Tempus Announces Six Abstracts Accepted for Presentation at the Society for Immunotherapy of Cancer Annual Meeting 2025

November 5, 2025

CHICAGO--(BUSINESS WIRE)--Nov. 5, 2025-- Tempus AI, Inc. (NASDAQ: TEM), a technology company leading the adoption of AI to advance precision medicine, today announced that six abstracts have been accepted for presentation at the Society for Immunotherapy of Cancer (SITC) Annual Meeting 2025. The meeting is taking place November 5 - 9 at the Gaylord National Convention Center in National Harbor, Maryland.

“We’re excited to join the oncology community at this year’s meeting and highlight our latest research and progress in advancing the immuno-oncology field,” said Ezra Cohen, MD, Chief Medical Officer of Oncology at Tempus. “Our latest findings demonstrate the potential of integrated, data-driven approaches to refine biomarkers, improve prediction of immunotherapy response, and inform the development of next-generation tools for patient stratification.”

This year, Tempus will highlight its latest scientific and clinical research findings via six poster presentations.

- **A novel multi-omic algorithm to predict real-world outcomes among patients with rare, advanced, solid cancers treated with off-label immune checkpoint inhibitors**
  - **Date/Time:** Friday, November 7, 5:10–6:35 p.m. ET
  - **Location:** Exhibit Halls AB
  - **Presentation Number:** 157
  - **Summary:** This study investigates the utility of the Immune Profile Score (IPS) as a molecular signature to predict the effectiveness of immune checkpoint inhibitor (ICI) therapy in rare, advanced solid cancers. Given the clinical unmet need for rare, heterogeneous cancers, the study evaluated 90 eligible patients from Tempus’ de-identified real-world database who had a rare, advanced solid cancer diagnosis and received off-label ICI treatment, excluding those with high TMB or MSI. Patients were further categorized as IPS-high or IPS-low. The findings demonstrated that IPS-high patients experienced significantly longer overall survival compared to those categorized as IPS-low. Importantly, IPS maintained its prognostic significance across all patient subgroups and clinically relevant confounders. These results support IPS as a pan-cancer biomarker capable of accurately stratifying ICI treatment outcomes and potentially supporting the label expansion of ICIs to various rare cancer types.

- **MAIT cell abundance within tumors are associated with key clinical characteristics across solid tumors**
  - **Date/Time:** Friday, November 7, 5:10–6:35 p.m. ET
  - **Location:** Exhibit Halls AB
  - **Presentation Number:** 133
  - **Summary:** An analysis of 190,189 patients, utilizing T-cell receptor (TCR) sequencing data from Tempus’ de-identified real-world database, investigated the prevalence and distribution of mucosal-associated invariant T (MAIT) cells across numerous solid tumor types. The study determined MAIT cell abundance using TCRα chains, with comparisons adjusting for overall T cell infiltration or total TCR’s detected where relevant. MAIT cell abundance was highest in tumors of mucosal origin, such as colorectal and gastroesophageal cancers, and higher MAIT cell levels were statistically significantly in younger patients, males, and non-smokers. Furthermore, the prevalence of MAIT cells showed associations with important clinical and molecular factors, including reduced MAIT cell abundance in PD-L1 high (TPS ≥50%; pan-cancer), microsatellite instability (MSI)-high (pan-cancer and colorectal cancer), and microbial factors such as lower bacterial load (pan-cancer). These findings suggest that MAIT cell

prevalence may have important clinical implications and may serve as a promising biomarker and immunotherapy target.

- **TargetR: Automated multi-omics report framework for target characterization and validation of immunotherapy and targeted therapy candidates across cancers**
  - **Date/Time:** Friday, November 7; 5:10–6:35 p.m. ET
  - **Location:** Exhibit Halls AB
  - **Presentation Number:** 1115
  - **Summary:** A detailed computational framework, TargetR, was developed by integrating public and real-world multi-omics datasets to accelerate the discovery and validation of immunotherapy targets. This approach unified pharmacologic, genomic, transcriptomic, and proteomic data, utilizing advanced analytics to assess target potential based on criteria such as normal tissue expression, mutational load, and copy number variation (CNV) correlation with expression. Validation of findings can then be performed using Tempus' de-identified real-world database, which provides clinical features and outcome data. The framework generated an automated, user-friendly report with actionable insights, enabling the identification and prioritization of targets for treatments like bispecific T-cell engagers and CAR-T therapies, thereby supporting the development of next-generation immunotherapies.

- **A multi-omic immune profile score (IPS) stratifies real-world outcomes of microsatellite stable (MSS) advanced colorectal cancer patients treated with immune checkpoint inhibitors**
  - **Date/Time:** Saturday, November 8; 5:10–6:35 p.m. ET
  - **Location:** Exhibit Halls AB
  - **Presentation Number:** 134
  - **Summary:** This exploratory study investigated the potential of Tempus' Immune Profile Score (IPS), a DNA- and RNA-based molecular signature, to act as a predictive biomarker for immune checkpoint inhibitor (ICI) benefit in patients with microsatellite stable (MSS) advanced colorectal cancer (CRC). Tempus' de-identified real-world database was utilized to identify 46 eligible MSS CRC patients who received an ICI alone or ICI-containing regimen in the third line (3L) or beyond. Using pre-ICI tissue, patients were stratified into IPS-High versus IPS-Low groups. The results demonstrated a clinically meaningful improvement in real-world overall survival (rwOS) for the IPS-High group compared to the IPS-Low group. Furthermore, a comparison of IPS risk stratification on ICI therapy versus prior non-ICI regimen provided additional insight about IPS's utility as an ICI-specific biomarker. This hypothesis-generating data address an unmet need for patients whom an ICI therapy and predictive biomarker are urgently needed.

- **Ultrahigh tumor mutational burden (TMB) is associated with improved survival outcomes in patients (Pts) treated with immune checkpoint inhibitors (ICIs)**
  - **Date/Time:** Saturday, November 8, 2025; 5:10–6:35 p.m. ET
  - **Location:** Exhibit Halls AB
  - **Presentation Number:** 136
  - **Summary:** This research evaluates the prognostic value of defining an "ultrahigh" tumor mutational burden (TMB) threshold (≥40 mutations/MB) compared to the standard 10 mt/MB cutoff for patients receiving immune checkpoint inhibitor (ICI) therapy. Using Tempus Lens, the research team defined a cohort of 17,449 patients with five different cancer types (melanoma, lung, GI, non-melanoma skin, and uterine) from Tempus'

de-identified multimodal database. The analysis sought to compare real-world objective response rates (rwORR) and overall survival (rwOS) across low, high, and ultrahigh TMB groups. The findings indicate that patients in the ultrahigh TMB group experience significantly improved clinical outcomes, including enhanced rwORR and better rwOS. This ultrahigh TMB status is also linked to a distinct tumor microenvironment, specifically showing a higher degree of regulatory T cell and myeloid cell infiltration, suggesting that ultrahigh TMB may serve as a novel marker for predicting ICI responsiveness.

- **Impact of androgen receptor mutations on immune infiltration in castration resistant prostate cancer**
  - **Date/Time:** Saturday, November 8; 5:10–6:35 p.m. ET
  - **Location:** Exhibit Halls AB
  - **Presentation Number:** 140
  - **Summary:** A detailed analysis using Tempus' de-identified real-world database examined the relationship between androgen receptor (AR) alterations and the immune microenvironment in 1,556 patients with castration-resistant prostate cancer (CRPC). The study specifically investigated AR mutations, amplifications, and ARv7 splicing detected via DNA (Tempus xT) and RNA (Tempus xR) sequencing. Over half of the CRPC patients exhibited these AR alterations, which were associated with significantly decreased immune infiltration and reduced expression of key immunotherapy targets like PD−1, PD−L1, and CTLA−4. Regression analysis confirmed this link to decreased immune infiltration was independent of tumor mutational burden (TMB) and tumor purity. These findings suggest that AR mutations contribute to a reduced immune response, potentially serving as a mechanism of resistance to treatment, and underscore the necessity of using AR status to stratify CRPC patients for immunotherapy.

Learn more about Tempus at SITC 2025 here.

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 quality of Tempus' research and publications; the contributions of Tempus' research and findings to the larger scientific community and the use of Tempus' products and services to advance clinical care for patients. 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: the intended use of Tempus' products and services; 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' Annual Report on Form 10-K for the year ended December 31, 2024, filed with the Securities and Exchange Commission ("SEC") on February 24, 2025, 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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