UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

POST-EFFECTIVE AMENDMENT NO. 1 to FORM S-8 REGISTRATION STATEMENT

UNDER
THE SECURITIES ACT OF 1933

Tectonic Therapeutic, Inc.

(Exact name of registrant as specified in its charter)

Delaware83-0710585(State or other jurisdiction of
incorporation or organization)(I.R.S. Employer
Identification No.)

490 Arsenal Way
Suite 210
Watertown, MA
(Address of Principal Executive Offices)

02472 (Zip Code)

2019 Equity Incentive Plan 2024 Equity Incentive Plan 2024 Employee Stock Purchase Plan (Full titles of the plans)

> Daniel Lochner Chief Financial Officer 490 Arsenal Way Suite 210 Watertown, MA 02472 (339) 666-3320

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Marc A. Recht
Courtney T. Thorne
Katherine Denby
Cooley LLP
500 Boylston Street, 14th Floor
Boston, MA 02116
(617) 937-2300

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

company" in Rule 12b-2	of the Exchange Act.		
Large accelerated filer		Accelerated Filer	
Non-accelerated filer	\boxtimes	Smaller reporting company	\boxtimes
		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 7(a)(2)(B) of the Securities Act. \Box

EXPLANATORY NOTE

This Post-Effective Amendment No. 1 (the "Amendment"), which relates to the Registration Statement filed on Form S-8, File No. 333-281690 (the "Original Registration Statement") filed with the Securities and Exchange Commission on August 21, 2024 by Tectonic Therapeutic, Inc., a Delaware corporation (the "Registrant"), is being filed solely to file a Consent of Ernst & Young LLP, independent registered public accounting firm of AVROBIO, Inc. attached as Exhibit 23.2 hereto. Except as described herein, this Amendment does not update, amend or modify any other information, statement or disclosure contained in the Original Registration Statement, and all other portions of the Original Registration Statement, as previously filed, remain unchanged. No additional securities are to be registered, and registration fees were paid upon filing of the Original Registration Statement.

ITEM 8.	EXHIBITS.
Exhibit <u>Number</u>	Description
4.1+	Fourth Amended and Restated Certificate of Incorporation, as amended through June 20, 2024 (incorporated by reference to Exhibit 3.1 to the Registrant's Quarterly Report on Form 10-Q (File No. 001-38537), filed with the SEC on August 14, 2024).
4.2+	Amended and Restated Bylaws (incorporated by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K (File No. 001-38537), filed with the SEC on June 25, 2018).
5.1+	Opinion of Cooley LLP.
23.1*	Consent of Deloitte & Touche LLP, independent registered public accounting firm of Tectonic Therapeutic, Inc.
23.2*	Consent of Ernst & Young LLP, independent registered public accounting firm of AVROBIO, Inc.
23.3+	Consent of Cooley LLP. Reference is made to Exhibit 5.1.
24.1+	Power of Attorney (included on signature page to the Original Registration Statement).
99.1+	Tectonic Therapeutic, Inc. 2019 Equity Incentive Plan and forms of award agreements thereunder (incorporated by reference to Exhibit 10.42 to the Registrant's Registration Statement on Form S-4, filed with the SEC on February 14, 2024).
99.2+	Tectonic Therapeutic, Inc. 2024 Equity Incentive Plan (incorporated by reference to Exhibit 10.6 to the Registrant's Current Report on Form 8-K (File No. 001-38537), filed with the SEC on June 20, 2024).
99.3+	Forms of Option Grant Notice, Option Agreement and Notice of Exercise under Tectonic Therapeutic, Inc. 2024 Equity Incentive Plan (incorporated by reference to Exhibit 10.7 to the Registrant's Current Report on Form 8-K (File No. 001-38537), filed with the SEC on June 20, 2024).
99.4+	Tectonic Therapeutic, Inc. 2024 Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.8 to the Registrant's Current Report on Form 8-K (File No. 001-38537), filed with the SEC on June 20, 2024).
107+	Filing Fee Table.

Filed herewith Previously filed with the Original Registration Statement.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Post Effective Amendment No. 1 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Watertown, Commonwealth of Massachusetts, on August 27, 2024.

TECTONIC THERAPEUTIC, INC.

By /s/ Daniel Lochner Daniel Lochner

Chief Financial Officer

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement on Form S-8 has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
* Alise Reicin	President, Chief Executive Officer and Director (Principal Executive Officer)	August 27, 2024
/s/ Daniel Lochner Daniel Lochner	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	August 27, 2024
* Terrance McGuire	Director	August 27, 2024
* Stefan Vitorovic	Director	August 27, 2024
* Timothy A. Springer	Director	August 27, 2024
* Praveen Tipirneni	Director	August 27, 2024
* Phillip B. Donenberg	Director	August 27, 2024
*By: /s/ Daniel Lochner Daniel Lochner Attorney-in-Fact		

Attorney-in-Fact

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement on Form S-8/A of our report dated April 12, 2024 relating to the financial statements of Tectonic Therapeutic, Inc. appearing in the Current Report on Form 8-K filed on June 20, 2024 for the year ended December 31, 2023.

/s/ Deloitte & Touche LLP

Boston, Massachusetts August 27, 2024

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in Amendment No. 1 to the Registration Statement (Form S-8 No. 333-281690) pertaining to the 2019 Equity Incentive Plan, 2024 Equity Incentive Plan, and 2024 Employee Stock Purchase Plan of Tectonic Therapeutic, Inc. of our report dated March 14, 2024, with respect to the consolidated financial statements of AVROBIO, Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 2023, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Boston, Massachusetts August 27, 2024