TEMPUS

Tempus One Introduces New GenAI Capabilities to Query Millions of Unstructured Documents for Research and Clinical Care

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CHICAGO--(BUSINESS WIRE)--Jan. 14, 2025-- Tempus AI, Inc. (NASDAQ: TEM), a technology company leading the adoption of AI to advance precision medicine and patient care, today introduced a suite of new, transformative capabilities available in Tempus One, the company's generative AI assistant. Tempus One, which initially launched in 2023, provides both physicians and researchers AI-enabled services that leverage generative AI to propel privacy-enabled, data-driven decision support in the clinic while simultaneously advancing research to bring new drugs to market. This latest iteration now applies Tempus' proprietary Large Language Model (LLM) Agent Infrastructure (Agent Builder), which adapts LLMs to work on unstructured, multimodal healthcare data to improve clinical care and research.

Tempus is building and deploying a series of AI models on top of its library of real-world, multimodal data that enables both physicians to access the data needed to make the most informed treatment decisions for their patients, as well as researchers to more easily uncover rapid insights for the development of the next generation of precision oncology treatments. The latest iteration of Tempus One includes four new breakthrough generative AI-powered capabilities that leverage LLMs to derive insights from unstructured data.

- **Patient Query**: Identifying and enrolling patients into clinical trials continues to be one of healthcare's biggest challenges. Tempus offers a suite of tools that support providers and study sponsors to get the right patient on the right experimental treatment at the right time. As part of its clinical trial matching program, TIME, Tempus is now deploying an internal agent that allows the company to analyze providers' structured and unstructured data to create a queue of patients that may be eligible for a specific trial. This agent can tap into unstructured data, such as progress notes, pathology reports, and imaging scans, which are important to understanding if a patient may be eligible for a trial. Tempus then sends the provider a notification for each patient that may be a match for that trial.

- **Patient Timeline**: Every patient's journey is unique. Throughout their care, a cancer patient typically amasses hundreds of different records that document diagnostic results, treatment plans, physician notes, scans, and more. This makes it very difficult for physicians to have a comprehensive view of each patient's journey. Tempus One offers a solution, which leverages generative AI to seamlessly weave together those documents and create a cohesive timeline for a specific patient. Using an LLM-based data science model, Tempus One turns digital health records into a structured timeline of clinical events, featuring diagnostic results, changes in treatment, and more. A separate agent is then applied to query structured data to answer explicit questions posed by a physician.

- **Prior Authorization**: Drafting and submitting prior authorization forms can require hours of administrative work for care teams, an arduous but necessary process to ensure that patients receive coverage for specific treatments throughout their care journey. Now, a new agent inside of Hub, Tempus' provider platform, helps clinicians gather pertinent guidelines, drug labels, payer policy, and other relevant patient information, and outputs support documents tailored to each patient's case for further use by their care team.

- **Data Exploration**: For the first time, researchers are able to ask questions and receive answers that are derived from both Tempus' de-identified curated datasets and unstructured data housed within Lens, the company's data analytics platform. Typically, real-world research has been hindered by manual chart reviews and data abstraction, but Tempus One can process millions of de-identified documents and provide initial answers in a fraction of the time. These datasets can include physician progress notes or medical images like pathology slides, providing researchers access to data that is not typically available, but critical when investigating new targets and patient populations. In particular, this new functionality expands

the ability to investigate adverse events and reported symptoms, an increasingly popular query for many Tempus biopharma research customers.

"When we launched Tempus One a few years ago, our hope was that it would grow and scale in intelligence for the benefit of clinicians, researchers, and patients. We've been blown away by the evolution of this product which is designed to continually evolve so that we can easily deploy new generative AI solutions to our customers to address their evolving needs," said Eric Lekfofsky, Founder and CEO of Tempus. "For example, LLMs now give us the opportunity to derive new insights from unstructured data, which has some of the richest patient data and until now, was extremely difficult to access at scale."

"I think the platform will be super impactful for clinicians. This will be the future for clinicians. There are a lot of platforms for AI associated charts, but those are way more limited and don't really help generate data with a full report," said Dani Castillo, MD, Assistant Clinical Professor, Department of Medical Oncology & Therapeutics Research at City of Hope.

For an in-depth look into these newest features, Tempus' approach to model training and validation, and specific use cases and demos, read our most recent blog post here.

Agents are for use subject to their written instructions. To learn more about Tempus One, visit http://tempus.com/one/.

About Tempus

Tempus is a technology company advancing precision medicine through the practical application of artificial intelligence in healthcare. With one of the world's largest libraries of multimodal data, and an operating system to make that data accessible and useful, Tempus provides AI-enabled precision medicine solutions to physicians to deliver personalized patient care and in parallel facilitates discovery, development and delivery of optimal therapeutics. The goal is for each patient to benefit from the treatment of others who came before by providing physicians with tools that learn as the company gathers more data. For more information, visit tempus.com.

Forward Looking Statements

This press release contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended, about Tempus and Tempus' industry that involve substantial risks and uncertainties. All statements other than statements of historical facts contained in this press release are forward-looking statements, including, but not limited to, statements regarding the expected outcomes and benefits of Tempus One and its capabilities for customers. In some cases, you can identify forward-looking statements because they contain words such as "anticipate," "believe," "contemplate," "continue," "could," "estimate," "expect," "going to," "intend," "may," "plan," "potential," "predict," "project," "should," "target," "will," or "would" or the negative of these words or other similar terms or expressions. Tempus cautions you that the foregoing may not include all of the forward-looking statements made in this press release.

You should not rely on forward-looking statements as predictions of future events. Tempus has based the forward-looking statements contained in this press release primarily on its current expectations and projections about future events and trends that it believes may affect Tempus' business, financial condition, results of operations and prospects. These forward-looking statements are subject to risks and uncertainties related to: Tempus' financial performance; the ability to attract and retain customers and partners; managing Tempus' growth and future expenses; competition and new market entrants; compliance with new laws, regulations and executive actions, including any evolving regulations in the artificial intelligence space; the ability to maintain, protect and enhance Tempus' intellectual property; the ability to attract and retain qualified team members and key personnel; the ability to repay or refinance outstanding debt, or to access additional financing; future acquisitions, divestitures or investments; the potential adverse impact of climate change, natural disasters, health epidemics, macroeconomic conditions, and war or other armed conflict, as well as risks, uncertainties, and other factors described in the section titled "Risk Factors" in Tempus' Quarterly Report on Form 10-Q for the quarter ended September 30, 2024 filed with the Securities and Exchange Commission ("SEC") as well as in other filings Tempus may make with the SEC in the future. In addition, any forward-looking statements contained in this press release are based on assumptions that Tempus believes to be reasonable as of this date. Tempus undertakes no obligation to update any forward-looking statements to reflect events or circumstances after the date of this press release or to reflect new information or the occurrence of unanticipated events, except as required by law.

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Erin Carron
media@tempus.com

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