

# TEMPUS

## Tempus Announces Six Posters Accepted for Presentation at ISPOR 2025

May 13, 2025

CHICAGO--(BUSINESS WIRE)--May 13, 2025-- Tempus AI, Inc. (NASDAQ: TEM), a technology company leading the adoption of AI to advance precision medicine and patient care, has announced the presentation of six posters, including one oral presentation, at the 2025 annual meeting of the Professional Society for Health Economics and Outcomes Research (ISPOR), taking place May 13-16 in Montreal, Canada. Tempus researchers are showcasing scientific and clinical studies highlighting the impact of AI and real-world data on health economics and outcomes research.

"The research we're presenting at ISPOR 2025 underscores the powerful potential of integrating clinical, molecular, and claims data to unlock actionable insights that drive more personalized and effective cancer care," said Emilie Scherrer, Senior Director and Head of Outcomes Research, at Tempus. "At Tempus, we share ISPOR's deep focus on empowering providers and health systems with the real-world data they need to optimize treatment strategies and improve outcomes for their patients."

Research highlights include:

- **Oral Presentation:** [Oncology Trial Emulation Using Real-World Electronic Health Record Data: Results of the Coalition to Advance Real-World Evidence through Randomized Controlled Trial Emulation \(CARE\) Initiative](#)
  - **Date/Time:** Thursday, May 15; 10:15 AM - 11:15 AM ET
  - **Overview:** The Coalition to Advance Real-World Evidence through Randomized Controlled Trial (RCT) Emulation (CARE) Initiative seeks to advance understanding of when real-world data (RWD) can generate valid treatment effectiveness estimates by emulating RCTs. This study presents findings from three oncology emulations. The KEYNOTE-189 (metastatic NSCLC) and PALOMA-2 (advanced breast cancer) trials were emulated using electronic health record datasets. Trial entry criteria were applied, and treatment status was based on first-line medications. Inverse probability of treatment weighting controlled for baseline confounding, and Kaplan-Meier and Cox models estimated primary outcomes. In the KEYNOTE-189 emulation, the real-world progression-free survival (rwPFS) hazard ratio (HR) in one dataset was similar to the RCT finding, while the other was closer to the null. PALOMA-2's rwPFS HR was also closer to the null. Real-world overall survival estimates in KEYNOTE-189 also varied across datasets. The researchers conclude that RWD oncology emulation conclusions depend on dataset features, route of administration, and real-world follow-up characteristics.
- **Poster Presentation:** [Impact of Adverse Event Definitions on Real-World Detection of Immune-Related Adverse Events](#)
  - **Date/Time:** Thursday, May 15; 10:30 AM - 1:30 PM ET
  - **Location:** Exhibit Hall 220B-E, Poster #6044
  - **Overview:** Researchers investigated the impact of varying definitions on the identification of immune-related adverse events (irAEs) in real-world data (RWD) from non-small cell lung cancer (NSCLC) patients treated with immune checkpoint blockade (ICB). The research utilized Tempus clinico-genomic data linked to Komodo Health's claims to analyze irAEs within one year of ICB treatment in patients with stage 3C+ NSCLC. Three peer-reviewed irAE definitions—differing in included irAEs, ICD-10 codes, and pre-treatment washout periods—were applied to the cohort of 4,831 patients. The overall prevalence of irAEs varied significantly across definitions: 41.0% (n=1,981) for Study A (9 irAEs), 75.4% (n=3,849) for Study B (10 irAEs), and 5.4% (n=264) for Study C (3 irAEs). This study demonstrates that irAE identification in RWD varies based on the definitions used, which can affect post-market surveillance, clinical practice

guidelines, and patient care. The authors emphasize the need for researchers to accurately communicate the definitions used and conduct sensitivity analyses.

- **Poster Presentation: [Comparison of Demographics and Clinical Characteristics using Real World Data from Tempus Multimodal Database and SEER Cancer Registry Across 17 Solid Cancer Cohorts](#)**
  - **Date/Time:** Thursday, May 15; 4:00 PM - 7:00 PM ET
  - **Location:** Exhibit Hall 220B-E, Poster #6019
  - **Overview:** This study benchmarked the Tempus multimodal database — a real-world data source with clinical and biomarker data from cancer patients — against the SEER cancer registry. Analyzing data from 63,520 patients with solid tumors diagnosed between 2016 and 2021, researchers compared baseline demographic, clinical, and treatment characteristics against the SEER database. The proportion of cancer types of new cancer cases were similar among the two databases. The Tempus database showed a larger representation of patients from the Midwest, whereas the SEER database had a heavy representation from the West. Tempus patients were younger on average but had more advanced cancer staging. Additionally, the Tempus database had more racial diversity based on self-reported race and more complete treatment data. In conclusion, the Tempus and SEER databases show general comparability in demographics and clinical characteristics, but the Tempus database provides greater treatment data granularity and captures more late-stage disease, attributable to sequencing patterns in clinical care.
- **Poster Presentation: [Assessing the Completeness of Oncology Treatment Data from Administrative Claims: A Benchmarking Study Against Abstracted EHRs Using Patient-Level Linkages](#)**
  - **Date/Time:** Thursday, May 15; 4:00 PM - 7:00 PM ET
  - **Location:** Exhibit Hall 220B-E, Poster #6041
  - **Overview:** This study benchmarked oncology treatment data from administrative claims against abstracted electronic health records (EHR) for 6,487 stage 4 lung adenocarcinoma patients diagnosed between 2020 and 2023. Claims data (open and closed) were linked using de-identified patient tokens, with EHR data considered the ground truth. Sensitivities and positive predictive values (PPVs) were calculated for 13 infusional and 3 oral medications. Closed claims showed greater sensitivities (50.0-95.3%) than open claims (14.3-54.8%), with infusions having higher sensitivities than orals. PPVs were high for both infusions (closed: 79.1-98.3%; open: 61.5-99.1%) and orals (closed: 84.5-94.2%; open: 91.8-96.8%). Exact matches for abstracted infusion start dates in claims ranged from 45.5-82.5% for closed claims, while 27.6-65.9% of oral start dates matched within 7 days. The team concludes that while EHR remains the gold standard, individual claims may be sufficient for identifying patients receiving specific treatments, and closed claims may be suitable for constructing comprehensive treatment journeys.
- **Poster Presentation: [Impact of NGS Testing Timing on Treatment Patterns and Clinical Outcomes in Colorectal Cancer](#)**
  - **Date/Time:** Thursday, May 15; 4:00 PM - 7:00 PM ET
  - **Location:** Exhibit Hall 220B-E, Poster #6013
  - **Overview:** Researchers evaluated the impact of next-generation sequencing (NGS) timing on real-world overall survival (rWOS) in 2,293 colorectal cancer (CRC) patients using the Tempus real-world multimodal database. The median age at diagnosis was

58.4 years, with most patients having stage 3 (23%) or stage 4 (68%) disease and receiving first-line (1L) chemotherapy without NGS-informed therapy. Time from biopsy to NGS test order was analyzed, revealing a notable delay in ordering NGS tests post-biopsy. A random forest classifier identified the timeline from biopsy to NGS results receipt as key in determining 1L treatment. Notably, stage 4 patients receiving NGS results within approximately two months of biopsy had a significant survival advantage. The study demonstrates that NGS testing may be associated with increased rWOS in CRC, highlighting the importance of timely NGS for guiding treatment decisions and improving outcomes.

- **Poster Presentation: [Integrating Next Generation Sequencing, EHR, and Claims Data to Extend Follow-Up in a Real-World Advanced Lung Adenocarcinoma Biomarker-Treatment Landscape](#)**
  - **Date/Time:** Friday, May 16; 9:00 AM - 11:30 AM ET
  - **Location:** Exhibit Hall 220B-E, Poster #6046
  - **Overview:** The research team explored the use of closed claims data to enhance electronic health record (EHR)-derived treatment histories for stage 4 lung adenocarcinoma patients with comprehensive genomic profiling (CGP) and a diagnosis between 2020 and 2023. By linking closed claims data to EHRs, researchers extended abstracted lines of therapy (LOTs), defining new LOTs based on treatment gaps, persistent treatments, and follow-up duration. Integrating claims data increased the number of patients in LOT1, LOT2, and LOT3 and extended LOTs previously lost to follow-up. The integrated LOTs reflected NCCN guidelines, with EGFR inhibitors frequently used in EGFR-mutated patients and immunotherapy and KRAS inhibitors used in KRAS p.G12C patients. The study concludes that using closed claims to extend EHR-abstracted treatment data is valuable for real-world treatment pattern and outcome analyses.

#### 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](https://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' Quarterly Report on Form 10-Q for the fiscal quarter ending February 24, 2025 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.

View source version on [businesswire.com](https://www.businesswire.com/news/home/20250513434336/en/): <https://www.businesswire.com/news/home/20250513434336/en/>

Hanah Heintzeman

[Hahah.heintzeman@tempus.com](mailto:Hahah.heintzeman@tempus.com)

Source: Tempus AI, Inc.