

PROSPECTUS SUPPLEMENT
(To Prospectus dated July 30, 2024)



Tectonic Therapeutic, Inc.

Up to 2,969,583 Shares of Common Stock

This prospectus supplement supplements the prospectus dated July 30, 2024 (the “Prospectus”), which forms a part of our registration statement on Form S-1 (No. 333-280909). This prospectus supplement is being filed to update and supplement the information in the Prospectus with certain information contained in our Current Report on Form 8-K, filed with the Securities and Exchange Commission on January 30, 2025 (the “Current Report”). Accordingly, we have attached the Current Report in relevant part to this prospectus supplement.

The Prospectus and this prospectus supplement relate to the proposed offer and resale or other disposition from time to time by the selling stockholders identified in this prospectus of up to an aggregate of 2,969,583 shares of common stock, par value \$0.0001 per share, of Tectonic Therapeutic, Inc.

Our Common Stock is listed on the Nasdaq Global Market under the ticker symbol “TECX.” On February 11, 2025, the last reported sales price of our Common Stock was \$31.87 per share.

This prospectus supplement should be read in conjunction with the Prospectus, including any amendments or supplements to it, which is to be delivered with this prospectus supplement. This prospectus supplement is qualified by reference to the Prospectus, including any amendments or supplements thereto, except to the extent that the information provided by this prospectus supplement supersedes information contained in the Prospectus.

This prospectus supplement is not complete without, and may not be delivered or used except in conjunction with, the Prospectus, including any amendments or supplements to it.

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” beginning on page 9 of the Prospectus, and under similar headings in any amendments or supplements to the Prospectus.

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

The date of this prospectus supplement is February 12, 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): January 30, 2025

TECTONIC THERAPEUTIC, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation)

001-38537
(Commission
File Number)

81-0710585
(IRS Employer
Identification No.)

490 Arsenal Way, Suite 210
Watertown, MA
(Address of principal executive offices)

02472
(Zip Code)

(339) 666-3320
(Registrant's telephone number, including area code)

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.):

- 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:

<u>Title of each class</u>	<u>Trading Symbol</u>	<u>Name of each exchange on which registered</u>
Common Stock, par value \$0.0001 per share	TECX	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 January 30, 2025, the Company issued a press release titled “Tectonic Therapeutic Announces Positive Interim Data from Phase 1b Trial for TX45 in Patients with Group 2 Pulmonary Hypertension in HFpEF.” A copy of the press release is attached as Exhibit 99.2 to this Current Report on Form 8-K and, other than the quotes contained therein, is incorporated herein by reference.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits

Exhibit No.	Description
99.2	Press Release dated January 30, 2025.
104	Cover Page Interactive Data File (formatted as Inline XBRL).

SIGNATURES

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

Date: January 30, 2025

TECTONIC THERAPEUTIC, INC.

By: /s/ Daniel Lochner

Daniel Lochner

Chief Financial Officer