

"TEMPUS



This prospectus supplement updates, amends and supplements the prospectus dated March 7, 2025 (the “Prospectus”), which forms a part of our Registration Statement on Form S-1 (Registration No. 333-285186). Capitalized terms used in this prospectus supplement and not otherwise defined herein have the meanings specified in the Prospectus.

This prospectus supplement is being filed to update, amend and supplement the information included in the Prospectus with the information contained in our Current Report on Form 8-K filed with the Securities and Exchange Commission on April 23, 2025, which is set forth below.

This prospectus supplement is not complete without the Prospectus. This prospectus supplement should be read in conjunction with the Prospectus, which is to be delivered with this prospectus supplement, and is qualified by reference thereto, except to the extent that the information in this prospectus supplement updates or supersedes the information contained in the Prospectus. Please keep this prospectus supplement with your Prospectus for future reference.

Our Class A common stock is listed on the Nasdaq Global Select Market under the symbol “TEM.” On April 22, 2025, the last reported sales price of our Class A common stock was \$[•] per share.

Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties described in the section titled “Risk Factors” section beginning on page 5 of the Prospectus, and under similar headings in any further amendments or supplements to the Prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of the securities to be issued under the Prospectus, or passed upon the accuracy or adequacy of the Prospectus or this prospectus supplement. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is April 23, 2025.

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 8-K

**CURRENT REPORT
Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934**

Date of Report (Date of earliest event reported): April 17, 2025

Tempus AI, Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation)

001-42130
(Commission
File Number)

47-4903308
(IRS Employer
Identification No.)

600 West Chicago Avenue, Suite 510
Chicago, Illinois
(Address of Principal Executive Offices)

60654
(Zip Code)

Registrant's telephone number, including area code: (800) 976-5448

Not Applicable

(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Class A common stock, \$0.0001 par value per share	TEM	The Nasdaq Stock Market LLC

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 8.01 Other Events.

On April 17, 2025 (the “Effective Date”), Tempus AI, Inc. (“Tempus”), AstraZeneca AB (“AstraZeneca”), and Pathos AI, Inc. (“Pathos”) entered into a series of agreements regarding both the development of a foundational large multimodal model in the field of oncology (the “Foundational Model”) and the licensing of certain de-identified multi-modal data to assist in the development of the Foundational Model.

Specifically, on the Effective Date, AstraZeneca and Tempus entered into a Statement of Work under the previously disclosed Master Services Agreement, dated November 17, 2021 (as amended from time to time), between AstraZeneca and Tempus (the Master Services Agreement and the Statement of Work collectively referred to herein as the “MSA”). Pursuant to the MSA, (i) Tempus will ensure that Pathos develops, and Tempus provides AstraZeneca with, a Foundational Model which has been developed, validated, and maintained using de-identified datasets contributed by Tempus, (ii) the Foundational Model will be developed, validated, and maintained by Pathos, (iii) AstraZeneca will pay Tempus a fee of \$35 million, and (iv) a syndicate of investors including AstraZeneca will contemporaneously execute a Stock Purchase Agreement with Pathos (the “SPA”) as part of a preferred stock financing round of sufficient size given the obligations described herein.

Also on the Effective Date, Tempus and Pathos entered into an Order Form under the previously disclosed Amended and Restated Master Agreement, restated effective February 12, 2024, between Tempus and Pathos (the Amended and Restated Master Agreement and the Order Form collectively referred to herein as the “Pathos Master Agreement”). Pursuant to the Pathos Master Agreement, (i) Pathos will be responsible for Foundational Model development activities under the MSA, (ii) Tempus will license Pathos a comprehensive de-identified multi-modal dataset for the sole purpose of assisting in the development and training of the Foundational Model under the MSA, (iii) Pathos will pay Tempus data license fees of \$200 million over a three-year period, including an upfront payment of \$50 million payable on the Effective Date, (iv) Tempus will receive a license to use the Foundational Model upon its completion (with certain field restrictions and the right of sublicense to AstraZeneca), and (v) in consideration of Pathos’ commitments under the Pathos Master Agreement, Tempus will pay Pathos \$35 million. Pathos, in its sole discretion, may pay up to 50% of the data license fees owed to Tempus in shares of Pathos’ Series D Preferred Stock.

Tempus is not a party to the SPA between AstraZeneca and Pathos and makes no representations or warranties about its terms.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Tempus AI, Inc.

Dated: April 23, 2025

By: /s/ James Rogers

James Rogers

Chief Financial Officer