



Christina T. Roupas
+1 312 881 6670
croupas@cooley.com

Via EDGAR

October 19, 2022

U.S. Securities and Exchange Commission
Division of Corporation Finance
Office of Technology
100 F Street, N.E.
Washington, D.C. 20549

Attention: Jan Woo, Legal Branch Chief
Kyle Wiley, Staff Attorney
Robert Littlepage, Accounting Branch Chief
Lisa Etheredge, Senior Staff Accountant

**Re: Tempus Labs, Inc.
Draft Registration Statement on Form S-1
Submitted April 27, 2022
CIK: 0001717115**

Ladies and Gentlemen:

On behalf of Tempus Labs, Inc. (the "**Company**"), we are providing this letter in response to comments (the "**Comments**") received from the staff of the U.S. Securities and Exchange Commission's Division of Corporation Finance (the "**Staff**") by letter dated August 3, 2022 with respect to the Company's Amendment No. 3 to the Draft Registration Statement on Form S-1, as confidentially submitted to the Staff on April 27, 2022 (as amended from time to time, the "**Draft Registration Statement**"), and the Company's Response Letter dated July 22, 2022. The Company is concurrently and confidentially submitting Amendment No. 4 to the Draft Registration Statement on Form S-1 (the "**Amended Draft Registration Statement**"), which includes changes that reflect the responses to the Comments as well as certain other updates to the Draft Registration Statement.

Set forth below are the Company's responses to the Comments. The numbering of the paragraphs below corresponds to the numbering of the Comments, which for your convenience we have incorporated into this response letter in italics. Page references in the text of the Company's responses correspond to the page numbers of the Amended Draft Registration Statement. Capitalized terms used in this letter but not otherwise defined in this letter have the meanings assigned to them in the Amended Draft Registration Statement.

Dilution, page 102

- 1. We note in your response to prior comment 1 that historical net tangible book value "represents the amount of our total tangible assets less our total liabilities and the carrying value of our redeemable convertible preferred stock." Please provide us your calculation, referencing the amounts reported on your balance sheet, to support a historical net tangible book value of \$33.7 million as of December 31, 2021.*

Cooley LLP 110 N. Wacker Drive Suite 4200 Chicago, IL 60606-1511
t: (312) 881-6500- f: (312) 881-6598 cooley.com

The Company respectfully advises the Staff that its historical net tangible book value (deficit) has been revised on page 102 of the Amended Draft Registration Statement to include redeemable convertible preferred stock, and as of December 31, 2021, was calculated as follows:

<i>(in thousands)</i>	
Total assets - historical	\$ 531,354
Total liabilities - historical	(440,565)
Redeemable convertible preferred stock	(898,291)
Net book value	(807,502)
Less: intangible assets	(53,271)
Less: deferred offering costs	(3,859)
Net tangible book value	(864,632)
Historical shares outstanding	62,980
Net tangible historical book value/share	\$ (13.73)

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 167

2. *You state that through December 2021, the 12-month retention rate for oncologists ordering more than 5 tests were 92%. Disclose the number of oncologists used to measure the retention rate. Discuss how the retention rate was measured and the time period. To the extent material, disclose the total number of customers for all periods presented in each of your three product lines.*

To calculate the 12-month retention rate for physicians, the Company tracks the number of ordering physicians of oncology tests and their ordering history. The Company divides these physicians into two categories: "active physicians" are those that have placed an order in the last 360 days, and "lost physicians" are those that have previously ordered a test (at any time) but have not done so in the last 360 days. More than 5,000 physicians have ordered a Tempus test at some point in time. As of December 31, 2021, the number of active physicians that had ordered more than 5 tests in the last 360 days was 2,509, and the number of physicians that had previously ordered more than 5 tests but had not ordered one in the last 360 days was 205. The 92% 12-month retention rate is calculated by dividing active physicians who have ordered more than 5 tests in the last 360 days (2,509) by total active and lost physicians who had ordered more than 5 tests (2,509 + 205). This metric only applies to the Genomics product line.

In response to the Staff's Comment, the Company has revised the disclosures on pages 167 and 170 of the Amended Draft Registration Statement.

Comparison of the Years Ended December 31, 2020 and 2021

Revenue, page 115

3. *We note your response to prior comment 3. Please revise to also address the reasons for changes in cost of revenues, genomics. For example, it is unclear what caused the \$15.6 million increase in material and service costs and the inventory write-downs of \$1.8 million. Similarly, it is unclear why you experienced a \$10.8 million decrease in cost of revenues, genomics associated with COVID-19 PCR testing despite a \$5 million increase in PCR testing revenues over the same period.*

Cooley LLP 110 N. Wacker Drive Suite 4200 Chicago, IL 60606-1511
t: (312) 881-6500- f: (312) 881-6598 cooley.com

The Company respectfully advises the Staff that its COVID-19 PCR testing business has continued to decrease into 2022 as a result of successful vaccination efforts. For the six months ended June 30, 2022, revenue from COVID-19 testing represented 9.6% of consolidated revenues, as compared to 54.2% of consolidated revenue for the six months ended June 30, 2021. The Company expects that revenue from COVID-19 testing will continue to decline in subsequent periods as the disease becomes endemic.

In response to the Staff's comment, the Company has revised the disclosures on pages 115 and 116 of the Amended Draft Registration Statement.

Management's Discussion and Analysis
Data and Other, page 116

4. *We note your response to prior comment 4. Please revise to provide greater context to investors by quantifying the increase in the number of new customers that adopted your data and other products during 2021 as compared to 2020.*

In response to the Staff's comment, the Company has revised the disclosure on page 116 of the Amended Draft Registration Statement.

Consolidated Financial Statements
9. Stock-Based Compensation, page F-29

5. *To the extent there have been any recent developments, please provide us with an update to your October 28, 2021 response to comment 31 regarding stock based compensation awards.*

The Company respectfully advises the Staff that it has granted restricted stock units quarterly to new hires and to existing employees as part of the 2021 annual performance review. Consistent with the July 2021 grants detailed in the Company's October 28, 2021 response to comment 31, the Company used a probability-weighted expected return method approach to value the awards at each quarter end. Beginning in the second quarter of 2022, the Company changed its valuation methodology back to a market approach.

* * *

Please contact me at (312) 881-6670 with any questions or further comments regarding our responses to the Staff's Comments.

Cooley LLP 110 N. Wacker Drive Suite 4200 Chicago, IL 60606-1511
t: (312) 881-6500- f: (312) 881-6598 cooley.com

October 19, 2022

Page Four

Sincerely,

/s/ Christina T. Roupas

Christina T. Roupas

cc: Eric Lefkofsky, *Tempus Labs, Inc.*
Jim Rogers, *Tempus Labs, Inc.*
Erik Phelps, *Tempus Labs, Inc.*
Ryan Bartolucci, *Tempus Labs, Inc.*
Eric Jensen, *Cooley LLP*
Courtney Tygesson, *Cooley LLP*

Cooley LLP 110 N. Wacker Drive Suite 4200 Chicago, IL 60606-1511
t: (312) 881-6500- f: (312) 881-6598 cooley.com