Tempus Announces Ten Abstracts Accepted for Presentation at the 2025 San Antonio Breast Cancer Symposium

December 9, 2025

CHICAGO--(BUSINESS WIRE)--Dec. 9, 2025-- Tempus AI, Inc. (NASDAQ: TEM), a technology company leading the adoption of AI to advance precision medicine, today announced that ten abstracts have been accepted for presentation at the 2025 San Antonio Breast Cancer Symposium (SABCS). The meeting takes place December 9–12 at the Henry B. González Convention Center in San Antonio, Texas.

“This year at SABCS, our research highlights the power of multimodal data to help unravel the complexity of breast cancer,” said Ezra Cohen, MD, Chief Medical Officer of Oncology at Tempus. “By integrating genomic, transcriptomic, and real-world clinical data, we are moving beyond broad disease classifications to uncover specific molecular drivers of progression and resistance. These insights are essential for pinpointing patient populations who may benefit from novel therapies and for optimizing treatment strategies to ultimately improve outcomes for those with advanced disease.”

Tempus will highlight its latest scientific and clinical research findings via ten poster presentations:

- **Integrative Modeling of Multimodal Real-World Data for Improved Risk Stratification of First-Line CDK4/6 Inhibitor Outcomes in Patients with Estrogen Receptor (ER)-Positive/Human Epidermal Growth Factor Receptor 2 (HER2)-Negative Metastatic Breast Cancer**
  - **Date/Time:** Wednesday, December 10, 2025, 12:30 p.m. - 2:30 p.m. CDT
  - **Presentation Number:** PS1-11-08
  - **Summary:** We developed a machine learning model that used clinical, genomic, and transcriptomic features to stratify patients with ER-positive/HER2-negative metastatic breast cancer, based on response to first-line CDK4/6 inhibitor plus endocrine treatment and identify predictors of response. This study demonstrated that multimodal real-world data collected during routine care can provide valuable insights into the biology of response to CDK4/6 inhibitors in patients with metastatic breast cancer and help improve patient stratification.
- **Distinct Transcriptional and Immunosuppressive Microenvironment Signatures in PIK3CA- and ESR1-Mutant Hormone Receptor Positive (HR+)/HER2- Metastatic Breast Cancer (MBC)**
  - **Date/Time:** Wednesday, December 10, 2025, 12:30 p.m. - 2:30 p.m. CDT
  - **Presentation Number:** PS1-11-22
  - **Summary:** This study compared transcriptomic and immune profiles in HR+/HER2- metastatic breast cancer across wild-type, PIK3CA-mutant, ESR1-mutant, and co-mutant groups. SFRP2 downregulation was specific to ESR1-mutant tumors, while SCGB2A2 was robustly upregulated in PIK3CA-mutant and co-mutant tumors, suggesting its potential as a diagnostic and therapeutic target. Immune analysis revealed increased M2 macrophages and regulatory T cells in PIK3CA-mutant and co-mutant tumors, with the most pronounced immunosuppressive microenvironment in PIK3CA-mutant cases.
- **Clinical and Molecular Landscape of ESR1 and PIK3CA Co-Mutated Hormone Receptor–Positive Metastatic Breast Cancer (HR+ MBC): Insights from 8,626 Patients Including Polyclonality and TP53 Alterations**
  - **Date/Time:** Wednesday, December 10, 2025, 12:30 p.m. - 2:30 p.m. CDT
  - **Presentation Number:** PS1-11-16
  - **Summary:** Distinct mutation groups—no-MUT, PIK3CA-MUT, ESR1-MUT, and co-MUT (PIK3CA + ESR1)—exhibited unique clinical and genomic features; co-MUT was linked to more bone metastases, elevated tumor mutational burden, increased polyclonality,

and shorter real-world overall survival. Notably, the frequency of ESR1 and co-mutations was higher in patients who underwent late molecular testing, indicating these alterations often emerge after extended endocrine therapy and highlighting the importance of timing in molecular assessment for guiding treatment strategies.

- **Clinicogenomic and Immune Profiles of Male Breast Cancer by Race: Insights from a Large Real-World Cohort**
  - **Date/Time:** Wednesday, December 10, 2025, 5:00 p.m. - 6:30 p.m. CDT
  - **Presentation Number:** PS2-06-28
  - **Summary:** Real-world analysis of male breast cancer revealed broadly similar clinicogenomic profiles between Black and White patients, with HR+/HER2-negative and luminal subtypes predominating. Notable immune microenvironment differences—lower M2 macrophage infiltration and higher PD-L1 negativity in Black patients—may impact immunotherapy response and warrant further research into racial variation.
- **Cathepsin Protease Expression and Therapeutic Outcomes to Trastuzumab Deruxtecan (T-DXd) in Metastatic Breast Cancer**
  - **Date/Time:** Wednesday, December 10, 2025, 5:00 p.m. - 6:30 p.m. CDT
  - **Presentation Number:** PS2-08-18
  - **Summary:** This study characterized pre-treatment expression of cathepsin proteases prior to T-DXd (cleavable linker) vs. T-DM1 (non-cleavable linker) treatment to understand their impact on clinical outcomes in metastatic breast cancer using the Tempus real-world database. This study demonstrated that among T-DXd treated patients, high cathepsin B and L protease expression was associated with improved outcomes in patients with HR+/HER2- disease, whereas in HER2+ patients, high expression of these proteases was associated with worse survival. In contrast, in the T-DM1 cohort there were no significant associations between protease expression and OS in the overall cohort as well as in the HER2+ cohort. This highlights the potential role of proteases as biomarkers of response to T-DXd in HER2 low/ultralow, but not HER2+ metastatic breast cancer.
- **Treatment Sequencing in HR+ HER2- Metastatic Breast Cancer and Associated Real World Outcomes**
  - **Date/Time:** Wednesday, December 10, 2025, 5:00 p.m. - 6:30 p.m. CDT
  - **Presentation Number:** PS2-04-11
  - **Summary:** This study investigates the impact of first-line and second-line therapy selections on real-world progression-free survival (rwPFS) and real-world overall survival (rwOS) in patients with HR+ HER2- mBC. CDK4/6i significantly outperforms taxane in first-line. Patients who received second-line CDK4/6i following first-line taxane had longer second-line rwPFS than those who received CDK4/6i first-line treatment. The findings suggest that taxane may cause sensitization to CDK4/6i, potentially conferring better survival outcomes in a subset of patients where first-line taxane is advised, or a potential advantage to chemo before CDK4/6i re-challenge.
- **Real-World Second-Line Treatment Use and Clinical Outcomes in Patients With HR-Positive/HER2-Negative Metastatic Breast Cancer and an ESR1 Mutation**
  - **Date/Time:** Wednesday, December 10, 2025, 5:00 p.m. - 6:30 p.m. CDT
  - **Presentation Number:** PS2-06-18
  - **Summary:** The study objective was to characterize real-world second-line treatment use and clinical outcomes (rwPFS and rwOS) in a metastatic breast cancer patient population with positive ESR1m test after first-line treatment with AI+CDK4/6i. Findings show that this cohort describes a complex subgroup of patients to treat, with rwPFS outcomes highlighting the need for more effective strategies that address resistance to AI+CDK4/6i and improve patient outcomes. Results from Flatiron Health EHR and

Tempus both indicated consistent findings.

- **Comparative Analysis of the Tumor Immune Microenvironment (TIME) and Primary and Metastatic Tissue in HR+/HER2- and Triple-Negative Breast Cancer (TNBC)**
  - **Date/Time:** Thursday, December 11, 2025, 12:30 p.m. - 2:00 p.m. CDT
  - **Presentation Number:** PS3-12-27
  - **Summary:** Tempus Lens was leveraged to assess the Tumor Immune Microenvironment (TIME) across metastatic sites of disease in HR+/HER2- breast cancer compared to TNBC, finding significant differences by site in both subtypes, with HR+/HER2- cancer being less immunogenic overall. Lung, pleura, and peritoneum metastases, along with breast and lymph nodes, showed the highest CD8+ T cell proportions, suggesting a subset of HR+/HER2- patients with these sites may potentially respond to Immune Checkpoint Inhibitor (ICI) therapy. This high variability of TIME profiles across metastatic sites warrants further study in prospective trials to guide patient selection for ICI.
- **The Molecular and Immune Landscape of HER2 Positive Breast Cancer**
  - **Date/Time:** Thursday, December 11, 2025, 5:00 p.m. - 6:30 p.m. CDT
  - **Presentation Number:** PS4-05-21
  - **Summary:** Tempus Lens was employed to evaluate the tumor immune microenvironment of HER2+ breast cancer, assessing immune cell infiltration, TMB, PD-L1 status, and HLA allele prevalence, to uncover biomarkers for treatment guidance. A notable percentage of patients with localized and de novo metastatic disease displayed TMB high status and/or PD-L1 positivity. Additionally, TMB-high and PD-L1 positive patients with de novo metastatic disease treated with first-line chemotherapy or anti-HER2 therapy had significantly worse real-world overall survival (rwOS), suggesting a potential therapeutic benefit of incorporating immunotherapy into the treatment paradigm, in both localized and metastatic disease settings. Furthermore, observed ethnic HLA polymorphisms in the cohort may contribute to differences in outcomes and could potentially guide the development of population-specific immunotherapeutic strategies.
- **Real-World Data (RWD) Outcome Analysis of ESR1 Mutation Emergence in HR+/HER2- Metastatic Breast Cancer Through the Continuum of Standard of Care Hormonal Therapy**
  - **Date/Time:** Friday, December 12, 2025, 12:30 p.m. - 2:00 p.m. CDT
  - **Presentation Number:** PS5-05-02
  - **Summary:** This large multimodal RWD outcome analysis from longitudinal molecular surveillance testing (xF) in HR+/HER2- mBC pts treated with AI+CDK4/6i sheds light on the continuum of ESR1m emergence and patient outcomes from first-line and beyond outside of clinical trial data. Analyses show higher ESR1m incidence is associated with reduced survival regardless of line of therapy.

Learn more about Tempus at SABCS 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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