated by reference into the Award Agreement. Notwithstanding anything to the contrary in this Plan (and unless the Award Agreement specifically provides otherwise), if the shares of Common Stock are publicly traded, and if a Participant holding an Award that constitutes "deferred compensation" under Section 409A is a "specified employee" for purposes of Section 409A, no distribution or payment of any amount that is due because of a "separation from service" (as defined in Section 409A without regard to alternative definitions thereunder) will be issued or paid before the date that is six months and one day following the date of such Participant's "separation from service" or, if earlier, the date of the Participant's death, unless such distribution or payment can be made in a manner that complies with Section 409A, and any amounts so deferred will be paid in a lump sum on the day after such six month period elapses, with the balance paid thereafter on the original schedule.

(o) CHOICE OF LAW. This Plan and any controversy arising out of or relating to this Plan shall be governed by, and construed in accordance with, the internal laws of the State of Delaware, without regard to conflict of law principles that would result in any application of any law other than the law of the State of Delaware.

10. COVENANTS OF THE COMPANY.

The Company will seek to obtain from each regulatory commission or agency, as may be deemed to be necessary, having jurisdiction over the Plan such authority as may be required to grant Awards and to issue and sell shares of Common Stock upon exercise or vesting of the Awards; provided, however, that this undertaking will not require the Company to register under the Securities Act the Plan, any Award or any Common Stock issued or issuable pursuant to any such Award. If, after reasonable efforts and at a reasonable cost, the Company is unable to obtain from any such regulatory commission or agency the authority that counsel for the Company deems necessary or advisable for the lawful issuance and sale of Common Stock under the Plan, the Company will be relieved from any liability for failure to issue and sell Common Stock upon exercise or vesting of such Awards unless and until such authority is obtained. A Participant is not eligible for the grant of an Award or the subsequent issuance of Common Stock pursuant to the Award if such grant or issuance would be in violation of any Applicable Law.

11. ADDITIONAL RULES FOR AWARDS SUBJECT TO SECTION 409A.

(a) Application. Unless the provisions of this Section of the Plan are expressly superseded by the provisions in the form of Award Agreement, the provisions of this Section shall apply and shall supersede anything to the contrary set forth in the Award Agreement for a Non-Exempt Award.

(b) Non-Exempt Awards Subject to Non-Exempt Severance Arrangements. To the extent a Non-Exempt Award is subject to Section 409A due to application of a Non-Exempt Severance Arrangement, the following provisions of this subsection (b) apply.

(i) If the Non-Exempt Award vests in the ordinary course during the Participant's Continuous Service in accordance with the vesting schedule set forth in the Award Agreement, and does not accelerate vesting under the terms of a Non-Exempt Severance Arrangement, in no event will the shares be issued in respect of such Non-Exempt Award any later than the later of: (i) December 31st of the calendar year that includes the applicable vesting date, or (ii) the 60th day that follows the applicable vesting date.

(ii) If vesting of the Non-Exempt Award accelerates under the terms of a Non-Exempt Severance Arrangement in connection with the Participant's Separation from Service, and such vesting acceleration provisions were in effect as of the date of grant of the Non-Exempt Award and, therefore, are part of the terms of such Non-Exempt Award as of the date of grant, then the shares will be earlier issued in settlement of such Non-Exempt Award upon the Participant's Separation from Service in accordance with the terms of the Non-Exempt Severance

Arrangement, but in no event later than the 60th day that follows the date of the Participant's Separation from Service. However, if at the time the shares would otherwise be issued the Participant is subject to the distribution limitations contained in Section 409A applicable to "specified employees," as defined in Section 409A(a)(2)(B)(i) of the Code, such shares shall not be issued before the date that is six months following the date of such Participant's Separation from Service, or, if earlier, the date of the Participant's death that occurs within such six month period.

(iii) If vesting of a Non-Exempt Award accelerates under the terms of a Non-Exempt Severance Arrangement in connection with a Participant's Separation from Service, and such vesting acceleration provisions were not in effect as of the date of grant of the Non-Exempt Award and, therefore, are not a part of the terms of such Non-Exempt Award on the date of grant, then such acceleration of vesting of the Non-Exempt Award shall not accelerate the issuance date of the shares, but the shares shall instead be issued on the same schedule as set forth in the Grant Notice as if they had vested in the ordinary course during the Participant's Continuous Service, notwithstanding the vesting acceleration of the Non-Exempt Award. Such issuance schedule is intended to satisfy the requirements of payment on a specified date or pursuant to a fixed schedule, as provided under Treasury Regulations Section 1.409A-3(a)(4).

(c) Treatment of Non-Exempt Awards Upon a Corporate Transaction for Employees and Consultants. The provisions of this subsection (c) shall apply and shall supersede anything to the contrary set forth in the Plan with respect to the permitted treatment of any Non-Exempt Award in connection with a Corporate Transaction if the Participant was either an Employee or Consultant upon the applicable date of grant of the Non-Exempt Award.

(i) Vested Non-Exempt Awards. The following provisions shall apply to any Vested Non-Exempt Award in connection with a Corporate Transaction:

(1) If the Corporate Transaction is also a Section 409A Change in Control then the Acquiring Entity may not assume, continue or substitute the Vested Non-Exempt Award. Upon the Section 409A Change in Control the settlement of the Vested Non-Exempt Award will automatically be accelerated and the shares will be immediately issued in respect of the Vested Non-Exempt Award. Alternatively, the Company may instead provide that the Participant will receive a cash settlement equal to the Fair Market Value of the shares that would otherwise be issued to the Participant upon the Section 409A Change in Control.

(2) If the Corporate Transaction is not also a Section 409A Change in Control, then the Acquiring Entity must either assume, continue or substitute each Vested Non-Exempt Award. The shares to be issued in respect of the Vested Non-Exempt Award shall be issued to the Participant by the Acquiring Entity on the same schedule that the shares would have been issued to the Participant if the Corporate Transaction had not occurred. In the Acquiring Entity's discretion, in lieu of an issuance of shares, the Acquiring Entity may instead substitute a cash payment on each applicable issuance date, equal to the Fair Market Value of the shares that would otherwise be issued to the Participant on such issuance dates, with the determination of the Fair Market Value of the shares made on the date of the Corporate Transaction.

(ii) Unvested Non-Exempt Awards. The following provisions shall apply to any Unvested Non-Exempt Award unless otherwise determined by the Board pursuant to subsection (e) of this Section.

(1) In the event of a Corporate Transaction, the Acquiring Entity shall assume, continue or substitute any Unvested Non-Exempt Award. Unless otherwise determined by the Board, any Unvested Non-Exempt Award will remain subject to the same vesting and forfeiture restrictions that were applicable to the Award prior to the Corporate Transaction. The shares to be issued in respect of any Unvested Non-Exempt Award shall be issued to the Participant by the Acquiring Entity on the same schedule that the shares would have been issued to the Participant if the Corporate Transaction had not occurred. In the Acquiring Entity's discretion, in lieu of an issuance of shares, the Acquiring Entity may instead substitute a cash payment on each applicable issuance date, equal to the Fair Market Value of the shares that would otherwise be issued to the Participant on such issuance dates, with the determination of Fair Market Value of the shares made on the date of the Corporate Transaction.

(2) If the Acquiring Entity will not assume, substitute or continue any Unvested Non-Exempt Award in connection with a Corporate Transaction, then such Award shall automatically terminate and be forfeited upon the Corporate Transaction with no consideration payable to any Participant in respect of such forfeited Unvested Non-Exempt Award. Notwithstanding the foregoing, to the extent permitted and in compliance with the requirements of Section 409A, the Board may in its discretion determine to elect to accelerate the vesting and settlement of the Unvested Non-Exempt Award upon the Corporate Transaction, or instead substitute a cash payment equal to the Fair Market Value of such shares that would otherwise be issued to the Participant, as further provided in subsection (e)(ii) below. In the absence of such discretionary election by the Board, any Unvested Non-Exempt Award shall be forfeited without payment of any consideration to the affected Participants if the Acquiring Entity will not assume, substitute or continue the Unvested Non-Exempt Awards in connection with the Corporate Transaction.

(3) The foregoing treatment shall apply with respect to all Unvested Non-Exempt Awards upon any Corporate Transaction, and regardless of whether or not such Corporate Transaction is also a Section 409A Change in Control.

(d) Treatment of Non-Exempt Awards Upon a Corporate Transaction for Non-Employee Directors. The following provisions of this subsection (d) shall apply and shall supersede anything to the contrary that may be set forth in the Plan with respect to the permitted treatment of a Non-Exempt Director Award in connection with a Corporate Transaction.

(i) If the Corporate Transaction is also a Section 409A Change in Control then the Acquiring Entity may not assume, continue or substitute the Non-Exempt Director Award. Upon the Section 409A Change in Control the vesting and settlement of any Non-Exempt Director Award will automatically be accelerated and the shares will be immediately issued to the Participant in respect of the Non-Exempt Director Award. Alternatively, the Company may provide that the Participant will instead receive a cash settlement equal to the Fair Market Value of the shares that would otherwise be issued to the Participant upon the Section 409A Change in Control pursuant to the preceding provision.

(ii) If the Corporate Transaction is not also a Section 409A Change in Control, then the Acquiring Entity must either assume, continue or substitute the Non-Exempt Director Award. Unless otherwise determined by the Board, the Non-Exempt Director Award will remain subject to the same vesting and forfeiture restrictions that were applicable to the Award prior to the Corporate Transaction. The shares to be issued in respect of the Non-Exempt Director Award shall be issued to the Participant by the Acquiring Entity on the same schedule that the shares would have been issued to the Participant if the Corporate Transaction had not occurred. In the Acquiring Entity's discretion, in lieu of an issuance of shares, the Acquiring Entity may instead substitute a cash payment on each applicable issuance date, equal to the Fair Market Value of the shares that would otherwise be issued to the Participant on such issuance dates, with the determination of Fair Market Value made on the date of the Corporate Transaction.

(e) If the RSU Award is a Non-Exempt Award, then the provisions in this Section 11(e) shall apply and supersede anything to the contrary that may be set forth in the Plan or the Award Agreement with respect to the permitted treatment of such Non-Exempt Award:

(i) Any exercise by the Board of discretion to accelerate the vesting of a Non-Exempt Award shall not result in any acceleration of the scheduled issuance dates for the shares in respect of the Non-Exempt Award unless earlier issuance of the shares upon the applicable vesting dates would be in compliance with the requirements of Section 409A.

(ii) The Company explicitly reserves the right to earlier settle any Non-Exempt Award to the extent permitted and in compliance with the requirements of Section 409A, including pursuant to any of the exemptions available in Treasury Regulations Section 1.409A-3(j)(4)(ix).

(iii) To the extent the terms of any Non-Exempt Award provide that it will be settled upon a Change in Control or Corporate Transaction, to the extent it is required for compliance with the requirements of Section 409A, the Change in Control or Corporate Transaction event triggering settlement must also constitute a Section 409A Change in Control. To the extent the terms of a Non-Exempt Award provides that it will be settled upon a termination of employment or termination of Continuous Service, to the extent it is required for compliance with the requirements of Section 409A, the termination event triggering settlement must also constitute a Separation From Service. However, if at the time the shares would otherwise be issued to a Participant in connection with a "separation from service" such Participant is subject to the distribution limitations contained in Section 409A applicable to "specified employees," as defined in Section 409A(a)(2)(B)(i) of the Code, such shares shall not be issued before the date that is six months following the date of the Participant's Separation From Service, or, if earlier, the date of the Participant's death that occurs within such six month period.

(iv) The provisions in this subsection (e) for delivery of the shares in respect of the settlement of an RSU Award that is a Non-Exempt Award are intended to comply with the requirements of Section 409A so that the delivery of the shares to the Participant in respect of such Non-Exempt Award will not trigger the additional tax imposed under Section 409A, and any ambiguities herein will be so interpreted.

12. SEVERABILITY.

If all or any part of the Plan or any Award Agreement is declared by any court or governmental authority to be unlawful or invalid, such unlawfulness or invalidity shall not invalidate any portion of the Plan or such Award Agreement not declared to be unlawful or invalid. Any Section of the Plan or any Award Agreement (or part of such a Section) so declared to be unlawful or invalid shall, if possible, be construed in a manner which will give effect to the terms of such Section or part of a Section to the fullest extent possible while remaining lawful and valid.

13. TERMINATION OF THE PLAN.

The Board may suspend or terminate the Plan at any time. No Incentive Stock Options may be granted after the tenth anniversary of the earlier of: (i) the Adoption Date, or (ii) the date the Plan is approved by the Company's stockholders. No Awards may be granted under the Plan while the Plan is suspended or after it is terminated.

14. DEFINITIONS.

As used in the Plan, the following definitions apply to the capitalized terms indicated below:

(a) “*Acquiring Entity*” means the surviving or acquiring corporation (or its parent company) in connection with a Corporate Transaction.

(b) “*Adoption Date*” means the date the Plan is first approved by the Board or Compensation Committee.

(c) “*Affiliate*” means, at the time of determination, any “parent” or “subsidiary” of the Company as such terms are defined in Rule 405 promulgated under the Securities Act. The Board may determine the time or times at which “parent” or “subsidiary” status is determined within the foregoing definition.

(d) “*Applicable Law*” means any applicable securities, federal, state, foreign, material local or municipal or other law, statute, constitution, principle of common law, resolution, ordinance, code, edict, decree, rule, listing rule, regulation, judicial decision, ruling or requirement issued, enacted, adopted, promulgated, implemented or otherwise put into effect by or under the authority of any Governmental Body (including under the authority of any applicable self-regulating organization such as the Nasdaq Stock Market, New York Stock Exchange, or the Financial Industry Regulatory Authority).

(e) “*Award*” means any right to receive Common Stock, cash or other property granted under the Plan (including an Incentive Stock Option, a Nonstatutory Stock Option, a Restricted Stock Award, an RSU Award, a SAR, a Performance Award or any Other Award).

(f) “*Award Agreement*” means a written or electronic agreement between the Company and a Participant evidencing the terms and conditions of an Award. The Award Agreement generally consists of the Grant Notice and the agreement containing the written summary of the general terms and conditions applicable to the Award and which is provided, including through electronic means, to a Participant along with the Grant Notice.

(g) “*Board*” means the Board of Directors of the Company (or its designee). Any decision or determination made by the Board shall be a decision or determination that is made in the sole discretion of the Board (or its designee), and such decision or determination shall be final and binding on all Participants.

(h) “*Capitalization Adjustment*” means any change that is made in, or other events that occur with respect to, the Common Stock subject to the Plan or subject to any Award after the date the Plan is adopted by the Board without the receipt of consideration by the Company through merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, stock split, reverse stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or any similar equity restructuring transaction, as that term is used in Statement of Financial Accounting Standards Board Accounting Standards Codification Topic 718 (or any successor thereto). Notwithstanding the foregoing, the conversion of any convertible securities of the Company will not be treated as a Capitalization Adjustment.

(i) “Cause” has the meaning ascribed to such term in any written agreement between a Participant and the Company defining such term and, in the absence of such agreement, such term means, with respect to a Participant, the occurrence of any of the following events: (i) the Participant’s dishonest statements or acts with respect to the Company or any Affiliate of the Company, or any current or prospective customers, suppliers, vendors or other third parties with which such entity does business; (ii) the Participant’s commission of (A) a felony or (B) any misdemeanor involving moral turpitude, deceit, dishonesty or fraud; (iii) the Participant’s failure to perform the Participant’s assigned duties and responsibilities to the reasonable satisfaction of the Company which failure continues, in the reasonable judgment of the Company, after written notice given to the Participant by the Company; (iv) the Participant’s gross negligence, willful misconduct or insubordination with respect to the Company or any Affiliate of the Company; or (v) the Participant’s material violation of any provision of any agreement(s) between the Participant and the Company relating to noncompetition, nonsolicitation, nondisclosure and/or assignment of inventions. The determination that a termination of the Participant’s Continuous Service is either for Cause or without Cause will be made by the Board with respect to Participants who are executive officers of the Company and by the Company’s Chief Executive Officer with respect to Participants who are not executive officers of the Company. Any determination by the Company that the Continuous Service of a Participant was terminated with or without Cause for the purposes of outstanding Awards held by such Participant will have no effect upon any determination of the rights or obligations of the Company or such Participant for any other purpose.

(j) “Change in Control” or “Change of Control” means the occurrence, in a single transaction or in a series of related transactions, of any one or more of the following events:

(i) any Exchange Act Person becomes the Owner, directly or indirectly, of securities of the Company representing more than 50% of the combined voting power of the Company’s then outstanding securities other than by virtue of a merger, consolidation or similar transaction. Notwithstanding the foregoing, a Change in Control shall not be deemed to occur (A) on account of the acquisition of securities of the Company directly from the Company, (B) on account of the acquisition of securities of the Company by an investor, any affiliate thereof or any other Exchange Act Person that acquires the Company’s securities in a transaction or series of related transactions the primary purpose of which is to obtain financing for the Company through the issuance of equity securities, or (C) solely because the level of Ownership held by any Exchange Act Person (the “Subject Person”) exceeds the designated percentage threshold of the outstanding voting securities as a result of a repurchase or other acquisition of voting securities by the Company reducing the number of shares outstanding, provided that if a Change in Control would occur (but for the operation of this sentence) as a result of the acquisition of voting securities by the Company, and after such share acquisition, the Subject Person becomes the Owner of any additional voting securities that, assuming the repurchase or other acquisition had not occurred, increases the percentage of the then outstanding voting securities Owned by the Subject Person over the designated percentage threshold, then a Change in Control shall be deemed to occur;

(ii) there is consummated a merger, consolidation or similar transaction involving (directly or indirectly) the Company and, immediately after the consummation of such merger, consolidation or similar transaction, the stockholders of the Company immediately prior thereto do not Own, directly or indirectly, either (A) outstanding voting securities representing more than 50% of the combined outstanding voting power of the Acquiring Entity in such merger, consolidation or similar transaction or (B) more than 50% of the combined outstanding voting power of the parent of the Acquiring Entity in such merger, consolidation or similar transaction, in each case in substantially the same proportions as their Ownership of the outstanding voting securities of the Company immediately prior to such transaction;

(iii) there is consummated a sale, lease, exclusive license or other disposition of all or substantially all of the consolidated assets of the Company and its Subsidiaries, other than a sale, lease, license or other disposition of all or substantially all of the consolidated assets of the Company and its Subsidiaries to an Entity, more than 50% of the combined voting power of the voting securities of which are Owned by stockholders of the Company in substantially the same proportions as their Ownership of the outstanding voting securities of the Company immediately prior to such sale, lease, license or other disposition; or

(iv) individuals who, on the date the Plan is adopted by the Board, are members of the Board (the “*Incumbent Board*”) cease for any reason to constitute at least a majority of the members of the Board; provided, however, that if the appointment or election (or nomination for election) of any new Board member was approved or recommended by a majority vote of the members of the Incumbent Board then still in office, such new member shall, for purposes of this Plan, be considered as a member of the Incumbent Board.

Notwithstanding the foregoing or any other provision of this Plan, (A) the term Change in Control shall not include a sale of assets, merger or other transaction effected exclusively for the purpose of changing the domicile of the Company, (B) the definition of Change in Control (or any analogous term) in an individual written agreement between the Company or any Affiliate and the Participant shall supersede the foregoing definition with respect to Awards subject to such agreement; provided, however, that if no definition of Change in Control or any analogous term is set forth in such an individual written agreement, the foregoing definition shall apply, and (C) with respect to any nonqualified deferred compensation that becomes payable on account of the Change in Control, the transaction or event described in clause (i), (ii), (iii), or (iv) also constitutes a Section 409A Change in Control if required in order for the payment not to violate Section 409A of the Code.

(k) “*Code*” means the Internal Revenue Code of 1986, as amended, including any applicable regulations and guidance thereunder.

(l) “*Combined Common Stock*” means the common stock of the Company of all classes.

(m) “*Committee*” means the Compensation Committee and any other committee of one or more Directors to whom authority has been delegated by the Board or Compensation Committee in accordance with the Plan.

(n) “*Common Stock*” means the Class A common stock of the Company.

(o) “*Company*” means Tempus Labs, Inc., a Delaware corporation.

(p) “*Compensation Committee*” means the Compensation Committee of the Board.

(q) “*Consultant*” means any person, including an advisor, who is (i) engaged by the Company or an Affiliate to render consulting or advisory services and is compensated for such services, or (ii) serving as a member of the board of directors of an Affiliate and is compensated for such services. However, service solely as a Director, or payment of a fee for such service, will not cause a Director to be considered a “Consultant” for purposes of the Plan. Notwithstanding the foregoing, a person is treated as a Consultant under this Plan only if a Form S-8 Registration Statement under the Securities Act is available to register either the offer or the sale of the Company’s securities to such person.

(r) “*Continuous Service*” means that the Participant’s service with the Company or an Affiliate, whether as an Employee, Director or Consultant, is not interrupted or terminated. A change in the capacity in which the Participant renders service to the Company or an Affiliate as an Employee, Director or Consultant or a change in the Entity for which the Participant renders such service, provided that there is no interruption or termination of the Participant’s service with the Company or an Affiliate, will not terminate a Participant’s Continuous Service; provided, however, that if the Entity for which a Participant is rendering services ceases to qualify as an Affiliate, as determined by the Board, such Participant’s Continuous Service will be considered to have terminated on the date such Entity ceases to qualify as an Affiliate. For example, a change in status from an Employee of the Company to a Consultant of an Affiliate or to a Director will not constitute an interruption of Continuous Service. To the extent permitted by law, the Board or the chief executive officer of the Company, in that party’s sole discretion, may determine whether Continuous Service will be considered interrupted in the case of (i) any leave of absence approved by the Board or chief executive officer, including sick leave, military leave or any other personal leave, or (ii) transfers between the Company, an Affiliate, or their successors. Notwithstanding the foregoing, a leave of absence will be treated as Continuous Service for purposes of vesting in an Award only to such extent as may be provided in the Company’s leave of absence policy, in the written terms of any leave of absence agreement or policy applicable to the Participant, or as otherwise required by law. In addition, to the extent required for exemption from or compliance with Section 409A, the determination of whether there has been a termination of Continuous Service will be made, and such term will be construed, in a manner that is consistent with the definition of “separation from service” as defined under Treasury Regulation Section 1.409A-1(h) (without regard to any alternative definition thereunder).

(s) “*Corporate Transaction*” means the consummation, in a single transaction or in a series of related transactions, of any one or more of the following events:

(i) a sale or other disposition of all or substantially all, as determined by the Board, of the consolidated assets of the Company and its Subsidiaries;

(ii) a sale or other disposition of at least 50% of the outstanding securities of the Company;

(iii) a merger, consolidation or similar transaction following which the Company is not the surviving corporation; or

(iv) a merger, consolidation or similar transaction following which the Company is the surviving corporation but the shares of Common Stock outstanding immediately preceding the merger, consolidation or similar transaction are converted or exchanged by virtue of the merger, consolidation or similar transaction into other property, whether in the form of securities, cash or otherwise.

Notwithstanding the foregoing or any other provision of this Plan, (A) the term Corporate Transaction shall not include a sale of assets, merger or other transaction effected exclusively for the purpose of changing the domicile of the Company, (B) the definition of Corporate Transaction (or any analogous term) in an individual written agreement between the Company or any Affiliate and the Participant shall supersede the foregoing definition with respect to Awards subject to such agreement; provided, however, that if no definition of Corporate Transaction or any analogous term is set forth in such an individual written agreement, the foregoing definition shall apply, and (C) with respect to any nonqualified deferred compensation that becomes payable on account of the Corporate Transaction, the transaction or event described in clause (i), (ii), (iii), or (iv) also constitutes a Section 409A Change in Control if required in order for the payment not to violate Section 409A of the Code.

(t) “*Director*” means a member of the Board.

(u) “*determine*” or “*determined*” means as determined by the Board or the Committee (or its designee) in its sole discretion.

(v) “*Disability*” means, with respect to a Participant, such Participant is unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or which has lasted or can be expected to last for a continuous period of not less than 12 months, as provided in Section 22(e)(3) of the Code, and will be determined by the Board on the basis of such medical evidence as the Board deems warranted under the circumstances.

(w) “*Effective Date*” means immediately prior to the IPO Date, provided that this Plan is approved by the Company’s stockholders prior to the IPO Date.

(x) “*Employee*” means any person employed by the Company or an Affiliate. However, service solely as a Director, or payment of a fee for such services, will not cause a Director to be considered an “Employee” for purposes of the Plan.

(y) “*Employer*” means the Company or the Affiliate of the Company that employs the Participant.

(z) “*Entity*” means a corporation, partnership, limited liability company or other entity.

(aa) “*Exchange Act*” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

(bb) “Exchange Act Person” means any natural person, Entity or “group” (within the meaning of Section 13(d) or 14(d) of the Exchange Act), except that “Exchange Act Person” will not include (i) the Company or any Subsidiary of the Company, (ii) any employee benefit plan of the Company or any Subsidiary of the Company or any trustee or other fiduciary holding securities under an employee benefit plan of the Company or any Subsidiary of the Company, (iii) an underwriter temporarily holding securities pursuant to a registered public offering of such securities, (iv) an Entity Owned, directly or indirectly, by the stockholders of the Company in substantially the same proportions as their Ownership of stock of the Company; or (v) any natural person, Entity or “group” (within the meaning of Section 13(d) or 14(d) of the Exchange Act) that, as of the Effective Date, is the Owner, directly or indirectly, of securities of the Company representing more than 50% of the combined voting power of the Company’s then outstanding securities.

(cc) “Fair Market Value” means, as of any date, unless otherwise determined by the Board, the value of the Common Stock (as determined on a per share or aggregate basis, as applicable) determined as follows:

(i) If the Common Stock is listed on any established stock exchange or traded on any established market, the Fair Market Value will be the closing sales price for such stock as quoted on such exchange or market (or the exchange or market with the greatest volume of trading in the Common Stock) on the date of determination, as reported in a source the Board deems reliable.

(ii) If there is no closing sales price for the Common Stock on the date of determination, then the Fair Market Value will be the closing selling price on the last preceding date for which such quotation exists.

(iii) In the absence of such markets for the Common Stock, or if otherwise determined by the Board, the Fair Market Value will be determined by the Board in good faith and in a manner that complies with Sections 409A and 422 of the Code.

(dd) “Governmental Body” means any: (i) nation, state, commonwealth, province, territory, county, municipality, district or other jurisdiction of any nature; (ii) federal, state, local, municipal, foreign or other government; (iii) governmental or regulatory body, or quasi-governmental body of any nature (including any governmental division, department, administrative agency or bureau, commission, authority, instrumentality, official, ministry, fund, foundation, center, organization, unit, body or Entity and any court or other tribunal, and for the avoidance of doubt, any Tax authority) or other body exercising similar powers or authority; or (iv) self-regulatory organization (including the Nasdaq Stock Market, New York Stock Exchange, and the Financial Industry Regulatory Authority).

(ee) “Grant Notice” means the notice provided to a Participant that he or she has been granted an Award under the Plan and which includes the name of the Participant, the type of Award, the date of grant of the Award, number of shares of Common Stock subject to the Award or potential cash payment right, (if any), the vesting schedule for the Award (if any) and other key terms applicable to the Award.

(ff) “**Incentive Stock Option**” means an option granted pursuant to Section 4 of the Plan that is intended to be, and qualifies as, an “incentive stock option” within the meaning of Section 422 of the Code.

(gg) “**IPO Date**” means the date of the underwriting agreement between the Company and the underwriter(s) managing the initial public offering of the Common Stock, pursuant to which the Common Stock is priced for the initial public offering.

(hh) “**Materially Impair**” means any amendment to the terms of the Award that materially adversely affects the Participant’s rights under the Award. A Participant’s rights under an Award will not be deemed to have been Materially Impaired by any such amendment if the Board, in its sole discretion, determines that the amendment, taken as a whole, does not materially impair the Participant’s rights. For example, the following types of amendments to the terms of an Award do not Materially Impair the Participant’s rights under the Award: (i) imposition of reasonable restrictions on the minimum number of shares subject to an Option or SAR that may be exercised; (ii) to maintain the qualified status of the Award as an Incentive Stock Option under Section 422 of the Code; (iii) to change the terms of an Incentive Stock Option in a manner that disqualifies, impairs or otherwise affects the qualified status of the Award as an Incentive Stock Option under Section 422 of the Code; (iv) to clarify the manner of exemption from, or to bring the Award into compliance with or qualify it for an exemption from, Section 409A; or (v) to comply with other Applicable Laws.

(ii) “**Non-Employee Director**” means a Director who either (i) is not a current employee or officer of the Company or an Affiliate, does not receive compensation, either directly or indirectly, from the Company or an Affiliate for services rendered as a consultant or in any capacity other than as a Director (except for an amount as to which disclosure would not be required under Item 404(a) of Regulation S-K promulgated pursuant to the Securities Act (“**Regulation S-K**”)), does not possess an interest in any other transaction for which disclosure would be required under Item 404(a) of Regulation S-K, and is not engaged in a business relationship for which disclosure would be required pursuant to Item 404(b) of Regulation S-K; or (ii) is otherwise considered a “non-employee director” for purposes of Rule 16b-3.

(jj) “**Non-Exempt Award**” means any Award that is subject to, and not exempt from, Section 409A, including as the result of (i) a deferral of the issuance of the shares subject to the Award which is elected by the Participant or imposed by the Company, or (ii) the terms of any Non-Exempt Severance Agreement.

(kk) “**Non-Exempt Director Award**” means a Non-Exempt Award granted to a Participant who was a Director but not an Employee on the applicable grant date.

(ll) “**Non-Exempt Severance Arrangement**” means a severance arrangement or other agreement between the Participant and the Company that provides for acceleration of vesting of an Award and issuance of the shares in respect of such Award upon the Participant’s termination of employment or separation from service (as such term is defined in Section 409A(a)(2)(A)(i) of the Code (and without regard to any alternative definition thereunder) (“**Separation from Service**”) and such severance benefit does not satisfy the requirements for an exemption from application of Section 409A provided under Treasury Regulations Section 1.409A-1(b)(4), 1.409A-1(b)(9) or otherwise.

(mm) “*Nonstatutory Stock Option*” means any option granted pursuant to Section 4 of the Plan that does not qualify as an Incentive Stock Option.

(nn) “*Officer*” means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act.

(oo) “*Option*” means an Incentive Stock Option or a Nonstatutory Stock Option to purchase shares of Common Stock granted pursuant to the Plan.

(pp) “*Option Agreement*” means a written or electronic agreement between the Company and the Optionholder evidencing the terms and conditions of the Option grant. The Option Agreement includes the Grant Notice for the Option and the agreement containing the written summary of the general terms and conditions applicable to the Option and which is provided, including through electronic means, to a Participant along with the Grant Notice. Each Option Agreement will be subject to the terms and conditions of the Plan.

(qq) “*Optionholder*” means a person to whom an Option is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Option.

(rr) “*Other Award*” means an award valued in whole or in part by reference to, or otherwise based on, Common Stock, including the appreciation in value thereof (e.g., options or stock rights with an exercise price or strike price less than 100% of the Fair Market Value at the time of grant) that is not an Incentive Stock Option, Nonstatutory Stock Option, SAR, Restricted Stock Award, RSU Award or Performance Award.

(ss) “*Other Award Agreement*” means a written or electronic agreement between the Company and a holder of an Other Award evidencing the terms and conditions of an Other Award grant. Each Other Award Agreement will be subject to the terms and conditions of the Plan.

(tt) “*Own,*” “*Owned,*” “*Owner,*” “*Ownership*” means that a person or Entity will be deemed to “Own,” to have “Owned,” to be the “Owner” of, or to have acquired “Ownership” of securities if such person or Entity, directly or indirectly, through any contract, arrangement, understanding, relationship or otherwise, has or shares voting power, which includes the power to vote or to direct the voting, with respect to such securities.

(uu) “*Participant*” means an Employee, Director or Consultant to whom an Award is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Award.

(vv) “*Performance Award*” means an Award that may vest or may be exercised or a cash award that may vest or become earned and paid contingent upon the attainment during a Performance Period of certain Performance Goals and which is granted under the terms and conditions of Section 5(b) pursuant to such terms as are approved by the Board. In addition, to the extent permitted by Applicable Law and set forth in the applicable Award Agreement, the Board may determine that cash or other property may be used in payment of Performance Awards. Performance Awards that are settled in cash or other property are not required to be valued in whole or in part by reference to, or otherwise based on, the Common Stock.

(ww) “*Performance Criteria*” means one or more criteria that the Board will select for purposes of establishing the Performance Goals for a Performance Period. The Performance Criteria that will be used to establish such Performance Goals may be based on any one of, or combination of, the following as determined by the Board: earnings (including earnings per share and net earnings); earnings before interest, taxes and depreciation; earnings before interest, taxes, depreciation and amortization; total stockholder return; return on equity or average stockholder’s equity; return on assets, investment, or capital employed; stock price; margin (including gross margin); income (before or after taxes); operating income; operating income after taxes; pre-tax profit; operating cash flow; sales or revenue targets; increases in revenue or product revenue; expenses and cost reduction goals; improvement in or attainment of working capital levels; economic value added (or an equivalent metric); market share; cash flow; cash flow per share; share price performance; debt reduction; customer satisfaction; stockholders’ equity; capital expenditures; debt levels; operating profit or net operating profit; workforce diversity; growth of net income or operating income; billings; financing; regulatory milestones; stockholder liquidity; corporate governance and compliance; intellectual property; personnel matters; progress of internal research; progress of partnered programs; partner satisfaction; budget management; partner or collaborator achievements; internal controls, including those related to the Sarbanes-Oxley Act of 2002; investor relations, analysts and communication; implementation or completion of projects or processes; employee retention; number of users, including unique users; strategic partnerships or transactions (including in-licensing and out-licensing of intellectual property); establishing relationships with respect to the marketing, distribution and sale of the Company’s products; supply chain achievements; co-development, co-marketing, profit sharing, joint venture or other similar arrangements; individual performance goals; corporate development and planning goals; and other measures of performance selected by the Board or Committee whether or not listed herein.

(xx) “*Performance Goals*” means, for a Performance Period, one or more goals established by the Board for the Performance Period based upon the Performance Criteria. Performance Goals may be based on a Company-wide basis, with respect to one or more business units, divisions, Affiliates, or business segments, and in either absolute terms or relative to the performance of one or more comparable companies or the performance of one or more relevant indices. Unless specified otherwise by the Board (i) in the Award Agreement at the time the Award is granted or (ii) in such other document setting forth the Performance Goals at the time the Performance Goals are established, the Board will appropriately make adjustments in the method of calculating the attainment of Performance Goals for a Performance Period as follows: (1) to exclude restructuring and/or other nonrecurring charges; (2) to exclude exchange rate effects; (3) to exclude the effects of changes to generally accepted accounting principles; (4) to exclude the effects of any statutory adjustments to corporate tax rates; (5) to exclude the effects of items that are “unusual” in nature or occur “infrequently” as determined under generally accepted accounting principles; (6) to exclude the dilutive effects of acquisitions or joint ventures; (7) to assume that any business divested by the Company achieved performance objectives at targeted levels during the balance of a Performance Period following such divestiture; (8) to exclude the effect of any change in the outstanding shares of common stock of the Company by reason of any stock dividend or split, stock repurchase, reorganization, recapitalization, merger, consolidation, spin-off,

combination or exchange of shares or other similar corporate change, or any distributions to common stockholders other than regular cash dividends; (9) to exclude the effects of stock based compensation and the award of bonuses under the Company's bonus plans; (10) to exclude costs incurred in connection with potential acquisitions or divestitures that are required to be expensed under generally accepted accounting principles; and (11) to exclude the goodwill and intangible asset impairment charges that are required to be recorded under generally accepted accounting principles. In addition, the Board may establish or provide for other adjustment items in the Award Agreement at the time the Award is granted or in such other document setting forth the Performance Goals at the time the Performance Goals are established. In addition, the Board retains the discretion to reduce or eliminate the compensation or economic benefit due upon attainment of Performance Goals and to define the manner of calculating the Performance Criteria it selects to use for such Performance Period. Partial achievement of the specified criteria may result in the payment or vesting corresponding to the degree of achievement as specified in the Award Agreement or the written terms of a Performance Cash Award.

(yy) "**Performance Period**" means the period of time selected by the Board over which the attainment of one or more Performance Goals will be measured for the purpose of determining a Participant's right to vesting or exercise of an Award. Performance Periods may be of varying and overlapping duration, at the sole discretion of the Board.

(zz) "**Plan**" means this Tempus Labs, Inc. 2022 Equity Incentive Plan, as amended from time to time.

(aaa) "**Plan Administrator**" means the person, persons, and/or third-party administrator designated by the Company to administer the day to day operations of the Plan and the Company's other equity incentive programs.

(bbb) "**Post-Termination Exercise Period**" means the period following termination of a Participant's Continuous Service within which an Option or SAR is exercisable, as specified in Section 4(h).

(ccc) "**Prior Plan**" means the Third Amended and Restated Tempus Labs, Inc. 2015 Stock Plan.

(ddd) "**Restricted Stock Award**" or "**RSA**" means an Award of shares of Common Stock which is granted pursuant to the terms and conditions of Section 5(a).

(eee) "**Restricted Stock Award Agreement**" means a written or electronic agreement between the Company and a holder of a Restricted Stock Award evidencing the terms and conditions of a Restricted Stock Award grant. The Restricted Stock Award Agreement includes the Grant Notice for the Restricted Stock Award and the agreement containing the written summary of the general terms and conditions applicable to the Restricted Stock Award and which is provided, including by electronic means, to a Participant along with the Grant Notice. Each Restricted Stock Award Agreement will be subject to the terms and conditions of the Plan.

(fff) “*Returning Shares*” means shares subject to outstanding stock awards granted under the Prior Plan and that following the Effective Date: (A) are not issued because such stock award or any portion thereof expires or otherwise terminates without all of the shares covered by such stock award having been issued; (B) are not issued because such stock award or any portion thereof is settled in cash; (C) are forfeited back to or repurchased by the Company because of the failure to meet a contingency or condition required for the vesting of such shares; (D) are withheld or reacquired to satisfy the exercise, strike or purchase price; or (E) are withheld or reacquired to satisfy a tax withholding obligation.

(ggg) “*RSU Award*” or “*RSU*” means an Award of restricted stock units representing the right to receive an issuance of shares of Common Stock which is granted pursuant to the terms and conditions of Section 5(a).

(hhh) “*RSU Award Agreement*” means a written or electronic agreement between the Company and a holder of an RSU Award evidencing the terms and conditions of an RSU Award grant. The RSU Award Agreement includes the Grant Notice for the RSU Award and the agreement containing the written summary of the general terms and conditions applicable to the RSU Award and which is provided, including by electronic means, to a Participant along with the Grant Notice. Each RSU Award Agreement will be subject to the terms and conditions of the Plan.

(iii) “*Rule 16b-3*” means Rule 16b-3 promulgated under the Exchange Act or any successor to Rule 16b-3, as in effect from time to time.

(jjj) “*Rule 405*” means Rule 405 promulgated under the Securities Act.

(kkk) “*Section 409A*” means Section 409A of the Code and the regulations and other guidance thereunder.

(lll) “*Section 409A Change in Control*” means a change in the ownership or effective control of the Company, or in the ownership of a substantial portion of the Company’s assets, as provided in Section 409A(a)(2)(A)(v) of the Code and Treasury Regulations Section 1.409A-3(i)(5) (without regard to any alternative definition thereunder).

(mmm) “*Securities Act*” means the Securities Act of 1933, as amended.

(nnn) “*Share Reserve*” means the number of shares available for issuance under the Plan as set forth in Section 2(a).

(ooo) “*Stock Appreciation Right*” or “*SAR*” means a right to receive the appreciation on Common Stock that is granted pursuant to the terms and conditions of Section 4.

(ppp) “*SAR Agreement*” means a written or electronic agreement between the Company and a holder of a SAR evidencing the terms and conditions of a SAR grant. The SAR Agreement includes the Grant Notice for the SAR and the agreement containing the written summary of the general terms and conditions applicable to the SAR and which is provided, including by electronic means, to a Participant along with the Grant Notice. Each SAR Agreement will be subject to the terms and conditions of the Plan.

(qqq) “*Subsidiary*” means, with respect to the Company, (i) any corporation of which more than 50% of the outstanding capital stock having ordinary voting power to elect a majority of the board of directors of such corporation (irrespective of whether, at the time, stock of any other class or classes of such corporation will have or might have voting power by reason of the happening of any contingency) is at the time, directly or indirectly, Owned by the Company, and (ii) any partnership, limited liability company or other entity in which the Company has a direct or indirect interest (whether in the form of voting or participation in profits or capital contribution) of more than 50%.

(rrr) “*Ten Percent Stockholder*” means a person who Owns (or is deemed to Own pursuant to Section 424(d) of the Code) stock possessing more than 10% of the total combined voting power of all classes of stock of the Company or any Affiliate.

(sss) “*Trading Policy*” means the Company’s policy permitting certain individuals to sell Company shares only during certain “window” periods and/or otherwise restricts the ability of certain individuals to transfer or encumber Company shares, as in effect from time to time.

(ttt) “*Unvested Non-Exempt Award*” means the portion of any Non-Exempt Award that had not vested in accordance with its terms upon or prior to the date of any Corporate Transaction.

(uuu) “*Vested Non-Exempt Award*” means the portion of any Non-Exempt Award that had vested in accordance with its terms upon or prior to the date of a Corporate Transaction.

**TEMPUS LABS, INC.
STOCK OPTION GRANT NOTICE
(2022 EQUITY INCENTIVE PLAN)**

Tempus Labs, Inc. (the “*Company*”), pursuant to its 2022 Equity Incentive Plan (the “*Plan*”), has granted to you (“*Optionholder*”) an option to purchase the number of shares of the Common Stock on the terms set forth below (the “*Option*”). Your Option is subject to all of the terms and conditions as set forth herein and in the Plan, and the Stock Option Agreement and the Notice of Exercise, all of which are available by logging into your [_____] brokerage account and which are incorporated herein in their entirety. Capitalized terms not explicitly defined herein but defined in the Plan or the Stock Option Agreement shall have the meanings set forth in the Plan or the Stock Option Agreement, as applicable.

Optionholder:	_____
Date of Grant:	_____
Vesting Commencement Date:	_____
Number of Shares of Common Stock Subject to Option:	_____
Exercise Price (Per Share):	_____
Total Exercise Price:	_____
Expiration Date:	_____

Type of Grant: [Incentive Stock Option¹] OR [Nonstatutory Stock Option]

Exercise and Vesting Schedule: Subject to the Optionholder’s Continuous Service through each applicable vesting date, the Option will vest as follows:
[_____].

Optionholder Acknowledgements: By your electronic acceptance of the Option via your [_____] brokerage account, you understand and agree that:

- The Option is governed by this Stock Option Grant Notice, and the provisions of the Plan and the Stock Option Agreement and the Notice of Exercise, all of which are made a part of this document. Unless otherwise provided in the Plan, this Grant Notice and the Stock Option Agreement (together, the “*Option Agreement*”) may not be modified, amended or revised except in a writing signed by you and a duly authorized officer of the Company.
- [If the Option is an Incentive Stock Option, it (plus other outstanding Incentive Stock Options granted to you) cannot be first *exercisable* for more than \$100,000 in value (measured by exercise price) in any calendar year. Any excess over \$100,000 is a Nonstatutory Stock Option.]
- Copies of the Plan, the Stock Option Agreement and Prospectus for the Plan are available via your [_____] brokerage account and may be viewed and printed by you. You consent to receive this Grant Notice, the Plan, the Stock Option Agreement, the Prospectus and any other Plan-related documents by electronic delivery and to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.

¹ If this is an Incentive Stock Option, it (plus other outstanding Incentive Stock Options) cannot be first exercisable for more than \$100,000 in value (measured by exercise price) in any calendar year. Any excess over \$100,000 is a Nonstatutory Stock Option.

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- You have read and are familiar with the provisions of the Plan, the Stock Option Agreement, the Notice of Exercise and the Prospectus. In the event of any conflict between the provisions in this Grant Notice, the Option Agreement, the Notice of Exercise, or the Prospectus and the terms of the Plan, the terms of the Plan shall control.
 - The Option Agreement sets forth the entire understanding between you and the Company regarding the acquisition of Common Stock and supersedes all prior oral and written agreements, promises and/or representations on that subject with the exception of other equity awards previously granted to you and any written employment agreement, offer letter, severance agreement, written severance plan or policy, or other written agreement between the Company and you in each case that specifies the terms that should govern this Option.

ATTACHMENT I

STOCK OPTION AGREEMENT

TEMPUS LABS, INC.
2022 EQUITY INCENTIVE PLAN

STOCK OPTION AGREEMENT

As reflected by your Stock Option Grant Notice (“**Grant Notice**”) Tempus Labs, Inc. (the “**Company**”) has granted you an option under its 2022 Equity Incentive Plan (the “**Plan**”) to purchase a number of shares of Common Stock at the exercise price indicated in your Grant Notice (the “**Option**”). Capitalized terms not explicitly defined in this Agreement but defined in the Grant Notice or the Plan shall have the meanings set forth in the Grant Notice or Plan, as applicable. The terms of your Option as specified in the Grant Notice and this Stock Option Agreement constitute your Option Agreement.

The general terms and conditions applicable to your Option are as follows:

1. GOVERNING PLAN DOCUMENT. Your Option is subject to all the provisions of the Plan, including but not limited to the provisions in:

(a) Section 6 regarding the impact of a Capitalization Adjustment, dissolution, liquidation, or Corporate Transaction on your Option;

(b) Section 9(e) regarding the Company’s retained rights to terminate your Continuous Service notwithstanding the grant of the Option;

and

(c) Section 8 regarding the tax consequences of your Option.

Your Option is further subject to all interpretations, amendments, rules and regulations, which may from time to time be promulgated and adopted pursuant to the Plan. In the event of any conflict between the Option Agreement and the provisions of the Plan, the provisions of the Plan shall control.

2. VESTING. Your Option will vest as provided in your Grant Notice, subject to the provisions contained herein and the terms of the Plan. Vesting will cease upon the termination of your Continuous Service.

3. EXERCISE.

(a) You may generally exercise the vested portion of your Option for whole shares of Common Stock at any time during its term by delivery of payment of the exercise price and applicable withholding taxes and other required documentation to the Plan Administrator in accordance with the exercise procedures established by the Plan Administrator, which may include an electronic submission. Please review Sections 4(i), 4(j) and 7(b)(v) of the Plan, which may restrict or prohibit your ability to exercise your Option during certain periods.

(b) To the extent permitted by Applicable Law, you may pay your Option exercise price as follows:

(i) cash, check, bank draft or money order;

(ii) pursuant to a “cashless exercise” program as further described in Section 4(c)(ii) of the Plan if at the time of exercise the Common Stock is publicly traded;

(iii) subject to Company and/or Committee consent at the time of exercise, by delivery of previously owned shares of Common Stock as further described in Section 4(c)(iii) of the Plan; or

(iv) subject to Company and/or Committee consent at the time of exercise, if the Option is a Nonstatutory Stock Option, by a “net exercise” arrangement as further described in Section 4(c)(iv) of the Plan.

(c) By accepting your Option, you agree that you will not sell, dispose of, transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale with respect to any shares of Common Stock or other securities of the Company held by you, for a period of 180 days following the effective date of a registration statement of the Company filed under the Securities Act or such longer period as the underwriters or the Company will request to facilitate compliance with FINRA Rule 2241 or any successor or similar rules or regulation (the “*Lock-Up Period*”); provided, however, that nothing contained in this Section 3(c) will prevent the exercise of a repurchase option, if any, in favor of the Company during the Lock-Up Period. You further agree to execute and deliver such other agreements as may be reasonably requested by the Company or the underwriters that are consistent with the foregoing or that are necessary to give further effect thereto. In order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to your shares of Common Stock until the end of such period. You also agree that any transferee of any shares of Common Stock (or other securities) of the Company held by you will be bound by this Section 3(c). The underwriters of the Company’s stock are intended third party beneficiaries of this Section 3(c) and will have the right, power and authority to enforce the provisions hereof as though they were a party hereto.

4. TERM. You may not exercise your Option before the commencement of its term or after its term expires. The term of your Option commences on the Date of Grant and expires upon the earliest of the following:

(a) immediately upon the termination of your Continuous Service for Cause;

(b) three months after the termination of your Continuous Service for any reason other than Cause, Disability or death;

(c) 12 months after the termination of your Continuous Service due to your Disability;

(d) 18 months after your death if you die during your Continuous Service;

(e) immediately upon a Corporate Transaction if the Board has determined that the Option will terminate in connection with a Corporate Transaction,

(f) the Expiration Date indicated in your Grant Notice; or

(g) the day before the 10th anniversary of the Date of Grant.

Notwithstanding the foregoing, if you die during the period provided in Section 4(b) or 4(c) above, the term of your Option shall not expire until the earlier of (i) 18 months after your death, (ii) upon any termination of the Option in connection with a Corporate Transaction, (iii) the Expiration Date indicated in your Grant Notice, or (iv) the day before the tenth anniversary of the Date of Grant. Additionally, the Post-Termination Exercise Period of your Option may be extended as provided in Section 4(i) of the Plan.

To obtain the federal income tax advantages associated with an Incentive Stock Option, the Code requires that at all times beginning on the date of grant of your Option and ending on the day three months before the date of your Option's exercise, you must be an employee of the Company or an Affiliate, except in the event of your death or Disability. If the Company provides for the extended exercisability of your Option under certain circumstances for your benefit, your Option will not necessarily be treated as an Incentive Stock Option if you exercise your Option more than three months after the date your employment terminates.

5. WITHHOLDING OBLIGATIONS. As further provided in Section 8 of the Plan: (a) you may not exercise your Option unless the applicable tax withholding obligations are satisfied, and (b) at the time you exercise your Option, in whole or in part, or at any time thereafter as requested by the Company, you hereby authorize withholding from payroll and any other amounts payable to you, and otherwise agree to make adequate provision for (including by means of a "cashless exercise" pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board to the extent permitted by the Company), any sums required to satisfy the federal, state, local and foreign tax withholding obligations, if any, which arise in connection with the exercise of your Option in accordance with the withholding procedures established by the Company. Accordingly, you may not be able to exercise your Option even though the Option is vested, and the Company shall have no obligation to issue shares of Common Stock subject to your Option, unless and until such obligations are satisfied. In the event that the amount of the Company's withholding obligation in connection with your Option was greater than the amount actually withheld by the Company, you agree to indemnify and hold the Company harmless from any failure by the Company to withhold the proper amount.

6. INCENTIVE STOCK OPTION DISPOSITION REQUIREMENT. If your Option is an Incentive Stock Option, you must notify the Company in writing within 15 days after the date of any disposition of any of the shares of the Common Stock issued upon exercise of your Option that occurs within two years after the date of your Option grant or within one year after such shares of Common Stock are transferred upon exercise of your Option.

7. TRANSFERABILITY. Except as otherwise provided in Section 4(e) of the Plan, your Option is not transferable, except by will or by the applicable laws of descent and distribution, and is exercisable during your life only by you.

8. CORPORATE TRANSACTION. Your Option is subject to the terms of any agreement governing a Corporate Transaction involving the Company, including, without limitation, a provision for the appointment of a stockholder representative that is authorized to act on your behalf with respect to any escrow, indemnities and any contingent consideration.

9. NO LIABILITY FOR TAXES. As a condition to accepting the Option, you hereby (a) agree to not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates related to tax liabilities arising from the Option or other Company compensation and (b) acknowledge that you were advised to consult with your own personal tax, financial and other legal advisors regarding the tax consequences of the Option and have either done so or knowingly and voluntarily declined to do so. Additionally, you acknowledge that the Option is exempt from Section 409A only if the exercise price is at least equal to the “fair market value” of the Common Stock on the date of grant as determined by the Internal Revenue Service and there is no other impermissible deferral of compensation associated with the Option. Additionally, as a condition to accepting the Option, you agree not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates in the event that the Internal Revenue Service asserts that such exercise is less than the “fair market value” of the Common Stock on the date of grant as subsequently determined by the Internal Revenue Service.

10. SEVERABILITY. If any part of this Option Agreement or the Plan is declared by any court or governmental authority to be unlawful or invalid, such unlawfulness or invalidity will not invalidate any portion of this Option Agreement or the Plan not declared to be unlawful or invalid. Any Section of this Option Agreement (or part of such a Section) so declared to be unlawful or invalid will, if possible, be construed in a manner which will give effect to the terms of such Section or part of a Section to the fullest extent possible while remaining lawful and valid

11. OTHER DOCUMENTS. You hereby acknowledge receipt of or the right to receive a document providing the information required by Rule 428(b)(1) promulgated under the Securities Act, which includes the Prospectus. In addition, you acknowledge receipt of the Company’s Trading Policy.

12. QUESTIONS. If you have questions regarding these or any other terms and conditions applicable to your Option, including a summary of the applicable federal income tax consequences please see the Prospectus.

* * * *

ATTACHMENT II

2022 EQUITY INCENTIVE PLAN

ATTACHMENT III

NOTICE OF EXERCISE

TEMPUS LABS, INC.

(2022 EQUITY INCENTIVE PLAN)

NOTICE OF EXERCISE

Tempus Labs, Inc.
600 West Chicago Avenue, Suite 510
Chicago, Illinois 60654

Date of Exercise: _____

This constitutes notice to Tempus Labs, Inc. (the "**Company**") that I elect to purchase the below number of shares of Common Stock of the Company (the "**Shares**") by exercising my Option for the price set forth below. Capitalized terms not explicitly defined in this Notice of Exercise but defined in the Grant Notice, Option Agreement or 2022 Equity Incentive Plan (the "**Plan**") shall have the meanings set forth in the Grant Notice, Option Agreement or Plan, as applicable. Use of certain payment methods is subject to Company and/or Committee consent and certain additional requirements set forth in the Option Agreement and the Plan.

Type of option (check one):

Incentive

Nonstatutory

Date of Grant: _____

Number of Shares as
to which Option is
exercised: _____

Certificates to be
issued in name of: _____

Total exercise price: \$ _____

Cash, check, bank draft or money order delivered herewith: \$ _____

Value of _____ Shares delivered herewith: \$ _____

Regulation T Program (cashless exercise) \$ _____

Value of _____ Shares pursuant to net exercise: \$ _____

By this exercise, I agree (i) to provide such additional documents as you may require pursuant to the terms of the Plan, (ii) to satisfy the tax withholding obligations, if any, relating to the exercise of this Option as set forth in the Option Agreement, and (iii) if this exercise relates to an incentive stock option, to notify you in writing within 15 days after the date of any disposition of any of the Shares issued upon exercise of this Option that occurs within two years after the Date of Grant or within one year after such Shares are issued upon exercise of this Option.

I further agree that I will not sell, dispose of, transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale with respect to any shares of Common Stock or other securities of the Company that I hold, for a period of 180 days following the effective date of a registration statement of the Company filed under the Securities Act or such longer period as the underwriters or the Company will request to facilitate compliance with FINRA Rule 2241 or any successor or similar rules or regulation (the "**Lock-Up Period**"); *provided, however*, that nothing contained in this paragraph will prevent the exercise of a repurchase option, if any, in favor of the Company during the Lock-Up Period. I further agree to execute and deliver such other agreements as may be reasonably requested by the Company or the underwriters that are consistent with the foregoing or that are necessary to give further effect thereto. I further agree that in order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to shares of Common Stock that I hold until the end of such period. I also agree that any transferee of any shares of Common Stock (or other securities) of the Company that I hold will be bound by this paragraph. The underwriters of the Company's stock are intended third party beneficiaries of this paragraph and will have the right, power and authority to enforce the provisions hereof as though they were a party hereto.

Very truly yours,

TEMPUS LABS, INC.
RSU AWARD GRANT NOTICE
(2022 EQUITY INCENTIVE PLAN)

Tempus Labs, Inc. (the “*Company*”) has awarded to you (the “*Participant*”) the number of restricted stock units specified and on the terms set forth below in consideration of your services (the “*RSU Award*”). Your RSU Award is subject to all of the terms and conditions as set forth herein and in the Company’s 2022 Equity Incentive Plan (the “*Plan*”) and the Award Agreement (the “*Agreement*”), which are available by logging into your [_____] brokerage account and which are incorporated herein in their entirety. Capitalized terms not explicitly defined herein but defined in the Plan or the Agreement shall have the meanings set forth in the Plan or the Agreement.

Participant: _____
 Date of Grant: _____
 Vesting Commencement Date: _____
 Number of Restricted Stock Units: _____

Vesting Schedule: Subject to the Participant’s Continuous Service through each applicable vesting date, the RSU Award will vest as follows:
 [_____].

Issuance Schedule: One share of Common Stock will be issued for each restricted stock unit which vests at the time set forth in Section 6 of the Agreement.

Participant Acknowledgements: By your electronic acceptance of the RSU Award via your [_____] brokerage account, you understand and agree that:

- The RSU Award is governed by this RSU Award Grant Notice (the “*Grant Notice*”), and the provisions of the Plan and the Agreement, all of which are made a part of this document. Unless otherwise provided in the Plan, this Grant Notice and the Agreement (together, the “*RSU Award Agreement*”) may not be modified, amended or revised except in a writing signed by you and a duly authorized officer of the Company.
- Copies of the Plan, the Agreement and Prospectus for the Plan are available via your [_____] brokerage account and may be viewed and printed by you. You consent to receive this Grant Notice, the Plan, the Agreement, the Prospectus and any other Plan-related documents by electronic delivery and to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.
- You have read and are familiar with the provisions of the Plan, the RSU Award Agreement and the Prospectus. In the event of any conflict between the provisions in the RSU Award Agreement, or the Prospectus and the terms of the Plan, the terms of the Plan shall control.
- The RSU Award Agreement sets forth the entire understanding between you and the Company regarding the acquisition of Common Stock and supersedes all prior oral and written agreements, promises and/or representations on that subject with the exception of: (i) other equity awards previously granted to you, and (ii) any written employment agreement, offer letter, severance agreement, written severance plan or policy, or other written agreement between the Company and you in each case that specifies the terms that should govern this RSU Award.

TEMPUS LABS, INC.
2022 EQUITY INCENTIVE PLAN
AWARD AGREEMENT (RSU AWARD)

As reflected by your Restricted Stock Unit Grant Notice (“*Grant Notice*”) Tempus Labs, Inc. (the “*Company*”) has granted you a RSU Award under its 2022 Equity Incentive Plan (the “*Plan*”) for the number of restricted stock units as indicated in your Grant Notice (the “*RSU Award*”). The terms of your RSU Award as specified in this Award Agreement for your RSU Award (the “*Agreement*”) and the Grant Notice constitute your “*RSU Award Agreement*”. Defined terms not explicitly defined in this Agreement but defined in the Grant Notice or the Plan shall have the same definitions as in the Grant Notice or Plan, as applicable.

The general terms applicable to your RSU Award are as follows:

1. GOVERNING PLAN DOCUMENT. Your RSU Award is subject to all the provisions of the Plan, including but not limited to the provisions in:

(a) Section 6 of the Plan regarding the impact of a Capitalization Adjustment, dissolution, liquidation, or Corporate Transaction on your RSU Award;

(b) Section 9(e) of the Plan regarding the Company’s retained rights to terminate your Continuous Service notwithstanding the grant of the RSU Award; and

(c) Section 8 of the Plan regarding the tax consequences of your RSU Award.

Your RSU Award is further subject to all interpretations, amendments, rules and regulations, which may from time to time be promulgated and adopted pursuant to the Plan. In the event of any conflict between the RSU Award Agreement and the provisions of the Plan, the provisions of the Plan shall control.

2. GRANT OF THE RSU AWARD. This RSU Award represents your right to be issued on a future date the number of shares of the Company’s Common Stock that is equal to the number of restricted stock units indicated in the Grant Notice as modified to reflect any Capitalization Adjustment and subject to your satisfaction of the vesting conditions set forth therein (the “*Restricted Stock Units*”). Any additional Restricted Stock Units that become subject to the RSU Award pursuant to Capitalization Adjustments as set forth in the Plan and the provisions of Section 4 below, if any, shall be subject, in a manner determined by the Board, to the same forfeiture restrictions, restrictions on transferability, and time and manner of delivery as applicable to the other Restricted Stock Units covered by your RSU Award.

3. VESTING. Your Restricted Stock Units will vest, if at all, in accordance with the vesting schedule provided in the Grant Notice, subject to the provisions contained herein and the terms of the Plan. Vesting will cease upon the termination of your Continuous Service.

4. DIVIDENDS. You may become entitled to receive payments equal to any cash dividends and other distributions paid with respect to a corresponding number of shares of Common Stock to be issued in respect of the Restricted Stock Units covered by your RSU Award. Any such dividends or distributions shall be subject to the same forfeiture restrictions as apply to the Restricted Stock Units and shall be paid at the same time that the corresponding shares are issued in respect of your vested Restricted Stock Units, provided, however that to the extent any such dividends or distributions are paid in shares of Common Stock, then you will automatically be granted a corresponding number of additional Restricted Stock Units subject to the RSU Award (the “*Dividend Units*”), and further provided that such Dividend Units shall be subject to the same forfeiture restrictions and restrictions on transferability, and same timing requirements for issuance of shares, as apply to the Restricted Stock Units subject to the RSU Award with respect to which the Dividend Units relate.

5. WITHHOLDING OBLIGATIONS. As further provided in Section 8 of the Plan, you hereby authorize withholding from payroll and any other amounts payable to you, and otherwise agree to make adequate provision for, any sums required to satisfy the federal, state, local and foreign tax withholding obligations, if any, which arise in connection with your RSU Award (the “*Withholding Obligation*”) in accordance with the withholding procedures established by the Company. Unless the Withholding Obligation is satisfied, the Company shall have no obligation to deliver to you any Common Stock in respect of the RSU Award. In the event the Withholding Obligation of the Company arises prior to the delivery to you of Common Stock or it is determined after the delivery of Common Stock to you that the amount of the Withholding Obligation was greater than the amount withheld by the Company, you agree to indemnify and hold the Company harmless from any failure by the Company to withhold the proper amount.

6. DATE OF ISSUANCE.

(a) The issuance of shares in respect of the Restricted Stock Units is intended to comply with Treasury Regulations Section 1.409A-1(b)(4) and will be construed and administered in such a manner. Subject to the satisfaction of the Withholding Obligation, if any, in the event one or more Restricted Stock Units vests, the Company shall issue to you one (1) share of Common Stock for each Restricted Stock Unit (subject to any adjustment under Section 4 above, and subject to any different provisions in the Grant Notice) that vests on the applicable vesting date(s) or on a later date as determined by the Company but in no event later than the Issuance Deadline (as defined below).

(b) In addition, the following provisions shall apply to the extent applicable at a vesting date when shares of Common Stock are registered under the Securities Act, unless otherwise determined by the Company. If:

(i) the applicable vest date does not occur (1) during an “open window period” applicable to you, as determined by the Company in accordance with the Company’s then-effective policy on trading in Company securities, or (2) on a date when you are otherwise permitted to sell shares of Common Stock on an established stock exchange or stock market (including but not limited to under a previously established written trading plan that meets the requirements of Rule 10b5-1 under the Exchange Act and was entered into in compliance with the Company’s policies (a “*10b5-1 Arrangement*”) or under such other policy expressly approved by the Company), and

(ii) either (1) a Withholding Obligation does not apply, or (2) the Company decides, prior to the applicable vest date, (A) not to satisfy the Withholding Obligation by withholding shares of Common Stock from the shares otherwise due to you under this Award, and (B) not to permit you to enter into a “same day sale” commitment with a broker-dealer (including but not limited to a commitment under a 10b5-1 Arrangement) and (C) not to permit you to pay your Withholding Obligation in cash,

then the shares that would otherwise be issued to you on the applicable vest date will not be delivered on such applicable vest date and will instead be delivered on the first business day when you are not prohibited from selling shares of the Company’s Common Stock in the open public market or on such other date determined by the Company, but in no event later than the Issuance Deadline.

The “**Issuance Deadline**” means (a) December 31 of the calendar year in which the applicable vest date occurs (that is, the last day of your taxable year in which the applicable vest date occurs), or (b) if and only if permitted in a manner that complies with Treasury Regulations Section 1.409A-1(b)(4), no later than the date that is the 15th day of the third calendar month of the applicable year following the year in which the shares of Common Stock issuable as a result of the applicable vest date under this Award are no longer subject to a “substantial risk of forfeiture” within the meaning of Treasury Regulations Section 1.409A-1(d).

(c) To the extent the RSU Award is a Non-Exempt RSU Award, the provisions of Section 11 of the Plan shall apply.

7. LOCK-UP PERIOD. By accepting your RSU Award, you agree that you will not sell, dispose of, transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale with respect to any shares of Common Stock or other securities of the Company held by you, for a period of one hundred eighty (180) days following the effective date of a registration statement of the Company filed under the Securities Act or such longer period as the underwriters or the Company will request to facilitate compliance with FINRA Rule 2241 or any successor or similar rules or regulation (the “**Lock-Up Period**”); *provided, however*, that nothing contained in this Section 7 will prevent the exercise of a repurchase option, if any, in favor of the Company during the Lock-Up Period. You further agree to execute and deliver such other agreements as may be reasonably requested by the Company or the underwriters that are consistent with the foregoing or that are necessary to give further effect thereto. In order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to your shares of Common Stock until the end of such period. You also agree that any transferee of any shares of Common Stock (or other securities) of the Company held by you will be bound by this Section 7. The underwriters of the Company’s stock are intended third party beneficiaries of this Section 7 and will have the right, power and authority to enforce the provisions hereof as though they were a party hereto.

8. TRANSFERABILITY. Except as otherwise provided in the Plan, your RSU Award is not transferable, except by will or by the applicable laws of descent and distribution.

9. CORPORATE TRANSACTION. Your RSU Award is subject to the terms of any agreement governing a Corporate Transaction involving the Company, including, without limitation, a provision for the appointment of a stockholder representative that is authorized to act on your behalf with respect to any escrow, indemnities and any contingent consideration.

10. NO LIABILITY FOR TAXES. As a condition to accepting the RSU Award, you hereby (a) agree to not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates related to tax liabilities arising from the RSU Award or other Company compensation and (b) acknowledge that you were advised to consult with your own personal tax, financial and other legal advisors regarding the tax consequences of the RSU Award and have either done so or knowingly and voluntarily declined to do so.

11. SEVERABILITY. If any part of this Agreement or the Plan is declared by any court or governmental authority to be unlawful or invalid, such unlawfulness or invalidity will not invalidate any portion of this Agreement or the Plan not declared to be unlawful or invalid. Any Section of this Agreement (or part of such a Section) so declared to be unlawful or invalid will, if possible, be construed in a manner which will give effect to the terms of such Section or part of a Section to the fullest extent possible while remaining lawful and valid.

12. OTHER DOCUMENTS. You hereby acknowledge receipt of or the right to receive a document providing the information required by Rule 428(b)(1) promulgated under the Securities Act, which includes the Prospectus. In addition, you acknowledge receipt of the Company's Trading Policy.

13. QUESTIONS. If you have questions regarding these or any other terms and conditions applicable to your RSU Award, including a summary of the applicable federal income tax consequences please see the Prospectus.

TEMPUS LABS, INC.
INDEMNIFICATION AGREEMENT

This INDEMNIFICATION AGREEMENT (this "*Agreement*") is dated as of _____, 20__ and is between Tempus Labs, Inc., a Delaware corporation (the "*Company*"), and _____ ("*Indemnitee*").

RECITALS

- A.** Indemnitee's service to the Company substantially benefits the Company.
- B.** Individuals are reluctant to serve as directors or officers of corporations or in certain other capacities unless they are provided with adequate protection through insurance or indemnification against the risks of claims and actions against them arising out of such service.
- C.** Indemnitee does not regard the protection currently provided by applicable law, the Company's governing documents and any insurance as adequate under the present circumstances, and Indemnitee may not be willing to serve as a director or officer without additional protection.
- D.** In order to induce Indemnitee to continue to provide services to the Company, it is reasonable, prudent and necessary for the Company to contractually obligate itself to indemnify, and to advance expenses on behalf of, Indemnitee as permitted by applicable law.
- E.** This Agreement is a supplement to and in furtherance of the indemnification provided in the Company's certificate of incorporation and bylaws, and any resolutions adopted pursuant thereto, and this Agreement shall not be deemed a substitute therefor, nor shall this Agreement be deemed to limit, diminish or abrogate any rights of Indemnitee thereunder.

AGREEMENT

The parties agree as follows:

1. Definitions.

(a) "**Beneficial Owner**" shall have the meaning given to such term in Rule 13d-3 under the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"); provided, however, that "Beneficial Owner" shall exclude any Person otherwise becoming a Beneficial Owner solely by reason of (i) the stockholders of the Company approving a merger of the Company with another Person, or entering into tender or support agreements relating thereto, provided such merger was approved by the Company's board of directors, or (ii) the Company's board of directors approving a sale of securities by the Company to such Person.

(b) A "**Change in Control**" shall be deemed to occur upon the earliest to occur after the date of this Agreement of any of the following events:

(i) *Acquisition of Stock by Third Party.* Any Person (as defined below) becomes the Beneficial Owner, directly or indirectly, of securities of the Company representing 50% or more of the combined voting power of the Company's then outstanding securities;

(ii) *Change in Board Composition.* During any period of two consecutive years (not including any period prior to the execution of this Agreement), individuals who at the beginning of such period constituted the Company's board of directors and any Approved Directors cease for any reason to constitute at least a majority of the members of the Company's board of directors. "**Approved Directors**" means new directors (other than a director designated by a person who has entered into an agreement with the Company to effect a transaction described in Sections 1(b)(i), 1(b)(iii) or 1(b)(iv)) whose election or nomination by the board of directors (or, if applicable, by the Company's stockholders) was approved by a vote of at least two thirds of the directors then still in office who either were directors at the beginning of such two-year period or whose election or nomination for election was previously so approved;

(iii) *Corporate Transactions.* The effective date of a merger or consolidation of the Company with any other entity, other than a merger or consolidation that would result in the voting securities of the Company outstanding immediately prior to such merger or consolidation continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity) more than 50% of the combined voting power of the voting securities of the surviving entity outstanding immediately after such merger or consolidation and with the power to elect a majority of the board of directors or other governing body of such surviving entity; or

(iv) *Liquidation.* The approval by the Company's board of directors of a complete liquidation or the dissolution of the Company or an agreement for the sale, lease or disposition by the Company of all or substantially all of the Company's assets; or

(v) *Other Events.* Any other event of a nature that would be required to be reported in response to Item 6(e) of Schedule 14A of Regulation 14A (or in response to any similar item on any similar schedule or form) promulgated under the Exchange Act, whether or not the Company is then subject to such reporting requirement, *except* the completion of the Company's initial public offering shall not be considered a Change in Control.

(c) "**Corporate Status**" describes the status of a person who is or was a director, trustee, general partner, managing member, officer, employee, agent or fiduciary of the Company or any other Enterprise.

(d) "**DGCL**" means the General Corporation Law of the State of Delaware.

(e) "**Disinterested Director**" means a director of the Company who is not and was not a party to the Proceeding in respect of which indemnification is sought by Indemnitee.

(f) "**Enterprise**" means the Company and any other corporation, partnership, limited liability company, joint venture, trust, employee benefit plan or other enterprise of which Indemnitee is or was serving at the request of the Company as a director, trustee, general partner, managing member, officer, employee, agent or fiduciary.

(g) "**Expenses**" include all reasonable and actually incurred attorneys' fees, retainers, court costs, transcript costs, fees and costs of experts, witness fees, travel expenses, duplicating costs, printing and binding costs, telephone charges, postage, delivery service fees, and all other disbursements or expenses of the types customarily incurred in connection with prosecuting, defending, preparing to prosecute or defend, investigating, being or preparing to be a witness in, or otherwise participating in, a Proceeding. Expenses also include (i) Expenses incurred in connection with any appeal resulting from any Proceeding, including without limitation the premium, security for, and other costs relating to any cost bond, supersede as bond or other appeal bond or their equivalent, and (ii) for purposes of Section 10(d), Expenses incurred by Indemnitee in connection with the interpretation, enforcement or defense of Indemnitee's rights under this Agreement or under any directors' and officers' liability insurance policies maintained by the Company. Expenses, however, shall not include amounts paid in settlement by Indemnitee or the amount of judgments or fines against Indemnitee.

(h) “**Independent Counsel**” means a law firm, or a partner or member of a law firm, that is experienced in matters of corporation law and neither presently is, nor in the past five years has been, retained to represent (i) the Company, any Enterprise or Indemnitee in any matter material to any such party (other than as Independent Counsel with respect to matters concerning Indemnitee under this Agreement, or other indemnitees under similar indemnification agreements), or (ii) any other party to the Proceeding giving rise to a claim for indemnification hereunder. Notwithstanding the foregoing, the term Independent Counsel shall not include any person who, under the applicable standards of professional conduct then prevailing, would have a conflict of interest in representing either the Company or Indemnitee in an action to determine Indemnitee’s rights under this Agreement.

(i) “**Person**” shall have the meaning set forth in Sections 13(d) and 14(d) of the Exchange Act; *provided, however*, that Person shall exclude (i) the Company, (ii) any trustee or other fiduciary holding securities under an employee benefit plan of the Company, and (iii) any corporation owned, directly or indirectly, by the stockholders of the Company in substantially the same proportions as their ownership of stock of the Company.

(j) “**Proceeding**” means any threatened, pending or completed action, suit, arbitration, mediation, alternate dispute resolution mechanism, investigation, inquiry, administrative hearing or proceeding, whether brought in the right of the Company or otherwise and whether of a civil, criminal, administrative or investigative nature, whether formal or informal, including any appeal therefrom and including without limitation any such Proceeding pending as of the date of this Agreement, in which Indemnitee was, is or will be involved as a party, a potential party, a non-party witness or otherwise by reason of (i) the fact that Indemnitee is or was a director or officer of the Company, (ii) any action taken by Indemnitee or any action or inaction on Indemnitee’s part while acting as a director or officer of the Company, or (iii) the fact that he or she is or was serving at the request of the Company as a director, trustee, general partner, managing member, officer, employee, agent or fiduciary of the Company or any other Enterprise, in each case whether or not serving in such capacity at the time any liability or Expense is incurred for which indemnification or advancement of expenses can be provided under this Agreement.

(k) “**to the fullest extent permitted by applicable law**” means to the fullest extent permitted by all applicable laws, including without limitation: (i) the fullest extent permitted by DGCL as of the date of this Agreement and (ii) the fullest extent authorized or permitted by any amendments to or replacements of the DGCL adopted after the date of this Agreement that increase the extent to which a corporation may indemnify its officers and directors.

(l) In connection with any Proceeding relating to an employee benefit plan: references to “**fin**es” shall include any excise taxes assessed on a person with respect to any employee benefit plan; references to “**serv**ing at the request of the Company” shall include any service as a director, officer, employee or agent of the Company which imposes duties on, or involves services by, such director, officer, employee or agent with respect to an employee benefit plan, its participants or beneficiaries; and a person who acted in good faith and in a manner he or she reasonably believed to be in the best interests of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner “**not opposed to the best interests of the Company**” as referred to in this Agreement.

2. Indemnity in Third-Party Proceedings. The Company shall indemnify Indemnitee in accordance with the provisions of this Section 2 if Indemnitee is, or is threatened to be made, a party to or witness or other participant in any Proceeding, other than a Proceeding by or in the right of the Company to procure a judgment in its favor. Pursuant to this Section 2, Indemnitee shall be indemnified to the fullest extent permitted by applicable law against all Expenses, judgments, fines and amounts paid in settlement actually and reasonably incurred by Indemnitee or on his or her behalf in connection with such Proceeding or any claim, issue or matter therein, if Indemnitee acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the Company and, with respect to any criminal action or proceeding, had no reasonable cause to believe that his or her conduct was unlawful.

3. Indemnity in Proceedings by or in the Right of the Company. The Company shall indemnify Indemnitee in accordance with the provisions of this Section 3 if Indemnitee is, or is threatened to be made, a party to or a witness or other participant in any Proceeding by or in the right of the Company to procure a judgment in its favor. Pursuant to this Section 3, Indemnitee shall be indemnified to the fullest extent permitted by applicable law against all Expenses incurred by Indemnitee or on his or her behalf in connection with such Proceeding or any claim, issue or matter therein, if Indemnitee acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the Company. No indemnification for Expenses shall be made under this Section 3 in respect of any claim, issue or matter as to which Indemnitee shall have been adjudged by a court of competent jurisdiction to be liable to the Company, unless and only to the extent that the Delaware Court of Chancery or any court in which the Proceeding was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, Indemnitee is fairly and reasonably entitled to indemnification for such expenses as the Delaware Court of Chancery or such other court shall deem proper.

4. Indemnification for Expenses of a Party Who is Wholly or Partly Successful. Notwithstanding any other provision of this Agreement, in circumstances where indemnification is not available under Section 2 or 3, as the case may be, to the fullest extent permitted by law and to the extent that Indemnitee is a party to, and is successful (on the merits or otherwise) in defense of, any Proceeding or any claim, issue or matter therein, the Company shall indemnify Indemnitee against all Expenses incurred by Indemnitee or on Indemnitee's behalf in connection therewith. For purposes of this Section 4, the termination of any claim, issue or matter in such a Proceeding by dismissal, with or without prejudice, shall be deemed to be a successful result as to such claim, issue or matter.

5. Exclusions. Notwithstanding any provision in this Agreement, the Company shall not be obligated under this Agreement to make any indemnity in connection with any Proceeding (or any part of any Proceeding):

(a) for which payment has actually been made to or on behalf of Indemnitee under any statute, insurance policy, indemnity provision, vote or otherwise, except with respect to any excess beyond the amount paid;

(b) for an accounting or disgorgement of profits pursuant to Section 16(b) of the Exchange Act, or similar provisions of federal, state or local statutory law or common law, if Indemnitee is held liable therefor (including pursuant to any settlement arrangements);

(c) for any reimbursement of the Company by Indemnitee of any bonus or other incentive-based or equity-based compensation or of any profits realized by Indemnitee from the sale of securities of the Company, as required in each case under the Exchange Act (including any such reimbursements that arise from an accounting restatement of the Company pursuant to Section 304 of the Sarbanes-Oxley Act of 2002 (the "*Sarbanes-Oxley Act*"), or the payment to the Company of profits arising from the purchase and sale by Indemnitee of securities in violation of Section 306 of the Sarbanes-Oxley Act), if Indemnitee is held liable therefor (including pursuant to any settlement arrangements);

(d) initiated by Indemnitee, including any Proceeding (or any part of any Proceeding) initiated by Indemnitee against the Company or its directors, officers, employees, agents or other indemnitees, unless (i) the Company's board of directors authorized the Proceeding (or the relevant part of the Proceeding) prior to its initiation, (ii) the Company provides the indemnification, in its sole discretion, pursuant to the powers vested in the Company under applicable law, (iii) otherwise authorized in Section 10(d) or (iv) otherwise required by applicable law; provided, for the avoidance of doubt, Indemnitee shall not be deemed for purposes of this paragraph, to have initiated any Proceeding (or any part of a Proceeding) by reason of (i) having asserted any affirmative defenses in connection with a claim not initiated by Indemnitee or (ii) having made any counterclaim (whether permissive or mandatory) in connection with any claim not initiated by Indemnitee; or

(e) if prohibited by the DGCL or other applicable law.

6. Advances of Expenses. The Company shall advance the Expenses incurred by Indemnitee in connection with any Proceeding prior to its final disposition, and such advancement shall be made as soon as reasonably practicable, but in any event no later than 30 days, after the receipt by the Company of a written statement or statements requesting such advances from time to time (which shall include invoices received by Indemnitee in connection with such Expenses but, in the case of invoices in connection with legal services, any references to legal work performed or to expenditure made that would cause Indemnitee to waive any privilege accorded by applicable law shall not be included with the invoice). Advances shall be unsecured and interest free and made without regard to Indemnitee's ability to repay such advances. Indemnitee hereby undertakes to repay any advance to the extent that it is ultimately determined that Indemnitee is not entitled to be indemnified by the Company, *except*, with respect to advances of expenses made pursuant to Section 10(c), in which case Indemnitee makes the undertaking provided in Section 10(c). This Section 6 shall not apply to the extent advancement is prohibited by law and shall not apply to any Proceeding (or any part of any Proceeding) for which indemnity is not permitted under this Agreement, but shall apply to any Proceeding (or any part of any Proceeding) referenced in Section 5(b) or 5(c) prior to a determination that Indemnitee is not entitled to be indemnified by the Company.

7. Procedures for Notification and Defense of Claim.

(a) Indemnitee shall notify the Company in writing of any matter with respect to which Indemnitee intends to seek indemnification or advancement of Expenses as soon as reasonably practicable following the receipt by Indemnitee of notice thereof. The written notification to the Company shall include, in reasonable detail, a description of the nature of the Proceeding and the facts underlying the Proceeding. The failure by Indemnitee to notify the Company will not relieve the Company from any liability that it may have to Indemnitee hereunder or otherwise than under this Agreement, and any delay in so notifying the Company shall not constitute a waiver by Indemnitee of any rights, except to the extent that such failure or delay materially prejudices the Company.

(b) If, at the time of the receipt of a notice of a Proceeding pursuant to the terms hereof, the Company has directors' and officers' liability insurance in effect that may be applicable to the Proceeding, the Company shall give prompt notice of the commencement of the Proceeding to the insurers in accordance with the procedures set forth in the applicable policies. The Company shall thereafter take all commercially reasonable action to cause such insurers to pay, on behalf of Indemnitee, all amounts payable as a result of such Proceeding in accordance with the terms of such policies.

(c) In the event the Company may be obligated to make any indemnity in connection with a Proceeding, the Company shall be entitled to assume the defense of such Proceeding with counsel approved by Indemnitee, which approval shall not be unreasonably withheld, conditioned or delayed, upon the delivery to Indemnitee of written notice of its election to do so. After delivery of such notice, approval of such counsel by Indemnitee and the retention of such counsel by the Company, the Company will not be liable to Indemnitee for any fees or expenses of counsel subsequently incurred by Indemnitee with respect to the same Proceeding. Notwithstanding the Company's assumption of the defense of any such Proceeding, the Company shall be obligated to pay the fees and expenses of Indemnitee's separate counsel to the extent (i) the employment of separate counsel by Indemnitee is authorized by the Company, (ii) counsel for the Company shall have reasonably concluded that there is a conflict of interest between the Company and Indemnitee in the conduct of any such defense such that Indemnitee needs to be separately represented, (iii) the Company is not financially or legally able to perform its indemnification obligations, or (iv) the Company shall not have retained, or shall not continue to retain, counsel to defend such Proceeding. Regardless of any provision in this Agreement, Indemnitee shall have the right to employ counsel in any Proceeding at Indemnitee's personal expense. The Company shall not be entitled, without the consent of Indemnitee, to assume the defense of any claim brought by or in the right of the Company.

(d) Indemnitee shall give the Company such information and cooperation in connection with the Proceeding as may be reasonably appropriate.

(e) The Company shall not be liable to indemnify Indemnitee for any settlement of any Proceeding (or any part thereof) effected without the Company's prior written consent, which shall not be unreasonably withheld, conditioned or delayed. The Company acknowledges that a settlement or other disposition short of final judgment may be successful if it permits a party to avoid expense, delay, distraction, disruption and uncertainty. In the event that any action, claim or proceeding to which Indemnitee is a party is resolved in a settlement to which the Company has given its prior written consent, such settlement shall be treated as a success on the merits in the settled action, suit or proceeding.

(f) The Company shall not settle any Proceeding (or any part thereof) in a manner that imposes any penalty or liability on Indemnitee not paid by the Company without Indemnitee's prior written consent, which shall not be unreasonably withheld, conditioned or delayed.

8. Procedures upon Application for Indemnification.

(a) To obtain indemnification, Indemnitee shall submit to the Company a written request, including therein or therewith such documentation and information as is reasonably available to Indemnitee and as is reasonably necessary to determine whether and to what extent Indemnitee is entitled to indemnification following the final disposition of the Proceeding. Any delay in providing the request will not relieve the Company from its obligations under this Agreement, except to the extent such failure is prejudicial.

(b) Upon written request by Indemnitee for indemnification pursuant to Section 8(a), a determination with respect to Indemnitee's entitlement thereto shall be made as follows, provided that a Change in Control shall not have occurred: (i) by a majority vote of the Disinterested Directors, even though less than a quorum of the Company's board of directors; (ii) by a committee of Disinterested Directors designated by a majority vote of the Disinterested Directors, even though less than a quorum of the Company's board of directors; (iii) if there are no such Disinterested Directors or, if a majority of Disinterested Directors so direct, by Independent Counsel in a written opinion to the Company's board of directors, a copy of which shall be delivered to Indemnitee; or (iv) if so directed by the Company's board of directors, by the stockholders of the Company. If a Change in Control shall have occurred, a determination with respect to Indemnitee's entitlement to indemnification shall be made by Independent Counsel in a written opinion to the Company's board of directors, a copy of which shall be delivered to Indemnitee. If it is determined that Indemnitee is entitled to indemnification, payment to Indemnitee shall be made within ten days after such determination. Indemnitee shall cooperate with the person, persons or entity making the determination with respect to Indemnitee's entitlement to indemnification, including

providing to such person, persons or entity upon reasonable advance request any documentation or information that is not privileged or otherwise protected from disclosure and that is reasonably available to Indemnitee and reasonably necessary to such determination. Any costs or expenses (including attorneys' fees and disbursements) actually and reasonably incurred by Indemnitee in so cooperating with the person, persons or entity making such determination shall be borne by the Company, to the extent permitted by applicable law.

(c) In the event the determination of entitlement to indemnification is to be made by Independent Counsel pursuant to Section 8(b), the Independent Counsel shall be selected as provided in this Section 8(c). If a Change in Control shall not have occurred, the Independent Counsel shall be selected by the Company's board of directors, and the Company shall give written notice to Indemnitee advising him or her of the identity of the Independent Counsel so selected. If a Change in Control shall have occurred, the Independent Counsel shall be selected by Indemnitee (unless Indemnitee shall request that such selection be made by the Company's board of directors, in which event the preceding sentence shall apply), and Indemnitee shall give written notice to the Company advising it of the identity of the Independent Counsel so selected. In either event, Indemnitee or the Company, as the case may be, may, within ten days after such written notice of selection shall have been given, deliver to the Company or to Indemnitee, as the case may be, a written objection to such selection; provided, however, that such objection may be asserted only on the ground that the Independent Counsel so selected does not meet the requirements of "Independent Counsel" as defined in Section 1, and the objection shall set forth with particularity the factual basis of such assertion. Absent a proper and timely objection, the person so selected shall act as Independent Counsel. If such written objection is so made and substantiated, the Independent Counsel so selected may not serve as Independent Counsel unless and until such objection is withdrawn or a court has determined that such objection is without merit. If, within 20 days after the later of (i) submission by Indemnitee of a written request for indemnification pursuant to Section 8(a) and (ii) the final disposition of the Proceeding, the parties have not agreed upon an Independent Counsel, either the Company or Indemnitee may petition a court of competent jurisdiction for resolution of any objection that shall have been made by the Company or Indemnitee to the other's selection of Independent Counsel and for the appointment as Independent Counsel of a person selected by the court or by such other person as the court shall designate, and the person with respect to whom all objections are so resolved or the person so appointed shall act as Independent Counsel under Section 8(b). Upon the due commencement of any judicial proceeding or arbitration pursuant to Section 10(a), the Independent Counsel shall be discharged and relieved of any further responsibility in such capacity (subject to the applicable standards of professional conduct then prevailing).

(d) The Company shall pay the reasonable fees and expenses of any Independent Counsel and to fully indemnify such counsel against any and all Expenses, claims, liabilities and damages arising out of or relating to this Agreement or its engagement pursuant hereto.

9. Presumptions and Effect of Certain Proceedings.

(a) In making a determination with respect to entitlement to indemnification hereunder, the person, persons or entity making such determination shall, to the fullest extent not prohibited by law, presume that Indemnitee is entitled to indemnification under this Agreement, and the Company shall, to the fullest extent not prohibited by law, have the burden of proof to overcome that presumption by clear and convincing evidence.

(b) The termination of any Proceeding or of any claim, issue or matter therein, by judgment, order, settlement or conviction, or upon a plea of *nolo contendere* or its equivalent, shall not (except as otherwise expressly provided in this Agreement) of itself adversely affect the right of Indemnitee to indemnification or create a presumption that Indemnitee did not act in good faith and in a manner that he or she reasonably believed to be in or not opposed to the best interests of the Company or, with respect to any criminal Proceeding, that Indemnitee had reasonable cause to believe that his or her conduct was unlawful.

(c) For purposes of any determination of good faith, Indemnitee shall be deemed to have acted in good faith to the extent Indemnitee relied in good faith on (i) the records or books of account of the Enterprise, including financial statements, (ii) information supplied to Indemnitee by the officers of the Enterprise in the course of their duties, (iii) the advice of legal counsel for the Enterprise or its board of directors or counsel selected by any committee of the board of directors or (iv) information or records given or reports made to the Enterprise by an independent certified public accountant, an appraiser, investment banker or other expert selected with reasonable care by the Enterprise or its board of directors or any committee of the board of directors. The provisions of this Section 9(c) shall not be deemed to be exclusive or to limit in any way the other circumstances in which Indemnitee may be deemed to have met the applicable standard of conduct set forth in this Agreement.

(d) Neither the knowledge, actions nor failure to act of any other director, officer, agent or employee of the Enterprise shall be imputed to Indemnitee for purposes of determining the right to indemnification under this Agreement.

10. Remedies of Indemnitee.

(a) Subject to Section 10(e), in the event that (i) a determination is made pursuant to Section 9 that Indemnitee is not entitled to indemnification under this Agreement, (ii) advancement of Expenses is not timely made pursuant to Section 6 or 10(d), (iii) no determination of entitlement to indemnification shall have been made pursuant to Section 8 within 30 days after the later of the receipt by the Company of the request for indemnification or the final disposition of the Proceeding, (iv) payment of indemnification pursuant to this Agreement is not made (A) within ten days after a determination has been made that Indemnitee is entitled to indemnification or (B) with respect to indemnification pursuant to Sections 4, 5 and 10(d), within 30 days after receipt by the Company of a written request therefor, or (v) the Company or any other person or entity takes or threatens to take any action to declare this Agreement void or unenforceable, or institutes any litigation or other action or proceeding designed to deny, or to recover from, Indemnitee the benefits provided or intended to be provided to Indemnitee hereunder, Indemnitee shall be entitled to an adjudication by a court of competent jurisdiction of his or her entitlement to such indemnification or advancement of Expenses. Alternatively, Indemnitee, at his or her option, may seek an award in arbitration with respect to his or her entitlement to such indemnification or advancement of Expenses, to be conducted by a single arbitrator pursuant to the Commercial Arbitration Rules of the American Arbitration Association. Indemnitee shall commence such proceeding seeking an adjudication or an award in arbitration within 12 months following the date on which Indemnitee first has the right to commence such proceeding pursuant to this Section 10(a); *provided, however*, that the foregoing clause shall not apply in respect of a proceeding brought by Indemnitee to enforce his or her rights under Section 4. The Company shall not oppose Indemnitee's right to seek any such adjudication or award in arbitration in accordance with this Agreement.

(b) Neither (i) the failure of the Company, its board of directors, any committee or subgroup of the board of directors, Independent Counsel or stockholders to have made a determination that indemnification of Indemnitee is proper in the circumstances because Indemnitee has met the applicable standard of conduct, nor (ii) an actual determination by the Company, its board of directors, any committee or subgroup of the board of directors, Independent Counsel or stockholders that Indemnitee has not met the applicable standard of conduct, shall create a presumption that Indemnitee has or has not met the applicable standard of conduct. In the event that a determination shall have been made pursuant to Section 8 that Indemnitee is not entitled to indemnification, any judicial proceeding or arbitration commenced pursuant to this Section 10 shall be conducted in all respects as a *de novo* trial, or arbitration, on the merits, and Indemnitee shall not be prejudiced by reason of that adverse determination. In any judicial proceeding or arbitration commenced pursuant to this Section 10, the Company shall, to the fullest extent not prohibited by law, have the burden of proving Indemnitee is not entitled to indemnification or advancement of Expenses, as the case may be, and the burden of proof shall be by clear and convincing evidence.

(c) To the fullest extent not prohibited by law, the Company shall be precluded from asserting in any judicial proceeding or arbitration commenced pursuant to this Section 10 that the procedures and presumptions of this Agreement are not valid, binding and enforceable and shall stipulate in any such court or before any such arbitrator that the Company is bound by all the provisions of this Agreement. If a determination shall have been made pursuant to Section 10 that Indemnitee is entitled to indemnification, the Company shall be bound by such determination in any judicial proceeding or arbitration commenced pursuant to this Section 10, absent (i) a misstatement by Indemnitee of a material fact, or an omission of a material fact necessary to make Indemnitee's statements not materially misleading, in connection with the request for indemnification, or (ii) a prohibition of such indemnification under applicable law.

(d) To the extent not prohibited by law, the Company shall indemnify Indemnitee against all Expenses incurred by Indemnitee in connection with any action for indemnification or advancement of Expenses from the Company under this Agreement, any other agreement, the Company's certificate of incorporation or bylaws or under any directors' and officers' liability insurance policies maintained by the Company to the extent Indemnitee is successful in such action, and, if requested by Indemnitee, shall (as soon as reasonably practicable, but in any event no later than 30 days, after receipt by the Company of a written request therefor) advance such Expenses to Indemnitee, subject to the provisions of Section 6. Indemnitee hereby undertakes to repay such advances to the extent the Indemnitee is ultimately unsuccessful in such action or arbitration.

(e) Notwithstanding anything in this Agreement to the contrary, no determination as to entitlement to indemnification shall be required to be made prior to the final disposition of the Proceeding.

11. Contribution. To the fullest extent permissible under applicable law, if the indemnification provided for in this Agreement is unavailable to Indemnitee, the Company, in lieu of indemnifying Indemnitee, shall contribute to the amounts incurred by Indemnitee, whether for Expenses, judgments, fines or amounts paid or to be paid in settlement, in connection with any claim relating to an indemnifiable event under this Agreement, in such proportion as is deemed fair and reasonable in light of all of the circumstances of such Proceeding in order to reflect (i) the relative benefits received by the Company and Indemnitee as a result of the events and transactions giving rise to such Proceeding; and (ii) the relative fault of Indemnitee and the Company (and its other directors, officers, employees and agents) in connection with such events and transactions.

12. Non-exclusivity. The rights of indemnification and to receive advancement of Expenses as provided by this Agreement shall not be deemed exclusive of any other rights to which Indemnitee may at any time be entitled under applicable law, the Company's certificate of incorporation or bylaws, any agreement, a vote of stockholders or a resolution of directors, or otherwise. To the extent that a change in Delaware law, whether by statute or judicial decision, permits greater indemnification or advancement of Expenses than would be afforded currently under the Company's certificate of incorporation and bylaws and this Agreement, it is the intent of the parties hereto that Indemnitee shall enjoy by this Agreement the greater benefits so afforded by such change, subject to the restrictions expressly set forth herein or therein. Except as expressly set forth herein, no right or remedy herein conferred is intended to be exclusive of any other right or remedy, and every other right and remedy shall be cumulative and in addition to every other right and remedy given hereunder or now or hereafter existing at law or in equity or otherwise. Except as expressly set forth herein, the assertion or employment of any right or remedy hereunder, or otherwise, shall not prevent the concurrent assertion or employment of any other right or remedy.

13. Primary Responsibility. The Company acknowledges that to the extent Indemnitee is serving as a director on the Company's board of directors at the request or direction of a private equity or venture capital fund or other entity and/or certain of its affiliates (collectively, the "**Secondary Indemnitors**"), Indemnitee may have certain rights to indemnification and advancement of expenses provided by such Secondary Indemnitors. The Company agrees that, as between the Company and the Secondary Indemnitors, the Company is primarily responsible for amounts required to be indemnified or advanced under the Company's certificate of incorporation or bylaws or this Agreement and any obligation of the Secondary Indemnitors to provide indemnification or advancement for the same amounts is secondary to those Company obligations. To the extent not in contravention of any insurance policy or policies providing liability or other insurance for the Company or any director, trustee, general partner, managing member, officer, employee, agent or fiduciary of the Company or any other Enterprise, the Company waives any right of contribution or subrogation against the Secondary Indemnitors with respect to the liabilities for which the Company is primarily responsible under this Section 13. In the event of any payment by the Secondary Indemnitors of amounts otherwise required to be indemnified or advanced by the Company under the Company's certificate of incorporation or bylaws or this Agreement, the Secondary Indemnitors shall be subrogated to the extent of such payment to all of the rights of recovery of Indemnitee for indemnification or advancement of expenses under the Company's certificate of incorporation or bylaws or this Agreement or, to the extent such subrogation is unavailable and contribution is found to be the applicable remedy, shall have a right of contribution with respect to the amounts paid. The Secondary Indemnitors are express third-party beneficiaries of the terms of this Section 13.

14. No Duplication of Payments. Subject to Section 13, the Company shall not be liable under this Agreement to make any payment of amounts otherwise indemnifiable hereunder (or for which advancement is provided hereunder) if and to the extent that Indemnitee has otherwise actually received payment for such amounts under any insurance policy, contract, agreement or otherwise.

15. Insurance. To the extent that the Company maintains an insurance policy or policies providing liability insurance for directors, trustees, general partners, managing members, officers, employees, agents or fiduciaries of the Company or any other Enterprise, Indemnitee shall be covered by such policy or policies to the same extent as the most favorably-insured persons under such policy or policies in a comparable position.

16. Subrogation. Subject to Section 13, in the event of any payment under this Agreement, the Company shall be subrogated to the extent of such payment to all of the rights of recovery of Indemnitee, who shall execute all papers required and take all action necessary to secure such rights, including execution of such documents as are necessary to enable the Company to bring suit to enforce such rights.

17. Services to the Company. Indemnitee agrees to serve as a director or officer of the Company or, at the request of the Company, as a director, trustee, general partner, managing member, officer, employee, agent or fiduciary of another Enterprise, for so long as Indemnitee is duly elected or appointed or until Indemnitee tenders his or her resignation or is removed from such position. Indemnitee may at any time and for any reason resign from such position (subject to any other contractual obligation or any obligation imposed by operation of law), in which event the Company shall have no obligation under this Agreement to continue Indemnitee in such position. This Agreement shall not be deemed an employment contract between the Company (or any of its subsidiaries or any Enterprise) and Indemnitee. Indemnitee specifically acknowledges that any employment with the Company (or any of its subsidiaries or any Enterprise) is at will, and Indemnitee may be discharged at any time for any reason, with or without cause, with or without notice, except as may be otherwise expressly provided in any executed, written employment contract between Indemnitee and the Company (or any of its subsidiaries or any Enterprise), any existing formal severance policies adopted by the Company's board of directors or, with respect to service as a director or officer of the Company, the Company's certificate of incorporation or bylaws or the DGCL. No such document shall be subject to any oral modification thereof.

18. Duration. This Agreement shall continue until and terminate upon the later of (a) ten years after the date that Indemnitee shall have ceased to serve as a director or officer of the Company or as a director, trustee, general partner, managing member, officer, employee, agent or fiduciary of any other Enterprise, as applicable; or (b) one year after the final termination of any Proceeding, including any appeal, then pending in respect of which Indemnitee is granted rights of indemnification or advancement of Expenses hereunder and of any Proceeding commenced by Indemnitee pursuant to Section 10 relating thereto.

19. Successors. This Agreement shall be binding upon the Company and its successors and assigns, including any direct or indirect successor, by purchase, merger, consolidation or otherwise, to all or substantially all of the business or assets of the Company, and shall inure to the benefit of Indemnitee and Indemnitee's heirs, executors and administrators. Further, the Company shall require and cause any successor (whether direct or indirect by purchase, merger, consolidation or otherwise) to all or substantially all of the business or assets of the Company, by written agreement, expressly to assume and agree to perform this Agreement in the same manner and to the same extent that the Company would be required to perform if no such succession had taken place.

20. Severability. Nothing in this Agreement is intended to require or shall be construed as requiring the Company to do or fail to do any act in violation of applicable law. The Company's inability, pursuant to court order or other applicable law, to perform its obligations under this Agreement shall not constitute a breach of this Agreement. If any provision or provisions of this Agreement shall be held to be invalid, illegal or unenforceable for any reason whatsoever: (i) the validity, legality and enforceability of the remaining provisions of this Agreement (including without limitation, each portion of any section of this Agreement containing any such provision held to be invalid, illegal or unenforceable, that is not itself invalid, illegal or unenforceable) shall not in any way be affected or impaired thereby and shall remain enforceable to the fullest extent permitted by law; (ii) such provision or provisions shall be deemed reformed to the extent necessary to conform to applicable law and to give the maximum effect to the intent of the parties hereto; and (iii) to the fullest extent possible, the provisions of this Agreement (including, without limitation, each portion of any section of this Agreement containing any such provision held to be invalid, illegal or unenforceable, that is not itself invalid, illegal or unenforceable) shall be construed so as to give effect to the intent manifested thereby.

21. Enforcement. The Company expressly confirms and agrees that it has entered into this Agreement and assumed the obligations imposed on it hereby in order to induce Indemnitee to serve as a director or officer of the Company, and the Company acknowledges that Indemnitee is relying upon this Agreement in serving as a director or officer of the Company.

22. Entire Agreement. This Agreement constitutes the entire agreement between the parties hereto with respect to the subject matter hereof and supersedes all prior agreements and understandings, oral, written and implied, between the parties hereto with respect to the subject matter hereof; *provided, however*, that this Agreement is a supplement to and in furtherance of the Company's certificate of incorporation and bylaws and applicable law.

23. Modification and Waiver. No supplement, modification or amendment to this Agreement shall be binding unless executed in writing by the parties hereto. No amendment, alteration or repeal of this Agreement shall adversely affect any right of Indemnitee under this Agreement in respect of any action taken or omitted by such Indemnitee in his or her Corporate Status prior to such amendment, alteration or repeal. No waiver of any of the provisions of this Agreement shall constitute or be deemed a waiver of any other provision of this Agreement nor shall any waiver constitute a continuing waiver.

24. Notices. All notices and other communications required or permitted hereunder shall be in writing and shall be mailed by registered or certified mail, postage prepaid, sent by facsimile or electronic mail or otherwise delivered by hand, messenger or courier service addressed:

(a) if to Indemnitee, to Indemnitee's address, facsimile number or electronic mail address as shown on the signature page of this Agreement or in the Company's records, as may be updated in accordance with the provisions hereof; or

(b) if to the Company, to Tempus Labs, Inc., 600 West Chicago Avenue, Suite 510, Chicago, Illinois 60654, Attention: General Counsel, or at such other current address as the Company shall have furnished to Indemnitee.

Each such notice or other communication shall for all purposes of this Agreement be treated as effective or having been given (i) if delivered by hand, messenger or courier service, when delivered (or if sent *via* a nationally-recognized overnight courier service, freight prepaid, specifying next-business-day delivery, one business day after deposit with the courier), or (ii) if sent via mail, at the earlier of its receipt or five days after the same has been deposited in a regularly-maintained receptacle for the deposit of the United States mail, addressed and mailed as aforesaid, or (iii) if sent via facsimile, upon confirmation of facsimile transfer or, if sent via electronic mail, upon confirmation of delivery when directed to the relevant electronic mail address, if sent during normal business hours of the recipient, or if not sent during normal business hours of the recipient, then on the recipient's next business day.

25. Applicable Law and Consent to Jurisdiction. This Agreement shall be governed by, and construed and enforced in accordance with, the laws of the State of Delaware, without regard to its conflict of laws rules. Except with respect to any arbitration commenced by Indemnitee pursuant to Section 10(a), the Company and Indemnitee hereby irrevocably and unconditionally (i) agree that any action or proceeding arising out of or in connection with this Agreement shall be brought only in the Delaware Court of Chancery, and not in any other state or federal court in the United States of America or any court in any other country, (ii) consent to submit to the exclusive jurisdiction of the Delaware Court of Chancery for purposes of any action or proceeding arising out of or in connection with this Agreement, (iii) appoint, to the extent such party is not otherwise subject to service of process in the State of Delaware, The Corporation Trust Company, Wilmington, Delaware as its agent in the State of Delaware as such party's agent for acceptance of legal process in connection with any such action or proceeding against such party with the same legal force and validity as if served upon such party personally within the State of Delaware, (iv) waive any objection to the laying of venue of any such action or proceeding in the Delaware Court of Chancery, and (v) waive, and agree not to plead or to make, any claim that any such action or proceeding brought in the Delaware Court of Chancery has been brought in an improper or inconvenient forum.

26. Counterparts. This Agreement may be executed in two or more counterparts, each of which shall for all purposes be deemed to be an original but all of which together shall constitute one and the same Agreement. This Agreement may also be executed and delivered by facsimile signature and in counterparts, each of which shall for all purposes be deemed to be an original but all of which together shall constitute one and the same Agreement. Only one such counterpart signed by the party against whom enforceability is sought needs to be produced to evidence the existence of this Agreement.

27. Captions. The headings of the paragraphs of this Agreement are inserted for convenience only and shall not be deemed to constitute part of this Agreement or to affect the construction thereof.

(signature page follows)

The parties are signing this Indemnification Agreement as of the date stated in the introductory sentence.

TEMPUS LABS, INC.

By: _____

Name: _____

Title: _____

[INDEMNITEE NAME]

Address: _____

EXECUTIVE EMPLOYMENT AGREEMENT

This EXECUTIVE EMPLOYMENT AGREEMENT dated as of January 1, 2022 (“*Agreement*”) is by and between ERIC LEFKOFSKY (“*Executive*”) and TEMPUS LABS, INC. (“*Company*”).

WHEREAS, the Company desires to employ Executive as Chief Executive Officer and provide Executive with certain compensation and benefits in return for Executive’s services, and Executive agrees to be employed by the Company in such capacity and to receive the compensation and benefits on the terms and conditions set forth herein; and

WHEREAS, the Company and Executive desire to enter into this Employment Agreement (the “*Agreement*”) to become effective immediately, subject to Executive’s signature below (the “*Effective Date*”) in order to memorialize the terms and conditions of Executive’s employment by the Company upon and following the Effective Date.

NOW, THEREFORE, in consideration of the mutual promises and covenants contained herein, the parties agree to the following:

1. Employment by the Company.

1.1 Position. Subject to the terms set forth herein, the Company agrees to employ Executive in the position of Chairman and Chief Executive Officer, and Executive hereby accepts such continued employment on the terms and conditions set forth in this Agreement.

1.2 Duties. As Chief Executive Officer, Executive will report to the Board of Directors of the Company (the “*Board*”) and such other individual(s) as assigned, performing such duties as are normally associated with Executive’s position and such duties as are assigned to Executive from time to time, subject to the oversight and direction of the Board. During the term of Executive’s employment with the Company, and except as noted in Section 4, Executive will work on a full-time basis for the Company and will devote Executive’s best efforts and substantially all of Executive’s business time and attention to the business of the Company.

1.3 Company Policies and Benefits. The employment relationship between the parties shall also be subject to the Company’s personnel policies and procedures as they may be interpreted, adopted, revised or deleted from time to time in the Company’s sole discretion. Executive will be eligible to participate on the same basis as similarly situated employees in the Company’s benefit plans in effect from time to time during Executive’s employment. All matters of eligibility for coverage or benefits under any benefit plan shall be determined in accordance with the provisions of such plan. The Company reserves the right to change, alter, or terminate any benefit plan in its sole discretion. Notwithstanding the foregoing, in the event that the terms of this Agreement differ from or are in conflict with the Company’s general employment policies or practices, this Agreement shall control.

2. Compensation.

2.1 Salary. Executive shall receive for Executive’s services to be rendered under this Agreement an initial base salary of \$0 on an annualized basis, subject to review and adjustment by the Company in its sole discretion, payable subject to standard federal and state payroll withholding requirements in accordance with the Company’s standard payroll practices (“*Base Salary*”).

2.2 Equity Incentive Plan. During the term of Executive's employment with the Company, Executive will be eligible to participate in any then-current equity incentive plan as may be in effect from time to time, subject to the terms of the associated plan documents and as determined by the Board in its sole discretion from time to time. The Company reserves the right to modify or terminate its incentive programs at any time in its sole discretion.

2.3 Expense Reimbursement. The Company will reimburse Executive for reasonable business expenses in accordance with the Company's standard expense reimbursement policy, as the same may be modified by the Company from time to time. The Company shall reimburse Executive for all customary and appropriate business-related expenses actually incurred and documented in accordance with Company policy, as in effect from time to time. For so long as Executive holds the title of Chairman and/or Chief Executive Officer, Executive shall be entitled, at the Company's expense (a) to employ an Administrative Assistant and a personal security officer, and (b) to be appropriately reimbursed for any private aviation expenses that are incurred for legitimate business travel. For the avoidance of doubt, to the extent that any reimbursements payable to Executive are subject to the provisions of Section 409A of the Code: (a) any such reimbursements will be paid no later than December 31 of the year following the year in which the expense was incurred, (b) the amount of expenses reimbursed in one year will not affect the amount eligible for reimbursement in any subsequent year, and (c) the right to reimbursement under this Agreement will not be subject to liquidation or exchange for another benefit.

3. Confidentiality, Intellectual Property, and Protective Covenants Agreement. As a condition of continued employment, Executive agreed to execute and abide by a Confidentiality, Intellectual Property, and Protective Covenants Agreement ("**Proprietary Information Agreement**"), which may be amended by the parties from time to time without regard to this Agreement. The Proprietary Information Agreement contains provisions that are intended by the parties to survive and do survive termination of this Agreement, and such terms are hereby incorporated by reference.

4. Outside Activities During Employment. The parties acknowledge and agree that Executive is also a co-founder and serves as Executive Chairman of the board of Pathos AI, Inc., an AI-enabled drug development company that has entered into an agreement with the Company, is the managing partner and co-founder of Lightbank LLC, a private venture capital firm specializing in investments in technology companies that has invested in the Company, and is a member of the board of directors of Groupon, Inc., which Executive co-founded.

5. No Conflict with Existing Obligations. Executive represents that Executive's performance of all the terms of this Agreement does not and will not breach any agreement or obligation of any kind made prior to Executive's employment by the Company, including agreements or obligations Executive may have with prior employers or entities for which Executive has provided services. Executive has not entered into, and Executive agrees that Executive will not enter into, any agreement or obligation, either written or oral, in conflict herewith.

6. Termination of Employment. The parties acknowledge that Executive's employment relationship with the Company is at-will, meaning either the Company or Executive may terminate Executive's employment at any time, with or without cause or advance notice. The provisions in this Section govern the amount of compensation, if any, to be provided to Executive upon termination of employment and do not alter this at-will status.

6.1 Termination without Cause or for Good Reason.

(a) The Company shall have the right to terminate Executive's employment with the Company pursuant to this **Section 6.1** at any time, in accordance with **Section 6.6**, without "Cause" (as defined in **Section 6.3(b)** below) by giving notice as described in **Section 7.1** of this Agreement. A termination pursuant to **Section 6.5** below is not a termination without "Cause" for purposes of receiving the benefits described in **Sections 6.1** or **Section 6.2**.

(b) If the Company terminates Executive's employment at any time without Cause or Executive terminates Executive's employment with the Company for Good Reason and provided that such termination constitutes a "separation from service" (as defined under Treasury Regulation Section 1.409A-1(h), without regard to any alternative definition thereunder, a "**Separation from Service**"), then Executive shall be entitled to receive the Accrued Obligations (defined below).

(c) For purposes of this Agreement, "**Accrued Obligations**" are (i) any unreimbursed business expenses incurred by Executive payable in accordance with the Company's standard expense reimbursement policies, and (ii) benefits owed to Executive under any qualified retirement plan or health and welfare benefit plan in which Executive was a participant in accordance with applicable law and the provisions of such plan.

(d) The Severance Benefits provided to Executive pursuant to this **Section 6.1** are in lieu of, and not in addition to, any benefits to which Executive may otherwise be entitled under any Company severance plan, policy or program.

(e) Any damages caused by the termination of Executive's employment without Cause would be difficult to ascertain; therefore, the Severance Benefits for which Executive is eligible pursuant to **Section 6.1(b)** above in exchange for the Release is agreed to by the parties as liquidated damages, to serve as full compensation, and not a penalty.

(f) For purposes of this Agreement, "**Good Reason**" shall mean the occurrence of any of the following events without Executive's consent: (i) a material reduction in Executive's Base Salary of at least 25%; (ii) a material breach of this Agreement by the Company; or (iii) a material reduction in the Executive's duties, authority and responsibilities relative to the Executive's duties, authority, and responsibilities in effect immediately prior to such reduction; *provided, however*; that, any such termination by Executive shall only be deemed for Good Reason pursuant to this definition if: (1) Executive gives the Company written notice of his intent to terminate for Good Reason within thirty (30) days following the first occurrence of the condition(s) that Executive believes constitute(s) Good Reason, which notice shall describe such condition(s); (2) the Company fails to remedy such condition(s) within thirty (30) days following receipt of the written notice (the "**Cure Period**"); and (3) Executive voluntarily terminates Executive's employment within thirty (30) days following the end of the Cure Period.

6.2 Effect upon a Change in Control.

(a) If the Company effects a Change of Control (as defined in the Company's Amended and Restated 2015 Stock Plan, as such plan may be amended from time to time (the "**2015 Plan**")), the Company will provide the following "**Change in Control Severance Benefits**":

(i) Any equity awards held by Executive that were issued pursuant to the Company's 2015 Plan or any successor plan and that remain outstanding and are unvested as of the date of such termination will immediately vest in full. For the avoidance of doubt, if such termination occurs prior to the effective date of a Change in Control, any such equity awards will remain outstanding following the date of such termination as necessary to give effect to the potential vesting acceleration set forth in this **Section 6.2(a)(iv)**, which would occur contingent upon the consummation of a Change in Control.

6.3 Termination by the Company for Cause.

(a) The Company shall have the right to terminate Executive's employment with the Company at any time, in accordance with **Section 6.6**, for Cause by giving notice as described in **Section 7.1** of this Agreement. In the event Executive's employment is terminated at any time for Cause, Executive will not receive Severance Benefits, Change in Control Severance Benefits, or any other severance compensation or benefits, except that, pursuant to the Company's standard payroll policies, the Company shall pay to Executive the Accrued Obligations.

(b) "**Cause**" for termination shall mean that the Company has determined in its sole discretion that Executive has engaged in any of the following: (i) any act constituting dishonesty, fraud, falsification of any documents or records, or immoral or disreputable conduct; (ii) any conduct which constitutes a felony or other criminal act involving corruption, misappropriation, or moral turpitude, or otherwise impairs your ability to perform your duties with the Company, under applicable law; (iii) material violation of any Company policy or any act of misconduct (including if Executive acts in a manner expected to have a material detrimental effect on the Company's reputation or business); (iv) breach of fiduciary duty.

6.4 Resignation by Executive.

(a) Executive may resign from Executive's employment with the Company at any time, in accordance with **Section 6.6**, by giving notice as described in **Section 7.1**.

(b) In the event Executive resigns from Executive's employment (as both Chairman and Chief Executive Officer) with the Company for any reason other than Good Reason in accordance with **Sections 6.1 or 6.2**, Executive will not receive Severance Benefits, Change in Control Severance Benefits, or any other severance compensation or benefits, except that, pursuant to the Company's standard payroll policies, the Company shall pay to Executive the Accrued Obligations.

6.5 Termination by Virtue of Death or Disability of Executive.

(a) In the event of Executive's death while employed pursuant to this Agreement, all obligations of the parties hereunder shall terminate immediately, in accordance with **Section 6.6**, and the Company shall, pursuant to the Company's standard payroll policies, pay to Executive's legal representatives all Accrued Obligations, and all unvested equity shall immediately vest upon such event.

(b) Subject to applicable state and federal law, the Company shall at all times have the right, upon written notice to Executive, and in accordance with **Section 6.6**, to terminate this Agreement based on Executive's Disability. Termination by the Company of Executive's employment based on "**Disability**" shall mean termination because Executive is unable due to a physical or mental condition to perform the essential functions of his position with or without reasonable accommodation for 180 days in the aggregate during any twelve (12) month period or based on the written certification by two licensed physicians of the likely continuation of such condition for such period. This definition shall be interpreted and applied consistent with the Americans with Disabilities Act, the Family and Medical Leave Act, and other applicable law. In the event Executive's employment is terminated based on Executive's Disability, Executive will not receive Severance Benefits, Change in Control Severance Benefits, or any other severance compensation or benefit, except that, pursuant to the Company's standard payroll policies, the Company shall pay to Executive the Accrued Obligations.

6.6 Notice; Effective Date of Termination.

(a) Termination of Executive's employment pursuant to this Agreement shall be effective on the earliest of:

(i) immediately after the Company gives notice to Executive of Executive's termination, with or without Cause, unless pursuant to Section 6.3(b)(vi) in which case ten (10) days after notice if not cured or unless the Company specifies a later date, in which case, termination shall be effective as of such later date;

(ii) immediately upon the Executive's death;

(iii) ten (10) days after the Company gives notice to Executive of Executive's termination on account of Executive's Disability, unless the Company specifies a later date, in which case, termination shall be effective as of such later date, *provided* that Executive has not returned to the full time performance of Executive's duties prior to such date;

(iv) ten (10) days after the Executive gives written notice to the Company of Executive's resignation, *provided* that the Company may set a termination date at any time between the date of notice and the date of resignation, in which case the Executive's resignation shall be effective as of such other date. Executive will receive compensation through any required notice period; or

(v) for a termination for Good Reason, immediately upon Executive's full satisfaction of the requirements of **Section 6.1(g)**.

(b) In the event notice of a termination under subsections (a)(i) or (iii) is given orally, at the other party's request, the party giving notice must provide written confirmation of such notice within five (5) business days of the request in compliance with the requirement of **Section 7.1** below. In the event of a termination for Cause, written confirmation shall specify the subsection(s) of the definition of Cause relied on to support the decision to terminate.

6.7 Application of Section 409A. It is intended that all of the severance payments payable under this Agreement satisfy, to the greatest extent possible, the exemptions from the application of Section 409A of the Code and the regulations and other guidance thereunder and any state law of similar effect (collectively, "**Section 409A**") provided under Treasury Regulations Sections 1.409A-1(b)(4) and 1.409A-1(b)(9), and this Agreement will be construed in a manner that complies with Section 409A. If not so exempt, this Agreement (and any definitions hereunder) will be construed in a manner that complies with Section 409A, and incorporates by reference all required definitions and payment terms. No severance payments will be made under this Agreement unless Executive's termination of employment constitutes a "separation from service" (as defined under Treasury Regulation Section 1.409A-1(h)). For purposes of Section 409A (including, without limitation, for purposes of Treasury Regulations Section 1.409A-2(b)(2)(iii)), Executive's right to receive any installment payments under this Agreement (whether severance payments or otherwise) shall be treated as a right to receive a series of separate payments and, accordingly, each installment payment hereunder shall at all times be considered a separate and distinct payment. If the Company determines that the severance benefits provided under this Agreement constitutes "deferred compensation" under Section 409A and if Executive is a "specified employee" of the Company, as such term is defined in Section 409A(a)(2)(B)(i) of the Code at the time of Executive's Separation from Service, then, solely to the extent necessary to avoid the incurrence of the adverse personal tax consequences under Section 409A, the timing of the Severance will be delayed as follows: on the earlier to occur of (a) the date that is six months and one day after Executive's Separation from Service, and (b) the date of Executive's death (such earlier date, the "**Delayed Initial Payment Date**"), the Company will (i) pay to Executive a lump sum amount equal to the sum of the severance benefits that Executive would otherwise have received through the Delayed Initial Payment Date if the commencement of the payment of the severance benefits had not been delayed pursuant to this Section 6.8 and (ii) commence paying the balance of the severance benefits in accordance with the applicable payment schedule set forth in Section 6. No interest shall be due on any amounts deferred pursuant to this Section 6.8. To the extent that any Severance Benefits are deferred compensation under Section 409A of the Code, and are not otherwise exempt from the application of Section 409A, then, if the period during which Executive may consider and sign the Release spans two calendar years, the payment of any such Severance Benefit will not be made or begin until the later calendar year.

6.8 Section 280G. Notwithstanding any other provision of this Agreement to the contrary, if payments made or benefits provided pursuant to this Agreement or otherwise from the Company or any person or entity are considered "parachute payments" under Section 280G of the Code, then such parachute payments will be limited to the greatest amount that may be paid to

Executive under Section 280G of the Code without causing any loss of deduction to the Company Group under such section, but only if, by reason of such reduction, the net after tax benefit to Executive will exceed the net after tax benefit if such reduction were not made. “*Net after tax benefit*” for purposes of this Agreement will mean the sum of (i) the total amounts payable to the Executive under this Agreement, plus (ii) all other payments and benefits which the Executive receives or then is entitled to receive from the Company or otherwise that would constitute a “parachute payment” within the meaning of Section 280G of the Code, less (iii) the amount of federal and state income taxes payable with respect to the foregoing calculated at the maximum marginal income tax rate for each year in which the foregoing will be paid to Executive (based upon the rate in effect for such year as set forth in the Code at the time of termination of Executive’s employment), less (iv) the amount of excise taxes imposed with respect to the payments and benefits described in (i) and (ii) above by Section 4999 of the Code. The determination as to whether and to what extent payments are required to be reduced in accordance with this Section 6.9 will be made at the Company’s expense by a nationally recognized certified public accounting firm as may be designated by the Company prior to a change in control (the “*Accounting Firm*”). In the event of any mistaken underpayment or overpayment under this Agreement, as determined by the Accounting Firm, the amount of such underpayment or overpayment will forthwith be paid to Executive or refunded to the Company, as the case may be, with interest at one hundred twenty (120%) of the applicable Federal rate provided for in Section 7872(f) (2) of the Code. Any reduction in payments required by this Section 6.9 will occur in the following order: (1) any cash severance, (2) any other cash amount payable to Executive, (3) any benefit valued as a “parachute payment,” (4) the acceleration of vesting of any equity awards that are options, and (5) the acceleration of vesting of any other equity awards. Within any such category of payments and benefits, a reduction will occur first with respect to amounts that are not “deferred compensation” within the meaning of Section 409A and then with respect to amounts that are. In the event that acceleration of compensation from equity awards is to be reduced, such acceleration of vesting will be canceled, subject to the immediately preceding sentence, in the reverse order of the date of grant.

7. General Provisions.

7.1 Notices. Any notices required hereunder to be in writing shall be deemed effectively given: (a) upon personal delivery to the party to be notified, (b) when sent by electronic mail or confirmed facsimile if sent during normal business hours of the recipient, and if not, then on the next business day, (c) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one (1) day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt. All communications shall be sent to the Company at its primary office location and to Executive at either Executive’s address as listed on the Company payroll, or Executive’s Company-issued email address, or at such other address as the Company or Executive may designate by ten (10) days advance written notice to the other.

7.2 Severability. Whenever possible, each provision of this Agreement will be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect under any applicable law or rule in any jurisdiction, such invalidity, illegality or unenforceability will not affect any other provision or any other jurisdiction, but this Agreement will be reformed, construed and enforced in such jurisdiction as if such invalid, illegal or unenforceable provisions had never been contained herein.

7.3 Survival. Provisions of this Agreement which by their terms must survive the termination of this Agreement in order to effectuate the intent of the parties will survive any such termination for such period as may be appropriate under the circumstances.

7.4 Waiver. If either party should waive any breach of any provisions of this Agreement, it shall not thereby be deemed to have waived any preceding or succeeding breach of the same or any other provision of this Agreement.

7.5 Complete Agreement. This Agreement constitutes the entire agreement between Executive and the Company with regard to the subject matter hereof. This Agreement is the complete, final, and exclusive embodiment of their agreement with regard to this subject matter and supersedes any prior oral discussions or written communications and agreements, including the Prior Agreement. This Agreement is entered into without reliance on any promise or representation other than those expressly contained herein, and it cannot be modified or amended except in writing signed by Executive and an authorized officer of the Company. The parties have entered into a separate Proprietary Information Agreement and have or may enter into separate agreements related to equity. These separate agreements govern other aspects of the relationship between the parties, have or may have provisions that survive termination of Executive's employment under this Agreement, may be amended or superseded by the parties without regard to this Agreement and are enforceable according to their terms without regard to the enforcement provision of this Agreement.

7.6 Counterparts. This Agreement may be executed in separate counterparts, any one of which need not contain signatures of more than one party, but all of which taken together will constitute one and the same Agreement. The parties agree that facsimile and scanned image copies of signatures will suffice as original signatures.

7.7 Withholding Taxes. The Company will be entitled to withhold from any payment due to Executive hereunder any amounts required to be withheld by applicable tax laws or regulations.

7.8 Headings. The headings of the sections hereof are inserted for convenience only and shall not be deemed to constitute a part hereof nor to affect the meaning thereof.

7.9 Successors and Assigns. The Company shall assign this Agreement and its rights and obligations hereunder in whole, but not in part, to any Company or other entity with or into which the Company may hereafter merge or consolidate or to which the Company may transfer all or substantially all of its assets, if in any such case said Company or other entity shall by operation of law or expressly in writing assume all obligations of the Company hereunder as fully as if it had been originally made a party hereto, but may not otherwise assign this Agreement or its rights and obligations hereunder. Executive may not assign or transfer this Agreement or any rights or obligations hereunder, other than to his estate upon his death.

7.10 Choice of Law. All questions concerning the construction, validity and interpretation of this Agreement will be governed by the laws of the State of Delaware.

7.11 Dispute Resolution. The parties recognize that litigation in federal or state courts or before federal or state administrative agencies of disputes arising out of the Executive's employment with the Company or out of this Agreement, or the Executive's termination of employment or termination of this Agreement, may not be in the best interests of either the Executive or the Company, and may result in unnecessary costs, delays, complexities, and uncertainty. The parties agree that any dispute between the parties arising out of or relating to the negotiation, execution, performance or termination of this Agreement or the Executive's employment, including, but not limited to, any claim arising out of this Agreement, claims under Title VII of the Civil Rights Act of 1964, as amended, the Civil Rights Act of 1991, the Age Discrimination in Employment Act of 1967, the Americans with Disabilities Act of 1990, Section 1981 of the Civil Rights Act of 1966, as amended, the Family Medical Leave Act, the Executive Retirement Income Security Act, and any similar federal, state or local law, statute, regulation, or any common law doctrine, whether that dispute arises during or after employment, shall be settled by binding arbitration in accordance with the National Rules for the Resolution of Employment Disputes of the American Arbitration Association; *provided however*, that this dispute resolution provision shall not apply to any separate agreements between the parties that do not themselves specify arbitration as an exclusive remedy. The location for the arbitration shall be the Chicago, Illinois area. Any award made by such panel shall be final, binding and conclusive on the parties for all purposes, and judgment upon the award rendered by the arbitrators may be entered in any court having jurisdiction thereof. The arbitrators' fees and expenses and all administrative fees and expenses associated with the filing of the arbitration shall be borne by the Company; *provided however*, that at the Executive's option, Executive may voluntarily pay up to one-half the costs and fees. The parties acknowledge and agree that their obligations to arbitrate under this Section survive the termination of this Agreement and continue after the termination of the employment relationship between Executive and the Company. The parties each further agree that the arbitration provisions of this Agreement shall provide each party with its **exclusive remedy**, and each party expressly waives any right it might have to seek redress in any other forum, except as otherwise expressly provided in this Agreement. By electing arbitration as the means for final settlement of all claims, **the parties hereby waive their respective rights to, and agree not to, sue each other in any action in a Federal, State or local court with respect to such claims, but may seek to enforce in court an arbitration award rendered pursuant to this Agreement. The parties specifically agree to waive their respective rights to a trial by jury, and further agree that no demand, request or motion will be made for trial by jury.**

[SIGNATURES TO FOLLOW ON NEXT PAGE]

IN WITNESS WHEREOF, the parties have duly executed this Agreement as of the date first above written.

TEMPUS LABS, INC.

By: /s/ Andy Polovin _____

Name: Andy Polovin

Title: General Counsel

EXECUTIVE

/s/ Eric Lefkofsky _____

Eric Lefkofsky

EXECUTIVE EMPLOYMENT AGREEMENT

This EXECUTIVE EMPLOYMENT AGREEMENT dated as of January 1, 2022 (“*Agreement*”) is by and between ERIK PHELPS (“*Executive*”) and TEMPUS LABS, INC. (“*Company*”).

WHEREAS, the Company desires to employ Executive as Chief Legal and Administrative Officer and provide Executive with certain compensation and benefits in return for Executive’s services, and Executive agrees to be employed by the Company in such capacity and to receive the compensation and benefits on the terms and conditions set forth herein; and

WHEREAS, the Company and Executive desire to enter into this Employment Agreement (the “*Agreement*”) to become effective immediately, subject to Executive’s signature below (the “*Effective Date*”) in order to memorialize the terms and conditions of Executive’s employment by the Company upon and following the Effective Date.

NOW, THEREFORE, in consideration of the mutual promises and covenants contained herein, the parties agree to the following:

1. Employment by the Company.

1.1 Position. Subject to the terms set forth herein, the Company agrees to employ Executive in the position of Chief Legal and Administrative Officer, and Executive hereby accepts such continued employment on the terms and conditions set forth in this Agreement.

1.2 Duties. As Chief Legal and Administrative Officer, Executive will report to the Chief Executive Officer (the “*CEO*”) and such other individual(s) as assigned, performing such duties as are normally associated with Executive’s position and such duties as are assigned to Executive from time to time, subject to the oversight and direction of the CEO. During the term of Executive’s employment with the Company, Executive will work on a full-time basis for the Company and will devote Executive’s best efforts and substantially all of Executive’s business time and attention to the business of the Company. Executive shall perform Executive’s duties under this Agreement principally out of the Company’s facility in Chicago or in Madison, Wisconsin. In addition, Executive shall make such business trips to such places as may be necessary or advisable for the efficient operations of the Company.

1.3 Company Policies and Benefits. The employment relationship between the parties shall also be subject to the Company’s personnel policies and procedures as they may be interpreted, adopted, revised or deleted from time to time in the Company’s sole discretion. Executive will be eligible to participate on the same basis as similarly situated employees in the Company’s benefit plans in effect from time to time during Executive’s employment. All matters of eligibility for coverage or benefits under any benefit plan shall be determined in accordance with the provisions of such plan. The Company reserves the right to change, alter, or terminate any benefit plan in its sole discretion. Notwithstanding the foregoing, in the event that the terms of this Agreement differ from or are in conflict with the Company’s general employment policies or practices, this Agreement shall control.

2. Compensation.

2.1 Salary. Executive shall receive for Executive's services to be rendered under this Agreement an initial base salary of **\$575,000** on an annualized basis, subject to review and adjustment by the Company in its sole discretion, payable subject to standard federal and state payroll withholding requirements in accordance with the Company's standard payroll practices ("**Base Salary**").

2.2 Equity Incentive Plan. During the term of Executive's employment with the Company, Executive will be eligible to participate in any then-current equity incentive plan as may be in effect from time to time and made available to similarly situated executive employees, subject to the terms of the associated plan documents and as determined by the Board of Directors of the Company (the "**Board**") in its sole discretion from time to time. The Company reserves the right to modify or terminate its incentive programs at any time in its sole discretion.

2.3 Expense Reimbursement. The Company will reimburse Executive for reasonable business expenses in accordance with the Company's standard expense reimbursement policy, as the same may be modified by the Company from time to time. The Company shall reimburse Executive for all customary and appropriate business-related expenses, including an agreed housing allowance, actually incurred and documented in accordance with Company policy, as in effect from time to time. For the avoidance of doubt, to the extent that any reimbursements payable to Executive are subject to the provisions of Section 409A of the Code: (a) any such reimbursements will be paid no later than December 31 of the year following the year in which the expense was incurred, (b) the amount of expenses reimbursed in one year will not affect the amount eligible for reimbursement in any subsequent year, and (c) the right to reimbursement under this Agreement will not be subject to liquidation or exchange for another benefit.

3. Confidentiality, Intellectual Property, and Protective Covenants Agreement. As a condition of continued employment, Executive agreed to execute and abide by a Confidentiality, Intellectual Property, and Protective Covenants Agreement ("**Proprietary Information Agreement**"), which may be amended by the parties from time to time without regard to this Agreement. The Proprietary Information Agreement contains provisions that are intended by the parties to survive and do survive termination of this Agreement, and such terms are hereby incorporated by reference.

4. Outside Activities during Employment. Except with the prior written consent of the Board, including consent given to Executive prior to the signing of this Agreement, Executive will not, while employed by the Company, undertake or engage in any other employment, occupation or business enterprise that would interfere with Executive's responsibilities and the performance of Executive's duties hereunder except for (i) reasonable time devoted to volunteer services for or on behalf of such religious, educational, non-profit and/or other charitable organization as Executive may wish to serve, (ii) reasonable time devoted to activities in the non-profit and business communities consistent with Executive's duties; and (iii) such other activities as may be specifically approved by the Board. This restriction shall not, however, preclude Executive (x) from owning less than one percent (1%) of the total outstanding shares of a publicly traded company, or (y) from employment or service in any capacity with Affiliates of the Company. As used in this Agreement, "**Affiliates**" means an entity under common management or control with the Company.

5. No Conflict with Existing Obligations. Executive represents that Executive's performance of all the terms of this Agreement does not and will not breach any agreement or obligation of any kind made prior to Executive's employment by the Company, including agreements or obligations Executive may have with prior employers or entities for which Executive has provided services. Executive has not entered into, and Executive agrees that Executive will not enter into, any agreement or obligation, either written or oral, in conflict herewith.

6. Termination of Employment. The parties acknowledge that Executive's employment relationship with the Company is at-will, meaning either the Company or Executive may terminate Executive's employment at any time, with or without cause or advance notice. The provisions in this Section govern the amount of compensation, if any, to be provided to Executive upon termination of employment and do not alter this at-will status.

6.1 Termination without Cause or for Good Reason.

(a) The Company shall have the right to terminate Executive's employment with the Company pursuant to this **Section 6.1** at any time, in accordance with **Section 6.6**, without "Cause" (as defined in **Section 6.3(b)** below) by giving notice as described in **Section 7.1** of this Agreement. A termination pursuant to **Section 6.5** below is not a termination without "Cause" for purposes of receiving the benefits described in **Sections 6.1** or **Section 6.2**.

(b) If the Company terminates Executive's employment at any time without Cause or Executive terminates Executive's employment with the Company for Good Reason and provided that such termination constitutes a "separation from service" (as defined under Treasury Regulation Section 1.409A-1(h), without regard to any alternative definition thereunder, a "**Separation from Service**"), then Executive shall be entitled to receive the Accrued Obligations (defined below). If Executive complies with the obligations in **Section 6.1(c)** below, Executive shall also be eligible to receive the following "**Severance Benefits**":

(i) The Company will pay Executive an amount equal to Executive's then current Base Salary for twelve (12) months, less all applicable withholdings and deductions, paid in equal installments on the Company's normal payroll schedule following the termination date, with the first payment beginning on the Severance Pay Commencement Date (as defined in **Section 6.1(c)** below), and the remaining installments occurring on the Company's regularly scheduled payroll dates thereafter; provided that on the Severance Pay Commencement Date, the Company will pay in a lump sum the aggregate amount of the cash severance payments that the Company would have paid Executive through such date had the payments commenced on the effective date of termination through the Severance Pay Commencement Date. In addition, during the six (6) month period following Executive's Separation from Service, Executive's equity will continue to satisfy any applicable time-based vesting condition, as though Executive remained employed by Company.

(c) If Executive timely elects continued coverage under COBRA for Executive and Executive's covered dependents under the Company's group health plans following such termination, then the Company shall pay the COBRA premiums necessary to continue Executive's and Executive's covered dependents' health insurance coverage in effect for

Executive (and Executive's covered dependents) on the termination date until the earliest of: (i) twelve (12) months following the termination date (the "**COBRA Severance Period**"); (ii) the date when Executive becomes eligible for substantially equivalent health insurance coverage in connection with new employment or self-employment; or (iii) the date Executive ceases to be eligible for COBRA continuation coverage for any reason, including plan termination (such period from the termination date through the earlier of (i)-(iii), (the "**COBRA Payment Period**"). Notwithstanding the foregoing, if at any time the Company determines that its payment of COBRA premiums on Executive's behalf would result in a violation of applicable law (including, but not limited to, the 2010 Patient Protection and Affordable Care Act, as amended by the 2010 Health Care and Education Reconciliation Act), then in lieu of paying COBRA premiums pursuant to this Section, the Company shall pay Executive on the last day of each remaining month of the COBRA Payment Period, a fully taxable cash payment equal to the COBRA premium for such month, subject to applicable tax withholding (such amount, the "**Special Severance Payment**"), for the remainder of the COBRA Payment Period. Nothing in this Agreement shall deprive Executive of Executive's rights under COBRA or ERISA for benefits under plans and policies arising under Executive's employment by the Company. Executive will be paid all of the Accrued Obligations on the Company's first payroll date after Executive's date of termination from employment or earlier if required by law. Executive shall receive the Severance Benefits pursuant to **Section 6.1(b)** or the Change in Control Severance Benefits (defined below) pursuant to **6.2(a)** of this Agreement, as applicable, if: (i) Executive executes and does not revoke a separation agreement containing an effective, general release of claims in favor of the Company and its affiliates and representatives, in a form acceptable to the Company (the "**Release**") and the Release is enforceable and effective as provided in the Release on or before the date that is the sixtieth (60th) day following the effective date of termination (such 60th day, the "**Severance Pay Commencement Date**"); (ii) if Executive holds any other positions with the Company, Executive resigns such position(s) to be effective no later than the date of Executive's termination date (or such other date as requested by the Board); (iii) Executive returns all Company property; (iv) Executive complies with Executive's post-termination obligations under this Agreement and the Proprietary Information Agreement; and (v) Executive complies with the terms of the Release, including without limitation any non-disparagement and confidentiality provisions contained in Release.

(d) For purposes of this Agreement, "**Accrued Obligations**" are (i) Executive's accrued but unpaid salary through the date of termination, (ii) any unreimbursed business expenses incurred by Executive payable in accordance with the Company's standard expense reimbursement policies, and (iii) benefits owed to Executive under any qualified retirement plan or health and welfare benefit plan in which Executive was a participant in accordance with applicable law and the provisions of such plan.

(e) The Severance Benefits provided to Executive pursuant to this **Section 6.1** are in lieu of, and not in addition to, any benefits to which Executive may otherwise be entitled under any Company severance plan, policy or program.

(f) Any damages caused by the termination of Executive's employment without Cause would be difficult to ascertain; therefore, the Severance Benefits for which Executive is eligible pursuant to **Section 6.1(b)** above in exchange for the Release is agreed to by the parties as liquidated damages, to serve as full compensation, and not a penalty.

(g) For purposes of this Agreement, “**Good Reason**” shall mean the occurrence of any of the following events without Executive’s consent: (i) a material reduction in Executive’s Base Salary of at least 25%; (ii) a material breach of this Agreement by the Company; (iii) a material reduction in the Executive’s duties, authority and responsibilities relative to the Executive’s duties, authority, and responsibilities in effect immediately prior to such reduction (provided that a material reduction of duties, authority and responsibilities will not be deemed to have occurred if, in connection with a Change in Control, Executive is not reporting to the individual in the same role as Executive’s prior manager at the acquirer or any other top-tier holding company above the acquirer); or (iv) the relocation of Executive’s principal place of employment, without Executive’s consent, in a manner that lengthens Executive’s one-way commute distance by fifty (50) or more miles from his then-current principal place of employment immediately prior to such relocation; *provided, however*, that, any such termination by Executive shall only be deemed for Good Reason pursuant to this definition if: (1) Executive gives the Company written notice of his intent to terminate for Good Reason within thirty (30) days following the first occurrence of the condition(s) that Executive believes constitute(s) Good Reason, which notice shall describe such condition(s); (2) the Company fails to remedy such condition(s) within thirty (30) days following receipt of the written notice (the “**Cure Period**”); and (3) Executive voluntarily terminates Executive’s employment within thirty (30) days following the end of the Cure Period.

6.2 Termination without Cause or for Good Reason Coincident with a Change in Control.

(a) If Executive’s employment by the Company is terminated by the Company or any successor entity without Cause (and not due to Disability or death) or by Executive for Good Reason within two (2) months prior to or within twelve (12) months following the effective date of a “**Change in Control**” (as defined in the Company’s Amended and Restated 2015 Stock Plan, as such plan may be amended from time to time (the “**2015 Plan**”)), provided that such termination constitutes a Separation from Service, without regard to any alternative definition thereunder, then in addition to paying or providing Executive with the Accrued Obligations and the Severance Benefits available under **Section 6.1**, the Company will provide the following “**Change in Control Severance Benefits**”:

(i) Any equity awards held by Executive that were issued pursuant to the Company’s 2015 Plan or any successor plan and that remain outstanding and are unvested as of the date of such termination will immediately vest in full. For the avoidance of doubt, if such termination occurs prior to the effective date of a Change in Control, any such equity awards will remain outstanding following the date of such termination as necessary to give effect to the potential vesting acceleration set forth in this **Section 6.2(a)(iv)**, which would occur contingent upon the consummation of a Change in Control.

6.3 Termination by the Company for Cause.

(a) The Company shall have the right to terminate Executive's employment with the Company at any time, in accordance with **Section 6.6**, for Cause by giving notice as described in **Section 7.1** of this Agreement. In the event Executive's employment is terminated at any time for Cause, Executive will not receive Severance Benefits, Change in Control Severance Benefits, or any other severance compensation or benefits, except that, pursuant to the Company's standard payroll policies, the Company shall pay to Executive the Accrued Obligations.

(b) "**Cause**" for termination shall mean that the Company has determined in its sole discretion that Executive has engaged in any of the following: (i) a material breach of any covenant or condition under this Agreement or any other agreement between the parties; (ii) any act constituting dishonesty, fraud, falsification of any documents or records, or immoral or disreputable conduct; (iii) any conduct which constitutes a felony or other criminal act involving corruption, misappropriation, or moral turpitude, or otherwise impairs your ability to perform your duties with the Company, under applicable law; (iv) material violation of any Company policy or any act of misconduct (including if Executive acts in a manner expected to have a material detrimental effect on the Company's reputation or business); (v) refusal to follow or implement a clear and reasonable directive of Company; (vi) negligence or incompetence in the performance of Executive's duties or failure to perform such duties in a manner satisfactory to the Company after the expiration of ten (10) days without cure after written notice of such failure; (vii) breach of fiduciary duty; or (viii) unauthorized use, misappropriation, destruction, or diversion of any tangible or intangible asset or corporate opportunity of the Company.

6.4 Resignation by Executive.

(a) Executive may resign from Executive's employment with the Company at any time, in accordance with **Section 6.6**, by giving notice as described in **Section 7.1**.

(b) In the event Executive resigns from Executive's employment with the Company for any reason other than Good Reason in accordance with **Sections 6.1 or 6.2**, Executive will not receive Severance Benefits, Change in Control Severance Benefits, or any other severance compensation or benefits, except that, pursuant to the Company's standard payroll policies, the Company shall pay to Executive the Accrued Obligations.

6.5 Termination by Virtue of Death or Disability of Executive.

(a) In the event of Executive's death while employed pursuant to this Agreement, all obligations of the parties hereunder shall terminate immediately, in accordance with **Section 6.6**, and the Company shall, pursuant to the Company's standard payroll policies, pay to Executive's legal representatives all Accrued Obligations.

(b) Subject to applicable state and federal law, the Company shall at all times have the right, upon written notice to Executive, and in accordance with **Section 6.6**, to terminate this Agreement based on Executive's Disability. Termination by the Company of Executive's employment based on "**Disability**" shall mean termination because Executive is unable due to a physical or mental condition to perform the essential functions of his position with

or without reasonable accommodation for 180 days in the aggregate during any twelve (12) month period or based on the written certification by two licensed physicians of the likely continuation of such condition for such period. This definition shall be interpreted and applied consistent with the Americans with Disabilities Act, the Family and Medical Leave Act, and other applicable law. In the event Executive's employment is terminated based on Executive's Disability, Executive will not receive Severance Benefits, Change in Control Severance Benefits, or any other severance compensation or benefit, except that, pursuant to the Company's standard payroll policies, the Company shall pay to Executive the Accrued Obligations.

6.6 Notice; Effective Date of Termination.

(a) Termination of Executive's employment pursuant to this Agreement shall be effective on the earliest of:

(i) immediately after the Company gives notice to Executive of Executive's termination, with or without Cause, unless pursuant to Section 6.3(b)(vi) in which case ten (10) days after notice if not cured or unless the Company specifies a later date, in which case, termination shall be effective as of such later date;

(ii) immediately upon the Executive's death;

(iii) ten (10) days after the Company gives notice to Executive of Executive's termination on account of Executive's Disability, unless the Company specifies a later date, in which case, termination shall be effective as of such later date, *provided* that Executive has not returned to the full-time performance of Executive's duties prior to such date;

(iv) ten (10) days after the Executive gives written notice to the Company of Executive's resignation, *provided* that the Company may set a termination date at any time between the date of notice and the date of resignation, in which case the Executive's resignation shall be effective as of such other date. Executive will receive compensation through any required notice period; or

(v) for a termination for Good Reason, immediately upon Executive's full satisfaction of the requirements of **Section 6.1(g)**.

(b) In the event notice of a termination under subsections (a)(i) or (iii) is given orally, at the other party's request, the party giving notice must provide written confirmation of such notice within five (5) business days of the request in compliance with the requirement of **Section 7.1** below. In the event of a termination for Cause, written confirmation shall specify the subsection(s) of the definition of Cause relied on to support the decision to terminate.

6.7 Cooperation with Company after Termination of Employment. Following termination of Executive's employment for any reason, Executive agrees to cooperate fully with the Company in connection with its actual or contemplated defense, prosecution, or investigation of any claims or demands by or against third parties, or other matters arising from events, acts, or failures to act that occurred during the period of Executive's employment by the Company. Such cooperation includes, without limitation, making Executive available to the

Company upon reasonable notice, without subpoena, to provide complete, truthful and accurate information in witness interviews, depositions and trial testimony, and the failure to provide complete, truthful, and accurate information shall be a material breach of this Agreement and a basis for rescinding or forfeiting the benefits described herein. In addition, for twelve (12) months after Executive's employment with the Company ends for any reason, Executive agrees to cooperate fully with the Company in all matters relating to the transition of Executive's work and responsibilities on behalf of the Company, including, but not limited to, any present, prior or subsequent relationships and the orderly transfer of any such work and institutional knowledge to such other persons as may be designated by the Company. The Company will reimburse Executive for reasonable out-of-pocket expenses Executive incurs in connection with any such cooperation (excluding forgone wages, salary, or other compensation) and will make reasonable efforts to accommodate Executive's scheduling needs.

6.8 Application of Section 409A. It is intended that all of the severance payments payable under this Agreement satisfy, to the greatest extent possible, the exemptions from the application of Section 409A of the Code and the regulations and other guidance thereunder and any state law of similar effect (collectively, "**Section 409A**") provided under Treasury Regulations Sections 1.409A-1(b)(4) and 1.409A-1(b)(9), and this Agreement will be construed in a manner that complies with Section 409A. If not so exempt, this Agreement (and any definitions hereunder) will be construed in a manner that complies with Section 409A and incorporates by reference all required definitions and payment terms. No severance payments will be made under this Agreement unless Executive's termination of employment constitutes a "separation from service" (as defined under Treasury Regulation Section 1.409A-1(h)). For purposes of Section 409A (including, without limitation, for purposes of Treasury Regulations Section 1.409A-2(b)(2)(iii)), Executive's right to receive any installment payments under this Agreement (whether severance payments or otherwise) shall be treated as a right to receive a series of separate payments and, accordingly, each installment payment hereunder shall at all times be considered a separate and distinct payment. If the Company determines that the severance benefits provided under this Agreement constitutes "deferred compensation" under Section 409A and if Executive is a "specified employee" of the Company, as such term is defined in Section 409A(a)(2)(B)(i) of the Code at the time of Executive's Separation from Service, then, solely to the extent necessary to avoid the incurrence of the adverse personal tax consequences under Section 409A, the timing of the Severance will be delayed as follows: on the earlier to occur of (a) the date that is six months and one day after Executive's Separation from Service, and (b) the date of Executive's death (such earlier date, the "**Delayed Initial Payment Date**"), the Company will (i) pay to Executive a lump sum amount equal to the sum of the severance benefits that Executive would otherwise have received through the Delayed Initial Payment Date if the commencement of the payment of the severance benefits had not been delayed pursuant to this Section 6.8 and (ii) commence paying the balance of the severance benefits in accordance with the applicable payment schedule set forth in Section 6. No interest shall be due on any amounts deferred pursuant to this Section 6.8. To the extent that any Severance Benefits are deferred compensation under Section 409A of the Code and are not otherwise exempt from the application of Section 409A, then, if the period during which Executive may consider and sign the Release spans two calendar years, the payment of any such Severance Benefit will not be made or begin until the later calendar year.

6.9 Section 280G. Notwithstanding any other provision of this Agreement to the contrary, if payments made or benefits provided pursuant to this Agreement or otherwise from the Company or any person or entity are considered “parachute payments” under Section 280G of the Code, then such parachute payments will be limited to the greatest amount that may be paid to Executive under Section 280G of the Code without causing any loss of deduction to the Company Group under such section, but only if, by reason of such reduction, the net after tax benefit to Executive will exceed the net after tax benefit if such reduction were not made. “*Net after tax benefit*” for purposes of this Agreement will mean the sum of (i) the total amounts payable to the Executive under this Agreement, plus (ii) all other payments and benefits which the Executive receives or then is entitled to receive from the Company or otherwise that would constitute a “parachute payment” within the meaning of Section 280G of the Code, less (iii) the amount of federal and state income taxes payable with respect to the foregoing calculated at the maximum marginal income tax rate for each year in which the foregoing will be paid to Executive (based upon the rate in effect for such year as set forth in the Code at the time of termination of Executive’s employment), less (iv) the amount of excise taxes imposed with respect to the payments and benefits described in (i) and (ii) above by Section 4999 of the Code. The determination as to whether and to what extent payments are required to be reduced in accordance with this Section 6.9 will be made at the Company’s expense by a nationally recognized certified public accounting firm as may be designated by the Company prior to a change in control (the “*Accounting Firm*”). In the event of any mistaken underpayment or overpayment under this Agreement, as determined by the Accounting Firm, the amount of such underpayment or overpayment will forthwith be paid to Executive or refunded to the Company, as the case may be, with interest at one hundred twenty (120%) of the applicable Federal rate provided for in Section 7872(f)(2) of the Code. Any reduction in payments required by this Section 6.9 will occur in the following order: (1) any cash severance, (2) any other cash amount payable to Executive, (3) any benefit valued as a “parachute payment,” (4) the acceleration of vesting of any equity awards that are options, and (5) the acceleration of vesting of any other equity awards. Within any such category of payments and benefits, a reduction will occur first with respect to amounts that are not “deferred compensation” within the meaning of Section 409A and then with respect to amounts that are. In the event that acceleration of compensation from equity awards is to be reduced, such acceleration of vesting will be canceled, subject to the immediately preceding sentence, in the reverse order of the date of grant.

7. General Provisions.

7.1 Notices. Any notices required hereunder to be in writing shall be deemed effectively given: (a) upon personal delivery to the party to be notified, (b) when sent by electronic mail or confirmed facsimile if sent during normal business hours of the recipient, and if not, then on the next business day, (c) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one (1) day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt. All communications shall be sent to the Company at its primary office location and to Executive at either Executive’s address as listed on the Company payroll, or Executive’s Company-issued email address, or at such other address as the Company or Executive may designate by ten (10) days advance written notice to the other.

7.2 Severability. Whenever possible, each provision of this Agreement will be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect under any applicable law or rule in any jurisdiction, such invalidity, illegality or unenforceability will not affect any other provision or any other jurisdiction, but this Agreement will be reformed, construed and enforced in such jurisdiction as if such invalid, illegal or unenforceable provisions had never been contained herein.

7.3 Survival. Provisions of this Agreement which by their terms must survive the termination of this Agreement in order to effectuate the intent of the parties will survive any such termination for such period as may be appropriate under the circumstances.

7.4 Waiver. If either party should waive any breach of any provisions of this Agreement, it shall not thereby be deemed to have waived any preceding or succeeding breach of the same or any other provision of this Agreement.

7.5 Complete Agreement. This Agreement constitutes the entire agreement between Executive and the Company with regard to the subject matter hereof. This Agreement is the complete, final, and exclusive embodiment of their agreement with regard to this subject matter and supersedes any prior oral discussions or written communications and agreements, including the Prior Agreement. This Agreement is entered into without reliance on any promise or representation other than those expressly contained herein, and it cannot be modified or amended except in writing signed by Executive and an authorized officer of the Company. The parties have entered into a separate Proprietary Information Agreement and have or may enter into separate agreements related to equity. These separate agreements govern other aspects of the relationship between the parties, have or may have provisions that survive termination of Executive's employment under this Agreement, may be amended or superseded by the parties without regard to this Agreement and are enforceable according to their terms without regard to the enforcement provision of this Agreement.

7.6 Counterparts. This Agreement may be executed in separate counterparts, any one of which need not contain signatures of more than one party, but all of which taken together will constitute one and the same Agreement. The parties agree that facsimile and scanned image copies of signatures will suffice as original signatures.

7.7 Withholding Taxes. The Company will be entitled to withhold from any payment due to Executive hereunder any amounts required to be withheld by applicable tax laws or regulations.

7.8 Headings. The headings of the sections hereof are inserted for convenience only and shall not be deemed to constitute a part hereof nor to affect the meaning thereof.

7.9 Successors and Assigns. The Company shall assign this Agreement and its rights and obligations hereunder in whole, but not in part, to any Company or other entity with or into which the Company may hereafter merge or consolidate or to which the Company may transfer all or substantially all of its assets, if in any such case said Company or other entity shall by operation of law or expressly in writing assume all obligations of the Company hereunder as fully as if it had been originally made a party hereto, but may not otherwise assign this Agreement or its rights and obligations hereunder. Executive may not assign or transfer this Agreement or any rights or obligations hereunder, other than to his estate upon his death.

7.10 Choice of Law. All questions concerning the construction, validity and interpretation of this Agreement will be governed by the laws of the State of Delaware.

7.11 Dispute Resolution. The parties recognize that litigation in federal or state courts or before federal or state administrative agencies of disputes arising out of the Executive's employment with the Company or out of this Agreement, or the Executive's termination of employment or termination of this Agreement, may not be in the best interests of either the Executive or the Company, and may result in unnecessary costs, delays, complexities, and uncertainty. The parties agree that any dispute between the parties arising out of or relating to the negotiation, execution, performance or termination of this Agreement or the Executive's employment, including, but not limited to, any claim arising out of this Agreement, claims under Title VII of the Civil Rights Act of 1964, as amended, the Civil Rights Act of 1991, the Age Discrimination in Employment Act of 1967, the Americans with Disabilities Act of 1990, Section 1981 of the Civil Rights Act of 1966, as amended, the Family Medical Leave Act, the Executive Retirement Income Security Act, and any similar federal, state or local law, statute, regulation, or any common law doctrine, whether that dispute arises during or after employment, shall be settled by binding arbitration in accordance with the National Rules for the Resolution of Employment Disputes of the American Arbitration Association; *provided however*, that this dispute resolution provision shall not apply to any separate agreements between the parties that do not themselves specify arbitration as an exclusive remedy. The location for the arbitration shall be the Chicago, Illinois area. Any award made by such panel shall be final, binding and conclusive on the parties for all purposes, and judgment upon the award rendered by the arbitrators may be entered in any court having jurisdiction thereof. The arbitrators' fees and expenses and all administrative fees and expenses associated with the filing of the arbitration shall be borne by the Company; *provided however*, that at the Executive's option, Executive may voluntarily pay up to one-half the costs and fees. The parties acknowledge and agree that their obligations to arbitrate under this Section survive the termination of this Agreement and continue after the termination of the employment relationship between Executive and the Company. The parties each further agree that the arbitration provisions of this Agreement shall provide each party with its **exclusive remedy**, and each party expressly waives any right it might have to seek redress in any other forum, except as otherwise expressly provided in this Agreement. By electing arbitration as the means for final settlement of all claims, **the parties hereby waive their respective rights to, and agree not to, sue each other in any action in a Federal, State or local court with respect to such claims, but may seek to enforce in court an arbitration award rendered pursuant to this Agreement. The parties specifically agree to waive their respective rights to a trial by jury, and further agree that no demand, request or motion will be made for trial by jury.**

[SIGNATURES TO FOLLOW ON NEXT PAGE]

IN WITNESS WHEREOF, the parties have duly executed this Agreement as of the date first above written.

TEMPUS LABS, INC.

By: /s/ Andy Polovin

Name: Andy Polovin

Title: General Counsel

EXECUTIVE

/s/ Erik Phelps

Erik Phelps

EXECUTIVE EMPLOYMENT AGREEMENT

This **EXECUTIVE EMPLOYMENT AGREEMENT** dated as of January 1, 2022 ("**Agreement**") is by and between **RYAN FUKUSHIMA** ("**Executive**") and **TEMPUS LABS, INC.** ("**Company**").

WHEREAS, the Company desires to employ Executive as Chief Operating Officer and provide Executive with certain compensation and benefits in return for Executive's services, and Executive agrees to be employed by the Company in such capacity and to receive the compensation and benefits on the terms and conditions set forth herein; and

WHEREAS, the Company and Executive desire to enter into this Employment Agreement (the "**Agreement**") to become effective immediately, subject to Executive's signature below (the "**Effective Date**") in order to memorialize the terms and conditions of Executive's employment by the Company upon and following the Effective Date.

NOW, THEREFORE, in consideration of the mutual promises and covenants contained herein, the parties agree to the following:

1. Employment by the Company.

1.1 Position. Subject to the terms set forth herein, the Company agrees to employ Executive in the position of Chief Operating Officer, and Executive hereby accepts such continued employment on the terms and conditions set forth in this Agreement.

1.2 Duties. As Chief Operating Officer, Executive will report to the Chief Executive Officer (the "**CEO**") and such other individual(s) as assigned, performing such duties as are normally associated with Executive's position and such duties as are assigned to Executive from time to time, subject to the oversight and direction of the CEO. During the term of Executive's employment with the Company, Executive will work on a full-time basis for the Company and will devote Executive's best efforts and substantially all of Executive's business time and attention to the business of the Company. Executive shall perform Executive's duties under this Agreement principally out of the Company's facility in Chicago. In addition, Executive shall make such business trips to such places as may be necessary or advisable for the efficient operations of the Company.

1.3 Company Policies and Benefits. The employment relationship between the parties shall also be subject to the Company's personnel policies and procedures as they may be interpreted, adopted, revised or deleted from time to time in the Company's sole discretion. Executive will be eligible to participate on the same basis as similarly situated employees in the Company's benefit plans in effect from time to time during Executive's employment. All matters of eligibility for coverage or benefits under any benefit plan shall be determined in accordance with the provisions of such plan. The Company reserves the right to change, alter, or terminate any benefit plan in its sole discretion. Notwithstanding the foregoing, in the event that the terms of this Agreement differ from or are in conflict with the Company's general employment policies or practices, this Agreement shall control.

2. Compensation.

2.1 Salary. Executive shall receive for Executive's services to be rendered under this Agreement an initial base salary of **\$500,000** on an annualized basis, subject to review and adjustment by the Company in its sole discretion, payable subject to standard federal and state payroll withholding requirements in accordance with the Company's standard payroll practices ("**Base Salary**").

2.2 Equity Incentive Plan. During the term of Executive's employment with the Company, Executive will be eligible to participate in any then-current equity incentive plan as may be in effect from time to time and made available to similarly situated executive employees, subject to the terms of the associated plan documents and as determined by the Board of Directors of the Company (the "**Board**") in its sole discretion from time to time. The Company reserves the right to modify or terminate its incentive programs at any time in its sole discretion.

2.3 Expense Reimbursement. The Company will reimburse Executive for reasonable business expenses in accordance with the Company's standard expense reimbursement policy, including an agreed housing allowance, as the same may be modified by the Company from time to time. The Company shall reimburse Executive for all customary and appropriate business-related expenses actually incurred and documented in accordance with Company policy, as in effect from time to time. For the avoidance of doubt, to the extent that any reimbursements payable to Executive are subject to the provisions of Section 409A of the Code: (a) any such reimbursements will be paid no later than December 31 of the year following the year in which the expense was incurred, (b) the amount of expenses reimbursed in one year will not affect the amount eligible for reimbursement in any subsequent year, and (c) the right to reimbursement under this Agreement will not be subject to liquidation or exchange for another benefit.

3. Confidentiality, Intellectual Property, and Protective Covenants Agreement. As a condition of continued employment, Executive agreed to execute and abide by a Confidentiality, Intellectual Property, and Protective Covenants Agreement ("**Proprietary Information Agreement**"), which may be amended by the parties from time to time without regard to this Agreement. The Proprietary Information Agreement contains provisions that are intended by the parties to survive and do survive termination of this Agreement, and such terms are hereby incorporated by reference.

4. Outside Activities during Employment. The parties acknowledge and agree that Executive is also a co-founder of Pathos, AI, Inc., an AI-enabled drug development company that has entered into an agreement with the Company, and Executive may devote *de minimus* working time to Pathos. Except as otherwise stated herein, Executive will not, while employed by the Company, undertake or engage in any other employment, occupation or business enterprise that would interfere with Executive's responsibilities and the performance of Executive's duties hereunder except for (i) reasonable time devoted to volunteer services for or on behalf of such religious, educational, non-profit and/or other charitable organization as Executive may wish to serve, (ii) reasonable time devoted to activities in the non-profit and business communities consistent with Executive's duties; and (iii) such other activities as may be specifically approved by the Board. This restriction shall not, however, preclude Executive (x) from owning less than one percent (1%) of the total outstanding shares of a publicly traded company, or (y) from employment or service in any capacity with Affiliates of the Company. As used in this Agreement, "**Affiliates**" means an entity under common management or control with the Company.

5. No Conflict with Existing Obligations. Executive represents that Executive's performance of all the terms of this Agreement does not and will not breach any agreement or obligation of any kind made prior to Executive's employment by the Company, including agreements or obligations Executive may have with prior employers or entities for which Executive has provided services. Executive has not entered into, and Executive agrees that Executive will not enter into, any agreement or obligation, either written or oral, in conflict herewith.

6. Termination of Employment. The parties acknowledge that Executive's employment relationship with the Company is at-will, meaning either the Company or Executive may terminate Executive's employment at any time, with or without cause or advance notice. The provisions in this Section govern the amount of compensation, if any, to be provided to Executive upon termination of employment and do not alter this at-will status.

6.1 Termination without Cause or for Good Reason.

(a) The Company shall have the right to terminate Executive's employment with the Company pursuant to this **Section 6.1** at any time, in accordance with **Section 6.6**, without "Cause" (as defined in **Section 6.3(b)** below) by giving notice as described in **Section 7.1** of this Agreement. A termination pursuant to **Section 6.5** below is not a termination without "Cause" for purposes of receiving the benefits described in **Sections 6.1** or **Section 6.2**.

(b) If the Company terminates Executive's employment at any time without Cause or Executive terminates Executive's employment with the Company for Good Reason and provided that such termination constitutes a "separation from service" (as defined under Treasury Regulation Section 1.409A-1(h), without regard to any alternative definition thereunder, a "**Separation from Service**"), then Executive shall be entitled to receive the Accrued Obligations (defined below). If Executive complies with the obligations in **Section 6.1(c)** below, Executive shall also be eligible to receive the following "**Severance Benefits**":

(i) The Company will pay Executive an amount equal to Executive's then current Base Salary for twelve (12) months, less all applicable withholdings and deductions, paid in equal installments on the Company's normal payroll schedule following the termination date, with the first payment beginning on the Severance Pay Commencement Date (as defined in **Section 6.1(c)** below), and the remaining installments occurring on the Company's regularly scheduled payroll dates thereafter; provided that on the Severance Pay Commencement Date, the Company will pay in a lump sum the aggregate amount of the cash severance payments that the Company would have paid Executive through such date had the payments commenced on the effective date of termination through the Severance Pay Commencement Date. In addition, during the six (6) month period following Executive's Separation from Service, Executive's equity will continue to satisfy any applicable time-based vesting condition, as though Executive remained employed by Company.

(c) If Executive timely elects continued coverage under COBRA for Executive and Executive's covered dependents under the Company's group health plans following such termination, then the Company shall pay the COBRA premiums necessary to continue Executive's and Executive's covered dependents' health insurance coverage in effect for Executive (and Executive's covered dependents) on the termination date until the earliest of: (i) twelve (12) months following the termination date (the "**COBRA Severance Period**"); (ii) the date when Executive becomes eligible for substantially equivalent health insurance coverage in connection with new employment or self-employment; or (iii) the date Executive ceases to be eligible for COBRA continuation coverage for any reason, including plan termination (such period from the termination date through the earlier of (i)-(iii), (the "**COBRA Payment Period**"). Notwithstanding the foregoing, if at any time the Company determines that its payment of COBRA premiums on Executive's behalf would result in a violation of applicable law (including, but not limited to, the 2010 Patient Protection and Affordable Care Act, as amended by the 2010 Health Care and Education Reconciliation Act), then in lieu of paying COBRA premiums pursuant to this Section, the Company shall pay Executive on the last day of each remaining month of the COBRA Payment Period, a fully taxable cash payment equal to the COBRA premium for such month, subject to applicable tax withholding (such amount, the "**Special Severance Payment**"), for the remainder of the COBRA Payment Period. Nothing in this Agreement shall deprive Executive of Executive's rights under COBRA or ERISA for benefits under plans and policies arising under Executive's employment by the Company. Executive will be paid all of the Accrued Obligations on the Company's first payroll date after Executive's date of termination from employment or earlier if required by law. Executive shall receive the Severance Benefits pursuant to **Section 6.1(b)** or the Change in Control Severance Benefits (defined below) pursuant to **6.2(a)** of this Agreement, as applicable, if: (i) Executive executes and does not revoke a separation agreement containing an effective, general release of claims in favor of the Company and its affiliates and representatives, in a form acceptable to the Company (the "**Release**") and the Release is enforceable and effective as provided in the Release on or before the date that is the sixtieth (60th) day following the effective date of termination (such 60th day, the "**Severance Pay Commencement Date**"); (ii) if Executive holds any other positions with the Company, Executive resigns such position(s) to be effective no later than the date of Executive's termination date (or such other date as requested by the Board); (iii) Executive returns all Company property; (iv) Executive complies with Executive's post-termination obligations under this Agreement and the Proprietary Information Agreement; and (v) Executive complies with the terms of the Release, including without limitation any non-disparagement and confidentiality provisions contained in Release.

(d) For purposes of this Agreement, "**Accrued Obligations**" are (i) Executive's accrued but unpaid salary through the date of termination, (ii) any unreimbursed business expenses incurred by Executive payable in accordance with the Company's standard expense reimbursement policies, and (iii) benefits owed to Executive under any qualified retirement plan or health and welfare benefit plan in which Executive was a participant in accordance with applicable law and the provisions of such plan.

(e) The Severance Benefits provided to Executive pursuant to this **Section 6.1** are in lieu of, and not in addition to, any benefits to which Executive may otherwise be entitled under any Company severance plan, policy or program.

(f) Any damages caused by the termination of Executive's employment without Cause would be difficult to ascertain; therefore, the Severance Benefits for which Executive is eligible pursuant to **Section 6.1(b)** above in exchange for the Release is agreed to by the parties as liquidated damages, to serve as full compensation, and not a penalty.

(g) For purposes of this Agreement, “**Good Reason**” shall mean the occurrence of any of the following events without Executive’s consent: (i) a material reduction in Executive’s Base Salary of at least 25%; (ii) a material breach of this Agreement by the Company; (iii) a material reduction in the Executive’s duties, authority and responsibilities relative to the Executive’s duties, authority, and responsibilities in effect immediately prior to such reduction (provided that a material reduction of duties, authority and responsibilities will not be deemed to have occurred if, in connection with a Change in Control, Executive is not reporting to the individual in the same role as Executive’s prior manager at the acquirer or any other top-tier holding company above the acquirer); or (iv) the relocation of Executive’s principal place of employment, without Executive’s consent, in a manner that lengthens Executive’s one-way commute distance by fifty (50) or more miles from his then-current principal place of employment immediately prior to such relocation; *provided, however*, that, any such termination by Executive shall only be deemed for Good Reason pursuant to this definition if: (1) Executive gives the Company written notice of his intent to terminate for Good Reason within thirty (30) days following the first occurrence of the condition(s) that Executive believes constitute(s) Good Reason, which notice shall describe such condition(s); (2) the Company fails to remedy such condition(s) within thirty (30) days following receipt of the written notice (the “**Cure Period**”); and (3) Executive voluntarily terminates Executive’s employment within thirty (30) days following the end of the Cure Period.

6.2 Termination without Cause or for Good Reason Coincident with a Change in Control.

(a) If Executive’s employment by the Company is terminated by the Company or any successor entity without Cause (and not due to Disability or death) or by Executive for Good Reason within two (2) months prior to or within twelve (12) months following the effective date of a “**Change in Control**” (as defined in the Company’s Amended and Restated 2015 Stock Plan, as such plan may be amended from time to time (the “**2015 Plan**”)), provided that such termination constitutes a Separation from Service, without regard to any alternative definition thereunder, then in addition to paying or providing Executive with the Accrued Obligations and the Severance Benefits available under **Section 6.1**, the Company will provide the following “**Change in Control Severance Benefits**”:

(i) Any equity awards held by Executive that were issued pursuant to the Company’s 2015 Plan or any successor plan and that remain outstanding and are unvested as of the date of such termination will immediately vest in full. For the avoidance of doubt, if such termination occurs prior to the effective date of a Change in Control, any such equity awards will remain outstanding following the date of such termination as necessary to give effect to the potential vesting acceleration set forth in this **Section 6.2(a)(iv)**, which would occur contingent upon the consummation of a Change in Control.

6.3 Termination by the Company for Cause.

(a) The Company shall have the right to terminate Executive's employment with the Company at any time, in accordance with **Section 6.6**, for Cause by giving notice as described in **Section 7.1** of this Agreement. In the event Executive's employment is terminated at any time for Cause, Executive will not receive Severance Benefits, Change in Control Severance Benefits, or any other severance compensation or benefits, except that, pursuant to the Company's standard payroll policies, the Company shall pay to Executive the Accrued Obligations.

(b) "**Cause**" for termination shall mean that the Company has determined in its sole discretion that Executive has engaged in any of the following: (i) a material breach of any covenant or condition under this Agreement or any other agreement between the parties; (ii) any act constituting dishonesty, fraud, falsification of any documents or records, or immoral or disreputable conduct; (iii) any conduct which constitutes a felony or other criminal act involving corruption, misappropriation, or moral turpitude, or otherwise impairs your ability to perform your duties with the Company, under applicable law; (iv) material violation of any Company policy or any act of misconduct (including if Executive acts in a manner expected to have a material detrimental effect on the Company's reputation or business); (v) refusal to follow or implement a clear and reasonable directive of Company; (vi) negligence or incompetence in the performance of Executive's duties or failure to perform such duties in a manner satisfactory to the Company after the expiration of ten (10) days without cure after written notice of such failure; (vii) breach of fiduciary duty; or (viii) unauthorized use, misappropriation, destruction, or diversion of any tangible or intangible asset or corporate opportunity of the Company.

6.4 Resignation by Executive.

(a) Executive may resign from Executive's employment with the Company at any time, in accordance with **Section 6.6**, by giving notice as described in **Section 7.1**.

(b) In the event Executive resigns from Executive's employment with the Company for any reason other than Good Reason in accordance with **Sections 6.1 or 6.2**, Executive will not receive Severance Benefits, Change in Control Severance Benefits, or any other severance compensation or benefits, except that, pursuant to the Company's standard payroll policies, the Company shall pay to Executive the Accrued Obligations.

6.5 Termination by Virtue of Death or Disability of Executive.

(a) In the event of Executive's death while employed pursuant to this Agreement, all obligations of the parties hereunder shall terminate immediately, in accordance with **Section 6.6**, and the Company shall, pursuant to the Company's standard payroll policies, pay to Executive's legal representatives all Accrued Obligations.

(b) Subject to applicable state and federal law, the Company shall at all times have the right, upon written notice to Executive, and in accordance with **Section 6.6**, to terminate this Agreement based on Executive's Disability. Termination by the Company of Executive's employment based on "**Disability**" shall mean termination because Executive is unable due to a physical or mental condition to perform the essential functions of his position with

or without reasonable accommodation for 180 days in the aggregate during any twelve (12) month period or based on the written certification by two licensed physicians of the likely continuation of such condition for such period. This definition shall be interpreted and applied consistent with the Americans with Disabilities Act, the Family and Medical Leave Act, and other applicable law. In the event Executive's employment is terminated based on Executive's Disability, Executive will not receive Severance Benefits, Change in Control Severance Benefits, or any other severance compensation or benefit, except that, pursuant to the Company's standard payroll policies, the Company shall pay to Executive the Accrued Obligations.

6.6 Notice; Effective Date of Termination.

(a) Termination of Executive's employment pursuant to this Agreement shall be effective on the earliest of:

(i) immediately after the Company gives notice to Executive of Executive's termination, with or without Cause, unless pursuant to Section 6.3(b)(vi) in which case ten (10) days after notice if not cured or unless the Company specifies a later date, in which case, termination shall be effective as of such later date;

(ii) immediately upon the Executive's death;

(iii) ten (10) days after the Company gives notice to Executive of Executive's termination on account of Executive's Disability, unless the Company specifies a later date, in which case, termination shall be effective as of such later date, *provided* that Executive has not returned to the full-time performance of Executive's duties prior to such date;

(iv) ten (10) days after the Executive gives written notice to the Company of Executive's resignation, *provided* that the Company may set a termination date at any time between the date of notice and the date of resignation, in which case the Executive's resignation shall be effective as of such other date. Executive will receive compensation through any required notice period; or

(v) for a termination for Good Reason, immediately upon Executive's full satisfaction of the requirements of **Section 6.1(g)**.

(b) In the event notice of a termination under subsections (a)(i) or (iii) is given orally, at the other party's request, the party giving notice must provide written confirmation of such notice within five (5) business days of the request in compliance with the requirement of **Section 7.1** below. In the event of a termination for Cause, written confirmation shall specify the subsection(s) of the definition of Cause relied on to support the decision to terminate.

6.7 Cooperation with Company after Termination of Employment. Following termination of Executive's employment for any reason, Executive agrees to cooperate fully with the Company in connection with its actual or contemplated defense, prosecution, or investigation of any claims or demands by or against third parties, or other matters arising from events, acts, or failures to act that occurred during the period of Executive's employment by the Company. Such cooperation includes, without limitation, making Executive available to the

Company upon reasonable notice, without subpoena, to provide complete, truthful and accurate information in witness interviews, depositions and trial testimony, and the failure to provide complete, truthful, and accurate information shall be a material breach of this Agreement and a basis for rescinding or forfeiting the benefits described herein. In addition, for twelve (12) months after Executive's employment with the Company ends for any reason, Executive agrees to cooperate fully with the Company in all matters relating to the transition of Executive's work and responsibilities on behalf of the Company, including, but not limited to, any present, prior or subsequent relationships and the orderly transfer of any such work and institutional knowledge to such other persons as may be designated by the Company. The Company will reimburse Executive for reasonable out-of-pocket expenses Executive incurs in connection with any such cooperation (excluding forgone wages, salary, or other compensation) and will make reasonable efforts to accommodate Executive's scheduling needs.

6.8 Application of Section 409A. It is intended that all of the severance payments payable under this Agreement satisfy, to the greatest extent possible, the exemptions from the application of Section 409A of the Code and the regulations and other guidance thereunder and any state law of similar effect (collectively, "**Section 409A**") provided under Treasury Regulations Sections 1.409A-1(b)(4) and 1.409A-1(b)(9), and this Agreement will be construed in a manner that complies with Section 409A. If not so exempt, this Agreement (and any definitions hereunder) will be construed in a manner that complies with Section 409A and incorporates by reference all required definitions and payment terms. No severance payments will be made under this Agreement unless Executive's termination of employment constitutes a "separation from service" (as defined under Treasury Regulation Section 1.409A-1(h)). For purposes of Section 409A (including, without limitation, for purposes of Treasury Regulations Section 1.409A-2(b)(2)(iii)), Executive's right to receive any installment payments under this Agreement (whether severance payments or otherwise) shall be treated as a right to receive a series of separate payments and, accordingly, each installment payment hereunder shall at all times be considered a separate and distinct payment. If the Company determines that the severance benefits provided under this Agreement constitutes "deferred compensation" under Section 409A and if Executive is a "specified employee" of the Company, as such term is defined in Section 409A(a)(2)(B)(i) of the Code at the time of Executive's Separation from Service, then, solely to the extent necessary to avoid the incurrence of the adverse personal tax consequences under Section 409A, the timing of the Severance will be delayed as follows: on the earlier to occur of (a) the date that is six months and one day after Executive's Separation from Service, and (b) the date of Executive's death (such earlier date, the "**Delayed Initial Payment Date**"), the Company will (i) pay to Executive a lump sum amount equal to the sum of the severance benefits that Executive would otherwise have received through the Delayed Initial Payment Date if the commencement of the payment of the severance benefits had not been delayed pursuant to this Section 6.8 and (ii) commence paying the balance of the severance benefits in accordance with the applicable payment schedule set forth in Section 6. No interest shall be due on any amounts deferred pursuant to this Section 6.8. To the extent that any Severance Benefits are deferred compensation under Section 409A of the Code and are not otherwise exempt from the application of Section 409A, then, if the period during which Executive may consider and sign the Release spans two calendar years, the payment of any such Severance Benefit will not be made or begin until the later calendar year.

6.9 Section 280G. Notwithstanding any other provision of this Agreement to the contrary, if payments made or benefits provided pursuant to this Agreement or otherwise from the Company or any person or entity are considered “parachute payments” under Section 280G of the Code, then such parachute payments will be limited to the greatest amount that may be paid to Executive under Section 280G of the Code without causing any loss of deduction to the Company Group under such section, but only if, by reason of such reduction, the net after tax benefit to Executive will exceed the net after tax benefit if such reduction were not made. “*Net after tax benefit*” for purposes of this Agreement will mean the sum of (i) the total amounts payable to the Executive under this Agreement, plus (ii) all other payments and benefits which the Executive receives or then is entitled to receive from the Company or otherwise that would constitute a “parachute payment” within the meaning of Section 280G of the Code, less (iii) the amount of federal and state income taxes payable with respect to the foregoing calculated at the maximum marginal income tax rate for each year in which the foregoing will be paid to Executive (based upon the rate in effect for such year as set forth in the Code at the time of termination of Executive’s employment), less (iv) the amount of excise taxes imposed with respect to the payments and benefits described in (i) and (ii) above by Section 4999 of the Code. The determination as to whether and to what extent payments are required to be reduced in accordance with this Section 6.9 will be made at the Company’s expense by a nationally recognized certified public accounting firm as may be designated by the Company prior to a change in control (the “*Accounting Firm*”). In the event of any mistaken underpayment or overpayment under this Agreement, as determined by the Accounting Firm, the amount of such underpayment or overpayment will forthwith be paid to Executive or refunded to the Company, as the case may be, with interest at one hundred twenty (120%) of the applicable Federal rate provided for in Section 7872(f)(2) of the Code. Any reduction in payments required by this Section 6.9 will occur in the following order: (1) any cash severance, (2) any other cash amount payable to Executive, (3) any benefit valued as a “parachute payment,” (4) the acceleration of vesting of any equity awards that are options, and (5) the acceleration of vesting of any other equity awards. Within any such category of payments and benefits, a reduction will occur first with respect to amounts that are not “deferred compensation” within the meaning of Section 409A and then with respect to amounts that are. In the event that acceleration of compensation from equity awards is to be reduced, such acceleration of vesting will be canceled, subject to the immediately preceding sentence, in the reverse order of the date of grant.

7. General Provisions.

7.1 Notices. Any notices required hereunder to be in writing shall be deemed effectively given: (a) upon personal delivery to the party to be notified, (b) when sent by electronic mail or confirmed facsimile if sent during normal business hours of the recipient, and if not, then on the next business day, (c) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one (1) day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt. All communications shall be sent to the Company at its primary office location and to Executive at either Executive’s address as listed on the Company payroll, or Executive’s Company-issued email address, or at such other address as the Company or Executive may designate by ten (10) days advance written notice to the other.

7.2 Severability. Whenever possible, each provision of this Agreement will be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect under any applicable law or rule in any jurisdiction, such invalidity, illegality or unenforceability will not affect any other provision or any other jurisdiction, but this Agreement will be reformed, construed and enforced in such jurisdiction as if such invalid, illegal or unenforceable provisions had never been contained herein.

7.3 Survival. Provisions of this Agreement which by their terms must survive the termination of this Agreement in order to effectuate the intent of the parties will survive any such termination for such period as may be appropriate under the circumstances.

7.4 Waiver. If either party should waive any breach of any provisions of this Agreement, it shall not thereby be deemed to have waived any preceding or succeeding breach of the same or any other provision of this Agreement.

7.5 Complete Agreement. This Agreement constitutes the entire agreement between Executive and the Company with regard to the subject matter hereof. This Agreement is the complete, final, and exclusive embodiment of their agreement with regard to this subject matter and supersedes any prior oral discussions or written communications and agreements, including the Prior Agreement. This Agreement is entered into without reliance on any promise or representation other than those expressly contained herein, and it cannot be modified or amended except in writing signed by Executive and an authorized officer of the Company. The parties have entered into a separate Proprietary Information Agreement and have or may enter into separate agreements related to equity. These separate agreements govern other aspects of the relationship between the parties, have or may have provisions that survive termination of Executive's employment under this Agreement, may be amended or superseded by the parties without regard to this Agreement and are enforceable according to their terms without regard to the enforcement provision of this Agreement.

7.6 Counterparts. This Agreement may be executed in separate counterparts, any one of which need not contain signatures of more than one party, but all of which taken together will constitute one and the same Agreement. The parties agree that facsimile and scanned image copies of signatures will suffice as original signatures.

7.7 Withholding Taxes. The Company will be entitled to withhold from any payment due to Executive hereunder any amounts required to be withheld by applicable tax laws or regulations.

7.8 Headings. The headings of the sections hereof are inserted for convenience only and shall not be deemed to constitute a part hereof nor to affect the meaning thereof.

7.9 Successors and Assigns. The Company shall assign this Agreement and its rights and obligations hereunder in whole, but not in part, to any Company or other entity with or into which the Company may hereafter merge or consolidate or to which the Company may transfer all or substantially all of its assets, if in any such case said Company or other entity shall by operation of law or expressly in writing assume all obligations of the Company hereunder as fully as if it had been originally made a party hereto, but may not otherwise assign this Agreement or its rights and obligations hereunder. Executive may not assign or transfer this Agreement or any rights or obligations hereunder, other than to his estate upon his death.

7.10 Choice of Law. All questions concerning the construction, validity and interpretation of this Agreement will be governed by the laws of the State of Delaware.

7.11 Dispute Resolution. The parties recognize that litigation in federal or state courts or before federal or state administrative agencies of disputes arising out of the Executive's employment with the Company or out of this Agreement, or the Executive's termination of employment or termination of this Agreement, may not be in the best interests of either the Executive or the Company, and may result in unnecessary costs, delays, complexities, and uncertainty. The parties agree that any dispute between the parties arising out of or relating to the negotiation, execution, performance or termination of this Agreement or the Executive's employment, including, but not limited to, any claim arising out of this Agreement, claims under Title VII of the Civil Rights Act of 1964, as amended, the Civil Rights Act of 1991, the Age Discrimination in Employment Act of 1967, the Americans with Disabilities Act of 1990, Section 1981 of the Civil Rights Act of 1966, as amended, the Family Medical Leave Act, the Executive Retirement Income Security Act, and any similar federal, state or local law, statute, regulation, or any common law doctrine, whether that dispute arises during or after employment, shall be settled by binding arbitration in accordance with the National Rules for the Resolution of Employment Disputes of the American Arbitration Association; *provided however*, that this dispute resolution provision shall not apply to any separate agreements between the parties that do not themselves specify arbitration as an exclusive remedy. The location for the arbitration shall be the Chicago, Illinois area. Any award made by such panel shall be final, binding and conclusive on the parties for all purposes, and judgment upon the award rendered by the arbitrators may be entered in any court having jurisdiction thereof. The arbitrators' fees and expenses and all administrative fees and expenses associated with the filing of the arbitration shall be borne by the Company; *provided however*, that at the Executive's option, Executive may voluntarily pay up to one-half the costs and fees. The parties acknowledge and agree that their obligations to arbitrate under this Section survive the termination of this Agreement and continue after the termination of the employment relationship between Executive and the Company. The parties each further agree that the arbitration provisions of this Agreement shall provide each party with its **exclusive remedy**, and each party expressly waives any right it might have to seek redress in any other forum, except as otherwise expressly provided in this Agreement. By electing arbitration as the means for final settlement of all claims, **the parties hereby waive their respective rights to, and agree not to, sue each other in any action in a Federal, State or local court with respect to such claims, but may seek to enforce in court an arbitration award rendered pursuant to this Agreement. The parties specifically agree to waive their respective rights to a trial by jury, and further agree that no demand, request or motion will be made for trial by jury.**

[SIGNATURES TO FOLLOW ON NEXT PAGE]

IN WITNESS WHEREOF, the parties have duly executed this Agreement as of the date first above written.

TEMPUS LABS, INC.

By: /s/ Andy Polovin _____

Name: Andy Polovin

Title: General Counsel

EXECUTIVE

/s/ Ryan Fukushima _____

Ryan Fukushima

EXECUTIVE EMPLOYMENT AGREEMENT

This EXECUTIVE EMPLOYMENT AGREEMENT dated as of January 1, 2022 (“*Agreement*”) is by and between JIM ROGERS (“*Executive*”) and TEMPUS LABS, INC. (“*Company*”).

WHEREAS, the Company desires to employ Executive as Chief Financial Officer and provide Executive with certain compensation and benefits in return for Executive’s services, and Executive agrees to be employed by the Company in such capacity and to receive the compensation and benefits on the terms and conditions set forth herein; and

WHEREAS, the Company and Executive desire to enter into this Employment Agreement (the “*Agreement*”) to become effective immediately, subject to Executive’s signature below (the “*Effective Date*”) in order to memorialize the terms and conditions of Executive’s employment by the Company upon and following the Effective Date.

NOW, THEREFORE, in consideration of the mutual promises and covenants contained herein, the parties agree to the following:

1. Employment by the Company.

1.1 Position. Subject to the terms set forth herein, the Company agrees to employ Executive in the position of Chief Financial Officer, and Executive hereby accepts such continued employment on the terms and conditions set forth in this Agreement.

1.2 Duties. As Chief Financial Officer, Executive will report to the Chief Executive Officer (the “*CEO*”), performing such duties as are normally associated with Executive’s position and such duties as are assigned to Executive from time to time, subject to the oversight and direction of the CEO. During the term of Executive’s employment with the Company, Executive will work on a full-time basis for the Company and will devote Executive’s best efforts and substantially all of Executive’s business time and attention to the business of the Company. Executive shall perform Executive’s duties under this Agreement principally out of the Company’s facility in Chicago. In addition, Executive shall make such business trips to such places as may be necessary or advisable for the efficient operations of the Company.

1.3 Company Policies and Benefits. The employment relationship between the parties shall also be subject to the Company’s personnel policies and procedures as they may be interpreted, adopted, revised or deleted from time to time in the Company’s sole discretion. Executive will be eligible to participate on the same basis as similarly situated employees in the Company’s benefit plans in effect from time to time during Executive’s employment. All matters of eligibility for coverage or benefits under any benefit plan shall be determined in accordance with the provisions of such plan. The Company reserves the right to change, alter, or terminate any benefit plan in its sole discretion. Notwithstanding the foregoing, in the event that the terms of this Agreement differ from or are in conflict with the Company’s general employment policies or practices, this Agreement shall control.

2. Compensation.

2.1 Salary. Executive shall receive for Executive's services to be rendered under this Agreement an initial base salary of **\$450,000** on an annualized basis, subject to review and adjustment by the Company in its sole discretion, payable subject to standard federal and state payroll withholding requirements in accordance with the Company's standard payroll practices ("**Base Salary**").

2.2 Equity Incentive Plan. During the term of Executive's employment with the Company, Executive will be eligible to participate in any then-current equity incentive plan as may be in effect from time to time and made available to similarly situated executive employees, subject to the terms of the associated plan documents and as determined by the Board of Directors of the Company (the "**Board**") in its sole discretion from time to time. The Company reserves the right to modify or terminate its incentive programs at any time in its sole discretion.

2.3 Expense Reimbursement. The Company will reimburse Executive for reasonable business expenses in accordance with the Company's standard expense reimbursement policy, as the same may be modified by the Company from time to time. The Company shall reimburse Executive for all customary and appropriate business-related expenses actually incurred and documented in accordance with Company policy, as in effect from time to time. For the avoidance of doubt, to the extent that any reimbursements payable to Executive are subject to the provisions of Section 409A of the Code: (a) any such reimbursements will be paid no later than December 31 of the year following the year in which the expense was incurred, (b) the amount of expenses reimbursed in one year will not affect the amount eligible for reimbursement in any subsequent year, and (c) the right to reimbursement under this Agreement will not be subject to liquidation or exchange for another benefit.

3. Confidentiality, Intellectual Property, and Protective Covenants Agreement. As a condition of continued employment, Executive agreed to execute and abide by a Confidentiality, Intellectual Property, and Protective Covenants Agreement ("**Proprietary Information Agreement**"), which may be amended by the parties from time to time without regard to this Agreement. The Proprietary Information Agreement contains provisions that are intended by the parties to survive and do survive termination of this Agreement, and such terms are hereby incorporated by reference.

4. Outside Activities during Employment. Except with the prior written consent of the Board, including consent given to Executive prior to the signing of this Agreement, Executive will not, while employed by the Company, undertake or engage in any other employment, occupation or business enterprise that would interfere with Executive's responsibilities and the performance of Executive's duties hereunder except for (i) reasonable time devoted to volunteer services for or on behalf of such religious, educational, non-profit and/or other charitable organization as Executive may wish to serve, (ii) reasonable time devoted to activities in the non-profit and business communities consistent with Executive's duties; and (iii) such other activities as may be specifically approved by the Board. This restriction shall not, however, preclude Executive (x) from owning less than one percent (1%) of the total outstanding shares of a publicly traded company, or (y) from employment or service in any capacity with Affiliates of the Company. As used in this Agreement, "**Affiliates**" means an entity under common management or control with the Company.

5. No Conflict with Existing Obligations. Executive represents that Executive's performance of all the terms of this Agreement does not and will not breach any agreement or obligation of any kind made prior to Executive's employment by the Company, including agreements or obligations Executive may have with prior employers or entities for which Executive has provided services. Executive has not entered into, and Executive agrees that Executive will not enter into, any agreement or obligation, either written or oral, in conflict herewith.

6. Termination of Employment. The parties acknowledge that Executive's employment relationship with the Company is at-will, meaning either the Company or Executive may terminate Executive's employment at any time, with or without cause or advance notice. The provisions in this Section govern the amount of compensation, if any, to be provided to Executive upon termination of employment and do not alter this at-will status.

6.1 Termination without Cause or for Good Reason.

(a) The Company shall have the right to terminate Executive's employment with the Company pursuant to this **Section 6.1** at any time, in accordance with **Section 6.6**, without "Cause" (as defined in **Section 6.3(b)** below) by giving notice as described in **Section 7.1** of this Agreement. A termination pursuant to **Section 6.5** below is not a termination without "Cause" for purposes of receiving the benefits described in **Sections 6.1** or **Section 6.2**.

(b) If the Company terminates Executive's employment at any time without Cause or Executive terminates Executive's employment with the Company for Good Reason and provided that such termination constitutes a "separation from service" (as defined under Treasury Regulation Section 1.409A-1(h), without regard to any alternative definition thereunder, a "**Separation from Service**"), then Executive shall be entitled to receive the Accrued Obligations (defined below). If Executive complies with the obligations in **Section 6.1(c)** below, Executive shall also be eligible to receive the following "**Severance Benefits**":

(i) The Company will pay Executive an amount equal to Executive's then current Base Salary for twelve (12) months, less all applicable withholdings and deductions, paid in equal installments on the Company's normal payroll schedule following the termination date, with the first payment beginning on the Severance Pay Commencement Date (as defined in **Section 6.1(c)** below), and the remaining installments occurring on the Company's regularly scheduled payroll dates thereafter; provided that on the Severance Pay Commencement Date, the Company will pay in a lump sum the aggregate amount of the cash severance payments that the Company would have paid Executive through such date had the payments commenced on the effective date of termination through the Severance Pay Commencement Date. In addition, during the six (6) month period following Executive's Separation from Service, Executive's equity will continue to satisfy any applicable time-based vesting condition, as though Executive remained employed by Company.

(c) If Executive timely elects continued coverage under COBRA for Executive and Executive's covered dependents under the Company's group health plans following such termination, then the Company shall pay the COBRA premiums necessary to continue Executive's and Executive's covered dependents' health insurance coverage in effect for Executive (and Executive's covered dependents) on the termination date until the earliest of: (i) twelve (12) months following the termination date (the "**COBRA Severance Period**"); (ii) the date when Executive becomes eligible for substantially equivalent health insurance coverage in connection with new employment or self-employment; or (iii) the date Executive ceases to be eligible for COBRA continuation coverage for any reason, including plan termination (such period from the termination date through the earlier of (i)-(iii), (the "**COBRA Payment Period**"). Notwithstanding the foregoing, if at any time the Company determines that its payment of COBRA premiums on Executive's behalf would result in a violation of applicable law (including, but not limited to, the 2010 Patient Protection and Affordable Care Act, as amended by the 2010 Health Care and Education Reconciliation Act), then in lieu of paying COBRA premiums pursuant to this Section, the Company shall pay Executive on the last day of each remaining month of the COBRA Payment Period, a fully taxable cash payment equal to the COBRA premium for such month, subject to applicable tax withholding (such amount, the "**Special Severance Payment**"), for the remainder of the COBRA Payment Period. Nothing in this Agreement shall deprive Executive of Executive's rights under COBRA or ERISA for benefits under plans and policies arising under Executive's employment by the Company. Executive will be paid all of the Accrued Obligations on the Company's first payroll date after Executive's date of termination from employment or earlier if required by law. Executive shall receive the Severance Benefits pursuant to **Section 6.1(b)** or the Change in Control Severance Benefits (defined below) pursuant to **6.2(a)** of this Agreement, as applicable, if: (i) Executive executes and does not revoke a separation agreement containing an effective, general release of claims in favor of the Company and its affiliates and representatives, in a form acceptable to the Company (the "**Release**") and the Release is enforceable and effective as provided in the Release on or before the date that is the sixtieth (60th) day following the effective date of termination (such 60th day, the "**Severance Pay Commencement Date**"); (ii) if Executive holds any other positions with the Company, Executive resigns such position(s) to be effective no later than the date of Executive's termination date (or such other date as requested by the Board); (iii) Executive returns all Company property; (iv) Executive complies with Executive's post-termination obligations under this Agreement and the Proprietary Information Agreement; and (v) Executive complies with the terms of the Release, including without limitation any non-disparagement and confidentiality provisions contained in Release.

(d) For purposes of this Agreement, "**Accrued Obligations**" are (i) Executive's accrued but unpaid salary through the date of termination, (ii) any unreimbursed business expenses incurred by Executive payable in accordance with the Company's standard expense reimbursement policies, and (iii) benefits owed to Executive under any qualified retirement plan or health and welfare benefit plan in which Executive was a participant in accordance with applicable law and the provisions of such plan.

(e) The Severance Benefits provided to Executive pursuant to this **Section 6.1** are in lieu of, and not in addition to, any benefits to which Executive may otherwise be entitled under any Company severance plan, policy or program.

(f) Any damages caused by the termination of Executive's employment without Cause would be difficult to ascertain; therefore, the Severance Benefits for which Executive is eligible pursuant to **Section 6.1(b)** above in exchange for the Release is agreed to by the parties as liquidated damages, to serve as full compensation, and not a penalty.

(g) For purposes of this Agreement, "**Good Reason**" shall mean the occurrence of any of the following events without Executive's consent: (i) a material reduction in Executive's Base Salary of at least 25%; (ii) a material breach of this Agreement by the Company; (iii) a material reduction in the Executive's duties, authority and responsibilities relative to the Executive's duties, authority, and responsibilities in effect immediately prior to such reduction (provided that a material reduction of duties, authority and responsibilities will not be deemed to have occurred if, in connection with a Change in Control, Executive is not reporting to the individual in the same role as Executive's prior manager at the acquirer or any other top-tier holding company above the acquirer); or (iv) the relocation of Executive's principal place of employment, without Executive's consent, in a manner that lengthens Executive's one-way commute distance by fifty (50) or more miles from his then-current principal place of employment immediately prior to such relocation; *provided, however*, that, any such termination by Executive shall only be deemed for Good Reason pursuant to this definition if: (1) Executive gives the Company written notice of his intent to terminate for Good Reason within thirty (30) days following the first occurrence of the condition(s) that Executive believes constitute(s) Good Reason, which notice shall describe such condition(s); (2) the Company fails to remedy such condition(s) within thirty (30) days following receipt of the written notice (the "**Cure Period**"); and (3) Executive voluntarily terminates Executive's employment within thirty (30) days following the end of the Cure Period.

6.2 Termination without Cause or for Good Reason Coincident with a Change in Control.

(a) If Executive's employment by the Company is terminated by the Company or any successor entity without Cause (and not due to Disability or death) or by Executive for Good Reason within two (2) months prior to or within twelve (12) months following the effective date of a "**Change in Control**" (as defined in the Company's Amended and Restated 2015 Stock Plan, as such plan may be amended from time to time (the "**2015 Plan**")), provided that such termination constitutes a Separation from Service, without regard to any alternative definition thereunder, then in addition to paying or providing Executive with the Accrued Obligations and the Severance Benefits available under **Section 6.1**, the Company will provide the following "**Change in Control Severance Benefits**":

(i) Any equity awards held by Executive that were issued pursuant to the Company's 2015 Plan or any successor plan and that remain outstanding and are unvested as of the date of such termination will immediately vest in full. For the avoidance of doubt, if such termination occurs prior to the effective date of a Change in Control, any such equity awards will remain outstanding following the date of such termination as necessary to give effect to the potential vesting acceleration set forth in this **Section 6.2(a)(iv)**, which would occur contingent upon the consummation of a Change in Control.

6.3 Termination by the Company for Cause.

(a) The Company shall have the right to terminate Executive's employment with the Company at any time, in accordance with **Section 6.6**, for Cause by giving notice as described in **Section 7.1** of this Agreement. In the event Executive's employment is terminated at any time for Cause, Executive will not receive Severance Benefits, Change in Control Severance Benefits, or any other severance compensation or benefits, except that, pursuant to the Company's standard payroll policies, the Company shall pay to Executive the Accrued Obligations.

(b) "**Cause**" for termination shall mean that the Company has determined in its sole discretion that Executive has engaged in any of the following: (i) a material breach of any covenant or condition under this Agreement or any other agreement between the parties; (ii) any act constituting dishonesty, fraud, falsification of any documents or records, or immoral or disreputable conduct; (iii) any conduct which constitutes a felony or other criminal act involving corruption, misappropriation, or moral turpitude, or otherwise impairs your ability to perform your duties with the Company, under applicable law; (iv) material violation of any Company policy or any act of misconduct (including if Executive acts in a manner expected to have a material detrimental effect on the Company's reputation or business); (v) refusal to follow or implement a clear and reasonable directive of Company; (vi) negligence or incompetence in the performance of Executive's duties or failure to perform such duties in a manner satisfactory to the Company after the expiration of ten (10) days without cure after written notice of such failure; (vii) breach of fiduciary duty; or (viii) unauthorized use, misappropriation, destruction, or diversion of any tangible or intangible asset or corporate opportunity of the Company.

6.4 Resignation by Executive.

(a) Executive may resign from Executive's employment with the Company at any time, in accordance with **Section 6.6**, by giving notice as described in **Section 7.1**.

(b) In the event Executive resigns from Executive's employment with the Company for any reason other than Good Reason in accordance with **Sections 6.1 or 6.2**, Executive will not receive Severance Benefits, Change in Control Severance Benefits, or any other severance compensation or benefits, except that, pursuant to the Company's standard payroll policies, the Company shall pay to Executive the Accrued Obligations.

6.5 Termination by Virtue of Death or Disability of Executive.

(a) In the event of Executive's death while employed pursuant to this Agreement, all obligations of the parties hereunder shall terminate immediately, in accordance with **Section 6.6**, and the Company shall, pursuant to the Company's standard payroll policies, pay to Executive's legal representatives all Accrued Obligations.

(b) Subject to applicable state and federal law, the Company shall at all times have the right, upon written notice to Executive, and in accordance with **Section 6.6**, to terminate this Agreement based on Executive's Disability. Termination by the Company of Executive's employment based on "**Disability**" shall mean termination because Executive is

unable due to a physical or mental condition to perform the essential functions of his position with or without reasonable accommodation for 180 days in the aggregate during any twelve (12) month period or based on the written certification by two licensed physicians of the likely continuation of such condition for such period. This definition shall be interpreted and applied consistent with the Americans with Disabilities Act, the Family and Medical Leave Act, and other applicable law. In the event Executive's employment is terminated based on Executive's Disability, Executive will not receive Severance Benefits, Change in Control Severance Benefits, or any other severance compensation or benefit, except that, pursuant to the Company's standard payroll policies, the Company shall pay to Executive the Accrued Obligations.

6.6 Notice; Effective Date of Termination.

(a) Termination of Executive's employment pursuant to this Agreement shall be effective on the earliest of:

(i) immediately after the Company gives notice to Executive of Executive's termination, with or without Cause, unless pursuant to Section 6.3(b)(vi) in which case ten (10) days after notice if not cured or unless the Company specifies a later date, in which case, termination shall be effective as of such later date;

(ii) immediately upon the Executive's death;

(iii) ten (10) days after the Company gives notice to Executive of Executive's termination on account of Executive's Disability, unless the Company specifies a later date, in which case, termination shall be effective as of such later date, *provided* that Executive has not returned to the full-time performance of Executive's duties prior to such date;

(iv) ten (10) days after the Executive gives written notice to the Company of Executive's resignation, *provided* that the Company may set a termination date at any time between the date of notice and the date of resignation, in which case the Executive's resignation shall be effective as of such other date. Executive will receive compensation through any required notice period; or

(v) for a termination for Good Reason, immediately upon Executive's full satisfaction of the requirements of **Section 6.1(g)**.

(b) In the event notice of a termination under subsections (a)(i) or (iii) is given orally, at the other party's request, the party giving notice must provide written confirmation of such notice within five (5) business days of the request in compliance with the requirement of **Section 7.1** below. In the event of a termination for Cause, written confirmation shall specify the subsection(s) of the definition of Cause relied on to support the decision to terminate.

6.7 Cooperation with Company after Termination of Employment. Following termination of Executive's employment for any reason, Executive agrees to cooperate fully with the Company in connection with its actual or contemplated defense, prosecution, or investigation of any claims or demands by or against third parties, or other matters arising from events, acts, or failures to act that occurred during the period of Executive's employment by the

Company. Such cooperation includes, without limitation, making Executive available to the Company upon reasonable notice, without subpoena, to provide complete, truthful and accurate information in witness interviews, depositions and trial testimony, and the failure to provide complete, truthful, and accurate information shall be a material breach of this Agreement and a basis for rescinding or forfeiting the benefits described herein. In addition, for twelve (12) months after Executive's employment with the Company ends for any reason, Executive agrees to cooperate fully with the Company in all matters relating to the transition of Executive's work and responsibilities on behalf of the Company, including, but not limited to, any present, prior or subsequent relationships and the orderly transfer of any such work and institutional knowledge to such other persons as may be designated by the Company. The Company will reimburse Executive for reasonable out-of-pocket expenses Executive incurs in connection with any such cooperation (excluding forgone wages, salary, or other compensation) and will make reasonable efforts to accommodate Executive's scheduling needs.

6.8 Application of Section 409A. It is intended that all of the severance payments payable under this Agreement satisfy, to the greatest extent possible, the exemptions from the application of Section 409A of the Code and the regulations and other guidance thereunder and any state law of similar effect (collectively, "**Section 409A**") provided under Treasury Regulations Sections 1.409A-1(b)(4) and 1.409A-1(b)(9), and this Agreement will be construed in a manner that complies with Section 409A. If not so exempt, this Agreement (and any definitions hereunder) will be construed in a manner that complies with Section 409A and incorporates by reference all required definitions and payment terms. No severance payments will be made under this Agreement unless Executive's termination of employment constitutes a "separation from service" (as defined under Treasury Regulation Section 1.409A-1(h)). For purposes of Section 409A (including, without limitation, for purposes of Treasury Regulations Section 1.409A-2(b)(2)(iii)), Executive's right to receive any installment payments under this Agreement (whether severance payments or otherwise) shall be treated as a right to receive a series of separate payments and, accordingly, each installment payment hereunder shall at all times be considered a separate and distinct payment. If the Company determines that the severance benefits provided under this Agreement constitutes "deferred compensation" under Section 409A and if Executive is a "specified employee" of the Company, as such term is defined in Section 409A(a)(2)(B)(i) of the Code at the time of Executive's Separation from Service, then, solely to the extent necessary to avoid the incurrence of the adverse personal tax consequences under Section 409A, the timing of the Severance will be delayed as follows: on the earlier to occur of (a) the date that is six months and one day after Executive's Separation from Service, and (b) the date of Executive's death (such earlier date, the "**Delayed Initial Payment Date**"), the Company will (i) pay to Executive a lump sum amount equal to the sum of the severance benefits that Executive would otherwise have received through the Delayed Initial Payment Date if the commencement of the payment of the severance benefits had not been delayed pursuant to this Section 6.8 and (ii) commence paying the balance of the severance benefits in accordance with the applicable payment schedule set forth in Section 6. No interest shall be due on any amounts deferred pursuant to this Section 6.8. To the extent that any Severance Benefits are deferred compensation under Section 409A of the Code and are not otherwise exempt from the application of Section 409A, then, if the period during which Executive may consider and sign the Release spans two calendar years, the payment of any such Severance Benefit will not be made or begin until the later calendar year.

6.9 Section 280G. Notwithstanding any other provision of this Agreement to the contrary, if payments made or benefits provided pursuant to this Agreement or otherwise from the Company or any person or entity are considered “parachute payments” under Section 280G of the Code, then such parachute payments will be limited to the greatest amount that may be paid to Executive under Section 280G of the Code without causing any loss of deduction to the Company Group under such section, but only if, by reason of such reduction, the net after tax benefit to Executive will exceed the net after tax benefit if such reduction were not made. “*Net after tax benefit*” for purposes of this Agreement will mean the sum of (i) the total amounts payable to the Executive under this Agreement, plus (ii) all other payments and benefits which the Executive receives or then is entitled to receive from the Company or otherwise that would constitute a “parachute payment” within the meaning of Section 280G of the Code, less (iii) the amount of federal and state income taxes payable with respect to the foregoing calculated at the maximum marginal income tax rate for each year in which the foregoing will be paid to Executive (based upon the rate in effect for such year as set forth in the Code at the time of termination of Executive’s employment), less (iv) the amount of excise taxes imposed with respect to the payments and benefits described in (i) and (ii) above by Section 4999 of the Code. The determination as to whether and to what extent payments are required to be reduced in accordance with this Section 6.9 will be made at the Company’s expense by a nationally recognized certified public accounting firm as may be designated by the Company prior to a change in control (the “*Accounting Firm*”). In the event of any mistaken underpayment or overpayment under this Agreement, as determined by the Accounting Firm, the amount of such underpayment or overpayment will forthwith be paid to Executive or refunded to the Company, as the case may be, with interest at one hundred twenty (120%) of the applicable Federal rate provided for in Section 7872(f)(2) of the Code. Any reduction in payments required by this Section 6.9 will occur in the following order: (1) any cash severance, (2) any other cash amount payable to Executive, (3) any benefit valued as a “parachute payment,” (4) the acceleration of vesting of any equity awards that are options, and (5) the acceleration of vesting of any other equity awards. Within any such category of payments and benefits, a reduction will occur first with respect to amounts that are not “deferred compensation” within the meaning of Section 409A and then with respect to amounts that are. In the event that acceleration of compensation from equity awards is to be reduced, such acceleration of vesting will be canceled, subject to the immediately preceding sentence, in the reverse order of the date of grant.

7. General Provisions.

7.1 Notices. Any notices required hereunder to be in writing shall be deemed effectively given: (a) upon personal delivery to the party to be notified, (b) when sent by electronic mail or confirmed facsimile if sent during normal business hours of the recipient, and if not, then on the next business day, (c) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one (1) day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt. All communications shall be sent to the Company at its primary office location and to Executive at either Executive’s address as listed on the Company payroll, or Executive’s Company-issued email address, or at such other address as the Company or Executive may designate by ten (10) days advance written notice to the other.

7.2 Severability. Whenever possible, each provision of this Agreement will be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect under any applicable law or rule in any jurisdiction, such invalidity, illegality or unenforceability will not affect any other provision or any other jurisdiction, but this Agreement will be reformed, construed and enforced in such jurisdiction as if such invalid, illegal or unenforceable provisions had never been contained herein.

7.3 Survival. Provisions of this Agreement which by their terms must survive the termination of this Agreement in order to effectuate the intent of the parties will survive any such termination for such period as may be appropriate under the circumstances.

7.4 Waiver. If either party should waive any breach of any provisions of this Agreement, it shall not thereby be deemed to have waived any preceding or succeeding breach of the same or any other provision of this Agreement.

7.5 Complete Agreement. This Agreement constitutes the entire agreement between Executive and the Company with regard to the subject matter hereof. This Agreement is the complete, final, and exclusive embodiment of their agreement with regard to this subject matter and supersedes any prior oral discussions or written communications and agreements, including the Prior Agreement. This Agreement is entered into without reliance on any promise or representation other than those expressly contained herein, and it cannot be modified or amended except in writing signed by Executive and an authorized officer of the Company. The parties have entered into a separate Proprietary Information Agreement and have or may enter into separate agreements related to equity. These separate agreements govern other aspects of the relationship between the parties, have or may have provisions that survive termination of Executive's employment under this Agreement, may be amended or superseded by the parties without regard to this Agreement and are enforceable according to their terms without regard to the enforcement provision of this Agreement.

7.6 Counterparts. This Agreement may be executed in separate counterparts, any one of which need not contain signatures of more than one party, but all of which taken together will constitute one and the same Agreement. The parties agree that facsimile and scanned image copies of signatures will suffice as original signatures.

7.7 Withholding Taxes. The Company will be entitled to withhold from any payment due to Executive hereunder any amounts required to be withheld by applicable tax laws or regulations.

7.8 Headings. The headings of the sections hereof are inserted for convenience only and shall not be deemed to constitute a part hereof nor to affect the meaning thereof.

7.9 Successors and Assigns. The Company shall assign this Agreement and its rights and obligations hereunder in whole, but not in part, to any Company or other entity with or into which the Company may hereafter merge or consolidate or to which the Company may transfer all or substantially all of its assets, if in any such case said Company or other entity shall by operation of law or expressly in writing assume all obligations of the Company hereunder as fully as if it had been originally made a party hereto, but may not otherwise assign this Agreement or its rights and obligations hereunder. Executive may not assign or transfer this Agreement or any rights or obligations hereunder, other than to his estate upon his death.

7.10 Choice of Law. All questions concerning the construction, validity and interpretation of this Agreement will be governed by the laws of the State of Delaware.

7.11 Dispute Resolution. The parties recognize that litigation in federal or state courts or before federal or state administrative agencies of disputes arising out of the Executive's employment with the Company or out of this Agreement, or the Executive's termination of employment or termination of this Agreement, may not be in the best interests of either the Executive or the Company, and may result in unnecessary costs, delays, complexities, and uncertainty. The parties agree that any dispute between the parties arising out of or relating to the negotiation, execution, performance or termination of this Agreement or the Executive's employment, including, but not limited to, any claim arising out of this Agreement, claims under Title VII of the Civil Rights Act of 1964, as amended, the Civil Rights Act of 1991, the Age Discrimination in Employment Act of 1967, the Americans with Disabilities Act of 1990, Section 1981 of the Civil Rights Act of 1966, as amended, the Family Medical Leave Act, the Executive Retirement Income Security Act, and any similar federal, state or local law, statute, regulation, or any common law doctrine, whether that dispute arises during or after employment, shall be settled by binding arbitration in accordance with the National Rules for the Resolution of Employment Disputes of the American Arbitration Association; *provided however*, that this dispute resolution provision shall not apply to any separate agreements between the parties that do not themselves specify arbitration as an exclusive remedy. The location for the arbitration shall be the Chicago, Illinois area. Any award made by such panel shall be final, binding and conclusive on the parties for all purposes, and judgment upon the award rendered by the arbitrators may be entered in any court having jurisdiction thereof. The arbitrators' fees and expenses and all administrative fees and expenses associated with the filing of the arbitration shall be borne by the Company; *provided however*, that at the Executive's option, Executive may voluntarily pay up to one-half the costs and fees. The parties acknowledge and agree that their obligations to arbitrate under this Section survive the termination of this Agreement and continue after the termination of the employment relationship between Executive and the Company. The parties each further agree that the arbitration provisions of this Agreement shall provide each party with its **exclusive remedy**, and each party expressly waives any right it might have to seek redress in any other forum, except as otherwise expressly provided in this Agreement. By electing arbitration as the means for final settlement of all claims, **the parties hereby waive their respective rights to, and agree not to, sue each other in any action in a Federal, State or local court with respect to such claims, but may seek to enforce in court an arbitration award rendered pursuant to this Agreement. The parties specifically agree to waive their respective rights to a trial by jury, and further agree that no demand, request or motion will be made for trial by jury.**

[SIGNATURES TO FOLLOW ON NEXT PAGE]

IN WITNESS WHEREOF, the parties have duly executed this Agreement as of the date first above written.

TEMPUS LABS, INC.

By: /s/ Andy Polovin

Name: Andy Polovin

Title: General Counsel

EXECUTIVE

/s/ Jim Rogers

Jim Rogers

TEMPUS LABS, INC.

2022 EMPLOYEE STOCK PURCHASE PLAN

ADOPTED BY THE BOARD OF DIRECTORS: DECEMBER 18, 2021

APPROVED BY THE STOCKHOLDERS: JANUARY 3, 2022

1. GENERAL; PURPOSE.

(a) The Plan provides a means by which Eligible Employees of the Company and certain Designated Companies may be given an opportunity to purchase shares of Common Stock. The Plan permits the Company to grant a series of Purchase Rights to Eligible Employees under an Employee Stock Purchase Plan. In addition, the Plan permits the Company to grant a series of Purchase Rights to Eligible Employees that do not meet the requirements of an Employee Stock Purchase Plan.

(b) The Plan includes two components: a 423 Component and a Non-423 Component. The Company intends (but makes no undertaking or representation to maintain) the 423 Component to qualify as an Employee Stock Purchase Plan. The provisions of the 423 Component, accordingly, will be construed in a manner that is consistent with the requirements of Section 423 of the Code. In addition, this Plan authorizes grants of Purchase Rights under the Non-423 Component that do not meet the requirements of an Employee Stock Purchase Plan. Except as otherwise provided in the Plan or determined by the Board, the Non-423 Component will operate and be administered in the same manner as the 423 Component. In addition, the Company may make separate Offerings which vary in terms (provided that such terms are not inconsistent with the provisions of the Plan or the requirements of an Employee Stock Purchase Plan to the extent the Offering is made under the 423 Component), and the Company will designate which Designated Company is participating in each separate Offering.

(c) The Company, by means of the Plan, seeks to retain the services of Eligible Employees, to secure and retain the services of new Employees and to provide incentives for such persons to exert maximum efforts for the success of the Company and its Related Corporations.

2. ADMINISTRATION.

(a) The Board will administer the Plan unless and until the Board delegates administration of the Plan to a Committee or Committees, as provided in Section 2(c).

(b) The Board will have the power, subject to, and within the limitations of, the express provisions of the Plan:

(i) To determine how and when Purchase Rights will be granted and the provisions of each Offering (which need not be identical).

(ii) To designate from time to time (A) which Related Corporations of the Company will be eligible to participate in the Plan as Designated 423 Companies, (B) which Related Corporations or Affiliates will be eligible to participate in the Plan as Designated Non-423 Companies, (C) which Affiliates or Related Corporations may be excluded from participation in the Plan, and (D) which Designated Companies will participate in each separate Offering (to the extent that the Company makes separate Offerings).

(iii) To construe and interpret the Plan and Purchase Rights, and to establish, amend and revoke rules and regulations for its administration. The Board, in the exercise of this power, may correct any defect, omission or inconsistency in the Plan, in a manner and to the extent it deems necessary or expedient to make the Plan fully effective.

(iv) To settle all controversies regarding the Plan and Purchase Rights granted under the Plan.

(v) To suspend or terminate the Plan at any time as provided in Section 12.

(vi) To amend the Plan at any time as provided in Section 12.

(vii) Generally, to exercise such powers and to perform such acts as it deems necessary or expedient to promote the best interests of the Company and its Related Corporations and to carry out the intent that the Plan be treated as an Employee Stock Purchase Plan with respect to the 423 Component.

(viii) To adopt such rules, procedures and sub-plans as are necessary or appropriate to permit or facilitate participation in the Plan by Employees who are foreign nationals or employed or located outside the United States. Without limiting the generality of, and consistent with, the foregoing, the Board specifically is authorized to adopt rules, procedures, and sub-plans regarding, without limitation, eligibility to participate in the Plan, the definition of eligible "earnings," handling and making of Contributions, establishment of bank or trust accounts to hold Contributions, payment of interest, conversion of local currency, obligations to pay payroll tax, determination of beneficiary designation requirements, withholding procedures and handling of share issuances, any of which may vary according to applicable requirements, and which, if applicable to a Designated Non-423 Company, do not have to comply with the requirements of Section 423 of the Code.

(c) The Board may delegate some or all of the administration of the Plan to a Committee or Committees. If administration is delegated to a Committee, the Committee will have, in connection with the administration of the Plan, the powers theretofore possessed by the Board that have been delegated to the Committee, including the power to delegate to a subcommittee any of the administrative powers the Committee is authorized to exercise (and references in this Plan and any applicable Offering Document to the Board will thereafter be to the Committee or subcommittee), subject, however, to such resolutions, not inconsistent with the provisions of the Plan, as may be adopted from time to time by the Board. Further, to the extent not prohibited by Applicable Law, the Board or Committee may, from time to time, delegate some or all of its authority under the Plan to one or more officers of the Company or other persons or groups of persons as it deems necessary, appropriate or advisable under conditions or limitations that it may set at or after the time of the delegation. The Board may retain the authority to concurrently administer the Plan with the Committee and may, at any time, revert in the Board some or all of the powers previously delegated. Whether or not the Board has delegated administration of the Plan to a Committee, the Board will have the final power to determine all questions of policy and expediency that may arise in the administration of the Plan.

(d) All determinations, interpretations and constructions made by the Board in good faith will not be subject to review by any person and will be final, binding and conclusive on all persons.

3. SHARES OF COMMON STOCK SUBJECT TO THE PLAN.

(a) Subject to the provisions of Section 11(a) relating to Capitalization Adjustments, the maximum number of shares of Common Stock that may be issued under the Plan will not exceed 3,000,000 shares of Common Stock, plus the number of shares of Common Stock that are automatically added on January 1st of each year for a period of up to ten years, commencing on January 1, 2023 and ending on (and including) January 1, 2032, in an amount equal to the lesser of (x) two percent (2%) of the total number of

shares of Combined Common Stock outstanding on December 31st of the preceding calendar year, and (y) 6,000,000 shares of Common Stock. Notwithstanding the foregoing, the Board may act prior to the first day of any calendar year to provide that there will be no January 1st increase in the share reserve for such calendar year or that the increase in the share reserve for such calendar year will be a lesser number of shares of Common Stock than would otherwise occur pursuant to the preceding sentence. For the avoidance of doubt, up to the maximum number of shares of Common Stock reserved under this Section 3(a) may be used to satisfy purchases of Common Stock under the 423 Component and any remaining portion of such maximum number of shares may be used to satisfy purchases of Common Stock under the Non-423 Component.

(b) If any Purchase Right granted under the Plan terminates without having been exercised in full, the shares of Common Stock not purchased under such Purchase Right will again become available for issuance under the Plan.

(c) The stock purchasable under the Plan will be shares of authorized but unissued or reacquired Common Stock, including shares repurchased by the Company on the open market.

4. GRANT OF PURCHASE RIGHTS; OFFERING.

(a) The Board may from time to time grant or provide for the grant of Purchase Rights to Eligible Employees under an Offering (consisting of one or more Purchase Periods) on an Offering Date or Offering Dates selected by the Board. Each Offering will be in such form and will contain such terms and conditions as the Board will deem appropriate, and with respect to the 423 Component, will comply with the requirement of Section 423(b)(5) of the Code that all Employees granted Purchase Rights will have the same rights and privileges. The terms and conditions of an Offering shall be incorporated by reference into the Plan and treated as part of the Plan. The provisions of separate Offerings need not be identical, but each Offering will include (through incorporation of the provisions of this Plan by reference in the document comprising the Offering or otherwise) the period during which the Offering will be effective, which period will not exceed 27 months beginning with the Offering Date, and the substance of the provisions contained in Sections 5 through 8, inclusive.

(b) If a Participant has more than one Purchase Right outstanding under the Plan, unless he or she otherwise indicates in forms delivered to the Company or a third party designated by the Company (each, a "*Company Designee*"): (i) each form will apply to all of his or her Purchase Rights under the Plan, and (ii) a Purchase Right with a lower exercise price (or an earlier-granted Purchase Right, if different Purchase Rights have identical exercise prices) will be exercised to the fullest possible extent before a Purchase Right with a higher exercise price (or a later-granted Purchase Right if different Purchase Rights have identical exercise prices) will be exercised.

(c) The Board will have the discretion to structure an Offering so that if the Fair Market Value of a share of Common Stock on the first Trading Day of a new Purchase Period within that Offering is less than or equal to the Fair Market Value of a share of Common Stock on the Offering Date for that Offering, then (i) that Offering will terminate immediately as of that first Trading Day, and (ii) the Participants in such terminated Offering will be automatically enrolled in a new Offering beginning on the first Trading Day of such new Purchase Period.

5. ELIGIBILITY.

(a) Purchase Rights may be granted only to Employees of the Company or, as the Board may designate in accordance with Section 2(b), to Employees of a Related Corporation or an Affiliate. Except as provided in Section 5(b) or as required by Applicable Law, an Employee will not be eligible to be granted

Purchase Rights unless, on the Offering Date, the Employee has been in the employ of the Company, the Related Corporation or the Affiliate, as the case may be, for such continuous period preceding such Offering Date as the Board may (unless prohibited by Applicable Law) require, but in no event will the required period of continuous employment be equal to or greater than two years. In addition, the Board may provide that no Employee will be eligible to be granted Purchase Rights under the Plan unless, on the Offering Date, such Employee's customary employment with the Company, the Related Corporation or the Affiliate is more than 20 hours per week and more than five months per calendar year or such other criteria as the Board may determine consistent with Section 423 of the Code with respect to the 423 Component. The Board may also exclude from participation in the Plan or any Offering Employees who are "highly compensated employees" (within the meaning of Section 423(b)(4)(D) of the Code) of the Company or a Related Corporation or a subset of such highly compensated employees.

(b) The Board may provide that each person who, during the course of an Offering, first becomes an Eligible Employee will, on a date or dates specified in the Offering which coincides with the day on which such person becomes an Eligible Employee or which occurs thereafter, receive a Purchase Right under that Offering, which Purchase Right will thereafter be deemed to be a part of that Offering. Such Purchase Right will have the same characteristics as any Purchase Rights originally granted under that Offering, as described herein, except that:

(i) the date on which such Purchase Right is granted will be the "Offering Date" of such Purchase Right for all purposes, including determination of the exercise price of such Purchase Right;

(ii) the period of the Offering with respect to such Purchase Right will begin on its Offering Date and end coincident with the end of such Offering; and

(iii) the Board may provide that if such person first becomes an Eligible Employee within a specified period of time before the end of the Offering, he or she will not receive any Purchase Right under that Offering.

(c) No Employee will be eligible for the grant of any Purchase Rights under the 423 Component if, immediately after any such Purchase Rights are granted, such Employee owns stock possessing five percent or more of the total combined voting power or value of all classes of stock of the Company or of any Related Corporation. For purposes of this Section 5(c), the rules of Section 424(d) of the Code will apply in determining the stock ownership of any Employee, and stock which such Employee may purchase under all outstanding Purchase Rights and options will be treated as stock owned by such Employee.

(d) As specified by Section 423(b)(8) of the Code, an Eligible Employee may be granted Purchase Rights under the 423 Component only if such Purchase Rights, together with any other rights granted under all Employee Stock Purchase Plans of the Company and any Related Corporations, do not permit such Eligible Employee's rights to purchase stock of the Company or any Related Corporation to accrue at a rate which, when aggregated, exceeds \$25,000 of Fair Market Value of such stock (determined at the time such rights are granted, and which, with respect to the Plan, will be determined as of their respective Offering Dates) for each calendar year in which such rights are outstanding at any time.

(e) Officers of the Company and any Designated Company, if they are otherwise Eligible Employees, will be eligible to participate in Offerings under the Plan. Notwithstanding the foregoing, the Board may (unless prohibited by Applicable Law) provide in an Offering that Employees who are highly compensated Employees within the meaning of Section 423(b)(4)(D) of the Code will not be eligible to participate.

(f) Notwithstanding anything in this Section 5 to the contrary, in the case of an Offering under the Non-423 Component, an Eligible Employee (or group of Eligible Employees) may be excluded from participation in the Plan or an Offering if the Board has determined, in its sole discretion, that participation of such Eligible Employee(s) is not advisable or practical for any reason.

6. PURCHASE RIGHTS; PURCHASE PRICE.

(a) On each Offering Date, each Eligible Employee, pursuant to an Offering made under the Plan, will be granted a Purchase Right to purchase up to that number of shares of Common Stock purchasable either with a percentage of earnings or with a maximum dollar amount, as designated by the Board during the period that begins on the Offering Date (or such later date as the Board determines for a particular Offering) and ends on the date stated in the Offering, which date will be no later than the end of the Offering.

(b) The Board will establish one or more Purchase Dates during an Offering on which Purchase Rights granted for that Offering will be exercised and shares of Common Stock will be purchased in accordance with such Offering.

(c) In connection with each Offering made under the Plan, the Board may specify (i) a maximum number of shares of Common Stock that may be purchased by any Participant on any Purchase Date during such Offering, (ii) a maximum aggregate number of shares of Common Stock that may be purchased by all Participants pursuant to such Offering and/or (iii) a maximum aggregate number of shares of Common Stock that may be purchased by all Participants on any Purchase Date under the Offering. If the aggregate purchase of shares of Common Stock issuable upon exercise of Purchase Rights granted under the Offering would exceed any such maximum aggregate number, then, in the absence of any Board action otherwise, a pro rata (based on each Participant's accumulated Contributions) allocation of the shares of Common Stock (rounded down to the nearest whole share) available will be made in as nearly a uniform manner as will be practicable and equitable.

(d) The purchase price of shares of Common Stock acquired pursuant to Purchase Rights will be specified by the Board prior to commencement of an Offering and will not be less than the lesser of:

- (i) an amount equal to 85% of the Fair Market Value of the shares of Common Stock on the Offering Date; or
- (ii) an amount equal to 85% of the Fair Market Value of the shares of Common Stock on the applicable Purchase Date.

7. PARTICIPATION; WITHDRAWAL; TERMINATION.

(a) An Eligible Employee may elect to participate in an Offering and authorize payroll deductions as the means of making Contributions by completing and delivering to the Company or a Company Designee, within the time specified in the Offering, an enrollment form provided by the Company or Company Designee. The enrollment form will specify the amount of Contributions not to exceed the maximum amount specified by the Board. Each Participant's Contributions will be credited to a bookkeeping account for such Participant under the Plan and will be deposited with the general funds of the Company except where Applicable Law requires that Contributions be deposited with a third party. If permitted in the Offering, a Participant may begin such Contributions with the first payroll occurring on or after the Offering Date (or, in the case of a payroll date that occurs after the end of the prior Offering but before the Offering Date of the next new Offering, Contributions from such payroll will be included in the new Offering). If permitted in the Offering, a Participant may thereafter reduce (including to zero) or

increase his or her Contributions. If required under Applicable Law or if specifically provided in the Offering and to the extent permitted by Section 423 of the Code with respect to the 423 Component, in addition to or instead of making Contributions by payroll deductions, a Participant may make Contributions through payment by cash, check or wire transfer prior to a Purchase Date.

(b) During an Offering, a Participant may cease making Contributions and withdraw from the Offering by delivering to the Company or a Company Designee a withdrawal form provided by the Company. The Company may impose a deadline before a Purchase Date for withdrawing. Upon such withdrawal, such Participant's Purchase Right in that Offering will immediately terminate and the Company will distribute as soon as practicable to such Participant all of his or her accumulated but unused Contributions and such Participant's Purchase Right in that Offering shall thereupon terminate. A Participant's withdrawal from that Offering will have no effect upon his or her eligibility to participate in any other Offerings under the Plan, but such Participant will be required to deliver a new enrollment form to participate in subsequent Offerings.

(c) Unless otherwise required by Applicable Law, Purchase Rights granted pursuant to any Offering under the Plan will terminate immediately if the Participant either (i) is no longer an Employee for any reason or for no reason (subject to any post-employment participation period required by Applicable Law) or (ii) is otherwise no longer eligible to participate. The Company will distribute as soon as practicable to such individual all of his or her accumulated but unused Contributions.

(d) Unless otherwise determined by the Board, a Participant whose employment transfers or whose employment terminates with an immediate rehire (with no break in service) by or between the Company and a Designated Company or between Designated Companies will not be treated as having terminated employment for purposes of participating in the Plan or an Offering; however, if a Participant transfers from an Offering under the 423 Component to an Offering under the Non-423 Component, the exercise of the Participant's Purchase Right will be qualified under the 423 Component only to the extent such exercise complies with Section 423 of the Code. If a Participant transfers from an Offering under the Non-423 Component to an Offering under the 423 Component, the exercise of the Purchase Right will remain non-qualified under the Non-423 Component. The Board may establish different and additional rules governing transfers between separate Offerings within the 423 Component and between Offerings under the 423 Component and Offerings under the Non-423 Component.

(e) During a Participant's lifetime, Purchase Rights will be exercisable only by such Participant. Purchase Rights are not transferable by a Participant, except by will, by the laws of descent and distribution, or, if permitted by the Company, by a beneficiary designation as described in Section 10.

(f) Unless otherwise specified in the Offering or as required by Applicable Law, the Company will have no obligation to pay interest on Contributions.

8. EXERCISE OF PURCHASE RIGHTS.

(a) On each Purchase Date, each Participant's accumulated Contributions will be applied to the purchase of shares of Common Stock, up to the maximum number of shares of Common Stock permitted by the Plan and the applicable Offering, at the purchase price specified in the Offering. No fractional shares will be issued unless specifically provided for in the Offering.

(b) Unless otherwise provided in the Offering, if any amount of accumulated Contributions remains in a Participant's account after the purchase of shares of Common Stock and such remaining amount is less than the amount required to purchase one share of Common Stock on the final Purchase Date of an Offering, then such remaining amount will be held in such Participant's account for the purchase of

shares of Common Stock under the next Offering under the Plan, unless such Participant withdraws from or is not eligible to participate in such next Offering, in which case such amount will be distributed to such Participant after the final Purchase Date without interest (unless the payment of interest is otherwise required by Applicable Law). If the amount of Contributions remaining in a Participant's account after the purchase of shares of Common Stock is at least equal to the amount required to purchase one (1) whole share of Common Stock on the final Purchase Date of an Offering, then such remaining amount will be distributed in full to such Participant after the final Purchase Date of such Offering without interest (unless otherwise required by Applicable Law).

(c) No Purchase Rights may be exercised to any extent unless the shares of Common Stock to be issued upon such exercise under the Plan are covered by an effective registration statement pursuant to the Securities Act and the Plan is in material compliance with all applicable U.S. federal and state, foreign and other securities, exchange control and other laws applicable to the Plan. If on a Purchase Date the shares of Common Stock are not so registered or the Plan is not in such compliance, no Purchase Rights will be exercised on such Purchase Date, and, subject to Section 423 of the Code with respect to the 423 Component, the Purchase Date will be delayed until the shares of Common Stock are subject to such an effective registration statement and the Plan is in material compliance, except that the Purchase Date will in no event be more than 27 months from the Offering Date. If, on the Purchase Date, as delayed to the maximum extent permissible, the shares of Common Stock are not registered and the Plan is not in material compliance with all Applicable Laws, as determined by the Company in its sole discretion, no Purchase Rights will be exercised and all accumulated but unused Contributions will be distributed to the Participants without interest (unless the payment of interest is otherwise required by Applicable Law).

9. COVENANTS OF THE COMPANY.

The Company will seek to obtain from each U.S. federal or state, foreign or other regulatory commission, agency or other Governmental Body having jurisdiction over the Plan such authority as may be required to grant Purchase Rights and issue and sell shares of Common Stock thereunder unless the Company determines, in its sole discretion, that doing so is not practical or would cause the Company to incur costs that are unreasonable. If, after commercially reasonable efforts, the Company is unable to obtain the authority that counsel for the Company deems necessary for the grant of Purchase Rights or the lawful issuance and sale of Common Stock under the Plan, and at a commercially reasonable cost, the Company will be relieved from any liability for failure to grant Purchase Rights and/or to issue and sell Common Stock upon exercise of such Purchase Rights.

10. DESIGNATION OF BENEFICIARY.

(a) The Company may, but is not obligated to, permit a Participant to submit a form designating a beneficiary who will receive any shares of Common Stock and/or Contributions from the Participant's account under the Plan if the Participant dies before such shares and/or Contributions are delivered to the Participant. The Company may, but is not obligated to, permit the Participant to change such designation of beneficiary. Any such designation and/or change must be on a form approved by the Company.

(b) If a Participant dies, and in the absence of a valid beneficiary designation, the Company will deliver any shares of Common Stock and/or Contributions to the executor or administrator of the estate of the Participant. If no executor or administrator has been appointed (to the knowledge of the Company), the Company, in its sole discretion, may deliver such shares of Common Stock and/or Contributions, without interest (unless the payment of interest is otherwise required by Applicable Law), to the Participant's spouse, dependents or relatives, or if no spouse, dependent or relative is known to the Company, then to such other person as the Company may designate.

11. ADJUSTMENTS UPON CHANGES IN COMMON STOCK; CORPORATE TRANSACTIONS.

(a) In the event of a Capitalization Adjustment, the Board will appropriately and proportionately adjust: (i) the class(es) and maximum number of securities subject to the Plan pursuant to Section 3(a), (ii) the class(es) and maximum number of securities by which the share reserve is to increase automatically each year pursuant to Section 3(a), (iii) the class(es) and number of securities subject to, and the purchase price applicable to outstanding Offerings and Purchase Rights, and (iv) the class(es) and number of securities that are the subject of the purchase limits under each ongoing Offering. The Board will make these adjustments, and its determination will be final, binding and conclusive.

(b) In the event of a Corporate Transaction, then: (i) any surviving corporation or acquiring corporation (or the surviving or acquiring corporation's parent company) may assume or continue outstanding Purchase Rights or may substitute similar rights (including a right to acquire the same consideration paid to the stockholders in the Corporate Transaction) for outstanding Purchase Rights, or (ii) if any surviving or acquiring corporation (or its parent company) does not assume or continue such Purchase Rights or does not substitute similar rights for such Purchase Rights, then the Participants' accumulated Contributions will be used to purchase shares of Common Stock (rounded down to the nearest whole share) within ten business days (or such other period specified by the Board) prior to the Corporate Transaction under the outstanding Purchase Rights, and the Purchase Rights will terminate immediately after such purchase.

12. AMENDMENT, TERMINATION OR SUSPENSION OF THE PLAN.

(a) The Board may amend the Plan at any time in any respect the Board deems necessary or advisable. However, except as provided in Section 11(a) relating to Capitalization Adjustments, stockholder approval will be required for any amendment of the Plan for which stockholder approval is required by Applicable Law.

(b) The Board may suspend or terminate the Plan at any time. No Purchase Rights may be granted under the Plan while the Plan is suspended or after it is terminated.

(c) Any benefits, privileges, entitlements and obligations under any outstanding Purchase Rights granted before an amendment, suspension or termination of the Plan will not be materially impaired by any such amendment, suspension or termination except (i) with the consent of the person to whom such Purchase Rights were granted, (ii) as necessary to facilitate compliance with any laws, listing requirements, or governmental regulations (including, without limitation, the provisions of Section 423 of the Code and the regulations and other interpretive guidance issued thereunder relating to Employee Stock Purchase Plans) including without limitation any such regulations or other guidance that may be issued or amended after the date the Plan is adopted by the Board, or (iii) as necessary to obtain or maintain favorable tax, listing, or regulatory treatment. To be clear, the Board may amend outstanding Purchase Rights without a Participant's consent if such amendment is necessary to ensure that the Purchase Right and/or the Plan complies with the requirements of Section 423 of the Code with respect to the 423 Component or with respect to other Applicable Laws. Notwithstanding anything in the Plan or any Offering Document to the contrary, the Board will be entitled to: (i) establish the exchange ratio applicable to amounts withheld in a currency other than U.S. dollars; (ii) permit Contributions in excess of the amount designated by a Participant in order to adjust for mistakes in the Company's processing of properly completed Contribution elections; (iii) establish reasonable waiting and adjustment periods and/or accounting and crediting procedures to ensure that amounts applied toward the purchase of Common Stock for each Participant properly correspond with amounts withheld from the Participant's Contributions; (iv) amend any outstanding Purchase Rights or clarify any ambiguities regarding the terms of any Offering to enable the Purchase Rights to qualify under and/or comply with Section 423 of the Code with respect to the 423

Component; and (v) establish other limitations or procedures as the Board determines in its sole discretion advisable that are consistent with the Plan. The actions of the Board pursuant to this paragraph will not be considered to alter or impair any Purchase Rights granted under an Offering as they are part of the initial terms of each Offering and the Purchase Rights granted under each Offering.

13. TAX QUALIFICATION; TAX WITHHOLDING.

(a) Although the Company may endeavor to (i) qualify a Purchase Right for special tax treatment under the laws of the United States or jurisdictions outside of the United States or (ii) avoid adverse tax treatment, the Company makes no representation to that effect and expressly disavows any covenant to maintain special or to avoid unfavorable tax treatment, notwithstanding anything to the contrary in this Plan. The Company will be unconstrained in its corporate activities without regard to the potential negative tax impact on Participants.

(b) Each Participant will make arrangements, satisfactory to the Company and any applicable Related Corporation, to enable the Company or the Related Corporation to fulfill any withholding obligation for Tax-Related Items. Without limitation to the foregoing, in the Company's sole discretion and subject to Applicable Law, such withholding obligation may be satisfied in whole or in part by (i) withholding from the Participant's salary or any other cash payment due to the Participant from the Company or a Related Corporation; (ii) withholding from the proceeds of the sale of shares of Common Stock acquired under the Plan, either through a voluntary sale or a mandatory sale arranged by the Company; or (iii) any other method deemed acceptable by the Board. The Company shall not be required to issue any shares of Common Stock under the Plan until such obligations are satisfied.

(c) The 423 Component is exempt from the application of Section 409A of the Code, and any ambiguities herein shall be interpreted to so be exempt from Section 409A of the Code. The Non-423 Component is intended to be exempt from the application of Section 409A of the Code under the short-term deferral exception and any ambiguities shall be construed and interpreted in accordance with such intent. In furtherance of the foregoing and notwithstanding any provision in the Plan to the contrary, if the Committee determines that an option granted under the Plan may be subject to Section 409A of the Code or that any provision in the Plan would cause an option under the Plan to be subject to Section 409A, the Committee may amend the terms of the Plan and/or of an outstanding option granted under the Plan, or take such other action the Committee determines is necessary or appropriate, in each case, without the participant's consent, to exempt any outstanding option or future option that may be granted under the Plan from or to allow any such options to comply with Section 409A of the Code, but only to the extent any such amendments or action by the Committee would not violate Section 409A of the Code. Notwithstanding the foregoing, the Company shall have no liability to a participant or any other party if the option under the Plan that is intended to be exempt from or compliant with Section 409A of the Code is not so exempt or compliant or for any action taken by the Committee with respect thereto.

14. EFFECTIVE DATE OF PLAN.

The Plan will become effective immediately prior to and contingent upon the IPO Date. No Purchase Rights will be exercised unless and until the Plan has been approved by the stockholders of the Company, which approval must be within 12 months before or after the date the Plan is adopted (or if required under Section 12(a) above, materially amended) by the Board.

15. MISCELLANEOUS PROVISIONS.

(a) Proceeds from the sale of shares of Common Stock pursuant to Purchase Rights will constitute general funds of the Company.

(b) A Participant will not be deemed to be the holder of, or to have any of the rights of a holder with respect to, shares of Common Stock subject to Purchase Rights unless and until the Participant's shares of Common Stock acquired upon exercise of Purchase Rights are recorded in the books of the Company (or its transfer agent).

(c) The Plan and Offering do not constitute an employment contract. Nothing in the Plan or in the Offering will in any way alter the at will nature of a Participant's employment or amend a Participant's employment contract, if applicable, or be deemed to create in any way whatsoever any obligation on the part of any Participant to continue in the employ of the Company or a Related Corporation or an Affiliate, or on the part of the Company, a Related Corporation or an Affiliate to continue the employment of a Participant.

(d) The provisions of the Plan will be governed by the laws of the State of Delaware without resort to that state's conflicts of laws rules.

(e) If any particular provision of the Plan is found to be invalid or otherwise unenforceable, such provision will not affect the other provisions of the Plan, but the Plan will be construed in all respects as if such invalid provision were omitted.

(f) If any provision of the Plan does not comply with Applicable Law, such provision shall be construed in such a manner as to comply with Applicable Law.

16. DEFINITIONS.

As used in the Plan, the following definitions will apply to the capitalized terms indicated below:

(a) "**423 Component**" means the part of the Plan, which excludes the Non-423 Component, pursuant to which Purchase Rights that satisfy the requirements for an Employee Stock Purchase Plan may be granted to Eligible Employees.

(b) "**Affiliate**" means any entity, other than a Related Corporation, whether now or subsequently established, which is at the time of determination, a "parent" or "subsidiary" of the Company as such terms are defined in Rule 405 promulgated under the Securities Act. The Board may determine the time or times at which "parent" or "subsidiary" status is determined within the foregoing definition.

(c) "**Applicable Law**" means shall mean the Code and any applicable securities, federal, state, foreign, material local or municipal or other law, statute, constitution, principle of common law, resolution, ordinance, code, edict, decree, rule, listing rule, regulation, judicial decision, ruling or requirement issued, enacted, adopted, promulgated, implemented or otherwise put into effect by or under the authority of any Governmental Body (or under the authority of the New York Stock Exchange, Nasdaq Stock Market or the Financial Industry Regulatory Authority).

(d) "**Board**" means the Board of Directors of the Company.

(e) "**Capitalization Adjustment**" means any change that is made in, or other events that occur with respect to, the Common Stock subject to the Plan or subject to any Purchase Right after the date the Plan is adopted by the Board without the receipt of consideration by the Company through merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or other similar equity restructuring transaction, as that term is used in Financial Accounting Standards Board Accounting Standards Codification Topic 718 (or any successor thereto). Notwithstanding the foregoing, the conversion of any convertible securities of the Company will not be treated as a Capitalization Adjustment.

(f) “*Code*” means the U.S. Internal Revenue Code of 1986, as amended, including any applicable regulations and guidance thereunder.

(g) “*Combined Common Stock*” means the common stock of the Company of all classes.

(h) “*Committee*” means a committee of one or more members of the Board to whom authority has been delegated by the Board in accordance with Section 2(c).

(i) “*Common Stock*” means the Class A common stock of the Company.

(j) “*Company*” means Tempus Labs, Inc., a Delaware corporation.

(k) “*Contributions*” means the payroll deductions and other additional payments specifically provided for in the Offering that a Participant contributes to fund the exercise of a Purchase Right. A Participant may make additional payments into his or her account if specifically provided for in the Offering, and then only if the Participant has not already had the maximum permitted amount withheld during the Offering through payroll deductions and, with respect to the 423 Component, to the extent permitted by Section 423.

(l) “*Corporate Transaction*” means the consummation, in a single transaction or in a series of related transactions, of any one or more of the following events:

(i) a sale or other disposition of all or substantially all, as determined by the Board in its sole discretion, of the consolidated assets of the Company and its subsidiaries;

(ii) a sale or other disposition of more than 50% of the outstanding securities of the Company;

(iii) a merger, consolidation or similar transaction following which the Company is not the surviving corporation; or

(iv) a merger, consolidation or similar transaction following which the Company is the surviving corporation but the shares of Common Stock outstanding immediately preceding the merger, consolidation or similar transaction are converted or exchanged by virtue of the merger, consolidation or similar transaction into other property, whether in the form of securities, cash or otherwise.

(m) “*Designated 423 Company*” means any Related Corporation selected by the Board as participating in the 423 Component.

(n) “*Designated Company*” means any Designated Non-423 Corporation or Designated 423 Company, provided, however, that at any given time, a Related Corporation participating in the 423 Component shall not be a Related Corporation participating in the Non-423 Component.

(o) “*Designated Non-423 Company*” means any Related Corporation or Affiliate selected by the Board as participating in the Non-423 Component.

(p) “*Director*” means a member of the Board.

(q) “**Eligible Employee**” means an Employee who meets the requirements set forth in the document(s) governing the Offering for eligibility to participate in the Offering, provided that such Employee also meets the requirements for eligibility to participate set forth in the Plan.

(r) “**Employee**” means any person, including an Officer or Director, who is “employed” for purposes of Section 423(b)(4) of the Code by the Company or a Related Corporation or solely with respect to the Non-423 Component, an Affiliate. However, service solely as a Director, or payment of a fee for such services, will not cause a Director to be considered an “Employee” for purposes of the Plan.

(s) “**Employee Stock Purchase Plan**” means a plan that grants Purchase Rights intended to be options issued under an “employee stock purchase plan,” as that term is defined in Section 423(b) of the Code.

(t) “**Exchange Act**” means the U.S. Securities Exchange Act of 1934, as amended and the rules and regulations promulgated thereunder.

(u) “**Fair Market Value**” means, as of any date, the value of the Common Stock determined as follows:

(i) If the Common Stock is listed on any established stock exchange or traded on any established market, the Fair Market Value of a share of Common Stock will be, unless otherwise determined by the Board, the **closing sales price** for such stock as quoted on such exchange or market (or the exchange or market with the greatest volume of trading in the Common Stock) **on the date of determination**, as reported in such source as the Board deems reliable. Unless otherwise provided by the Board, if there is no closing sales price for the Common Stock on the date of determination, then the Fair Market Value will be the closing sales price on the last preceding date for which such quotation exists.

(ii) In the absence of such markets for the Common Stock, the Fair Market Value will be determined by the Board in good faith in compliance with Applicable Laws and regulations and, to the extent applicable as determined in the sole discretion of the Board, in a manner that complies with Sections 409A of the Code

(iii) Notwithstanding the foregoing, for any Offering that commences on the IPO Date, the Fair Market Value of the shares of Common Stock on the Offering Date will be the price per share at which shares are first sold to the public in the Company’s initial public offering as specified in the final prospectus for that initial public offering.

(v) “**Governmental Body**” means any: (a) nation, state, commonwealth, province, territory, county, municipality, district or other jurisdiction of any nature; (b) federal, state, local, municipal, foreign or other government; (c) governmental or regulatory body, or quasi-governmental body of any nature (including any governmental division, department, administrative agency or bureau, commission, authority, instrumentality, official, ministry, fund, foundation, center, organization, unit, body or entity and any court or other tribunal, and for the avoidance of doubt, any tax authority) or other body exercising similar powers or authority; or (d) self-regulatory organization (including the New York Stock Exchange, the Nasdaq Stock Market and the Financial Industry Regulatory Authority).

(w) “**IPO Date**” means the date of the underwriting agreement between the Company and the underwriter(s) managing the initial public offering of the Common Stock, pursuant to which the Common Stock is priced for the initial public offering.

(x) “Non-423 Component” means the part of the Plan, which excludes the 423 Component, pursuant to which Purchase Rights that are not intended to satisfy the requirements for an Employee Stock Purchase Plan may be granted to Eligible Employees.

(y) “**Offering**” means the grant to Eligible Employees of Purchase Rights, with the exercise of those Purchase Rights automatically occurring at the end of one or more Purchase Periods. The terms and conditions of an Offering will generally be set forth in the “**Offering Document**” approved by the Board for that Offering.

(z) “**Offering Date**” means a date selected by the Board for an Offering to commence.

(aa) “**Officer**” means a person who is an officer of the Company or a Related Corporation within the meaning of Section 16 of the Exchange Act.

(bb) “**Participant**” means an Eligible Employee who holds an outstanding Purchase Right.

(cc) “**Plan**” means this Tempus Labs, Inc. 2022 Employee Stock Purchase Plan, as amended from time to time, including both the 423 Component and the Non-423 Component.

(dd) “**Purchase Date**” means one or more dates during an Offering selected by the Board on which Purchase Rights will be exercised and on which purchases of shares of Common Stock will be carried out in accordance with such Offering.

(ee) “**Purchase Period**” means a period of time specified within an Offering, generally beginning on the Offering Date or on the first Trading Day following a Purchase Date, and ending on a Purchase Date. An Offering may consist of one or more Purchase Periods.

(ff) “**Purchase Right**” means an option to purchase shares of Common Stock granted pursuant to the Plan.

(gg) “**Related Corporation**” means any “parent corporation” or “subsidiary corporation” of the Company whether now or subsequently established, as those terms are defined in Sections 424(e) and (f), respectively, of the Code.

(hh) “**Securities Act**” means the U.S. Securities Act of 1933, as amended.

(ii) “**Tax-Related Items**” means any income tax, social insurance, payroll tax, fringe benefit tax, payment on account or other tax-related items arising out of or in relation to a Participant’s participation in the Plan, including, but not limited to, the exercise of a Purchase Right and the receipt of shares of Common Stock or the sale or other disposition of shares of Common Stock acquired under the Plan.

(jj) “**Trading Day**” means any day on which the exchange(s) or market(s) on which shares of Common Stock are listed, including but not limited to the New York Stock Exchange, Nasdaq Global Select Market, the Nasdaq Global Market, the Nasdaq Capital Market or any successors thereto, is open for trading.