

PROSPECTUS SUPPLEMENT NO. 9
(To Prospectus dated June 24, 2024)



Plus Therapeutics, Inc.

This prospectus supplement updates and supplements the prospectus, dated June 24, 2024 (as supplemented to date, the “Prospectus”), which forms a part of our registration statement on Form S-1 ([No. 333-280061](#)). This prospectus supplement is being filed to update and supplement the information in the Prospectus with the information contained in our Current Report on Form filed with the Securities and Exchange Commission on April 18, 2025 (the “Current Report”). Accordingly, we have attached the Form to this prospectus supplement.

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 common stock, par value \$0.001 per share (“Common Stock”) is listed on The Nasdaq Capital Market LLC under the symbol “PSTV”. On April 17, 2025, the closing price of our Common Stock was \$0.66.

We are a “smaller reporting company” for purposes of federal securities laws and are subject to reduced public company reporting requirements. Accordingly, the information in the Prospectus and this prospectus supplement may not be comparable to information provided by companies that are not smaller reporting companies.

Our business and investment in our Common Stock involve significant risks. These risks are described in the section titled “Risk Factors” beginning on page 13 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 adequacy or accuracy of the Prospectus or this prospectus supplement. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is April 18, 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 18, 2025**

PLUS THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation)

001-34375
(Commission File Number)

33-0827593
(IRS Employer
Identification No.)

2710 Reed Road, Suite 160, Houston, Texas 77051
(Address of principal executive offices, with zip code)

(737) 255-7194
(Registrant's telephone number, including area code)

N/A
(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 Instructions 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
Common Stock, par value \$0.001	PSTV	The Nasdaq Capital Market

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 5.02 Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

Appointment to Board of Directors

On April 18, 2025, the Board of Directors (the “Board”) of Plus Therapeutics, Inc (the “Company”) unanimously appointed Mr. Kyle Guse to serve as a director of the Board, effective immediately. Mr. Guse is being appointed to the Board to fill the vacancy created by the resignation of Mr. Greg Petersen, and is expected to stand for reelection at the Company’s next annual meeting of stockholders. The Board has determined that Mr. Guse satisfies the definition of an “independent director” under the Nasdaq listing standards and the Company’s Corporate Governance Guidelines. Mr. Guse was also appointed to the Audit Committee and Compensation Committee of the Board and as Chairman of the Audit Committee.

Mr. Guse currently serves as the Chief Legal Officer of DDC Enterprise Ltd., an NYSE-American-listed international consumer foods company, a position he has held since September 2023. From January 2013 to May 2023, Mr. Guse was Chief Financial Officer, General Counsel and Secretary of Atossa Therapeutics, Inc., a Nasdaq-listed biotechnology company developing treatments and prevention for breast cancer. Mr. Guse’s experience includes 30 years of counseling innovative, rapid growth companies through all aspects of finance, corporate governance, securities laws and commercialization, with a particular focus on mergers and acquisitions and capital markets transactions. Mr. Guse has practiced law at several of the largest international law firms, including from January 2012 through January 2013 as a partner at Baker Botts LLP and, prior to that, from October 2007 to January 2012, as a partner at McDermott Will & Emery LLP. Before working at McDermott Will & Emery, Mr. Guse served as a partner at Heller Ehrman LLP. Mr. Guse began his career as an accountant at Deloitte and he is an inactive Certified Public Accountant and member of the Bars in California and Washington. Mr. Guse earned a B.S. in business administration and an M.B.A. from California State University, Sacramento, and a J.D. from Santa Clara University School of Law.

Mr. Guse will be eligible to receive compensation for his service on the Board and its committees consistent with that provided to all non-employee directors for such service, which is described under the caption “Director Compensation” in the Company’s Definitive Proxy Statement on Schedule 14A filed with the Securities and Exchange Commission (the “SEC”) on July 10, 2024, as adjusted by the Board from time to time.

There was no arrangement or understanding between Mr. Guse and any other person with respect to his appointment to the Board. In addition, there have been no transactions involving Mr. Guse that would be required to be disclosed pursuant to Item 404(a) of Regulation S-K.

In connection with his appointment, Mr. Guse is expected to execute the Company’s standard form of indemnification agreement for directors, a copy of which was filed as Exhibit 10.1 to the Company’s Current Report on Form 8-K filed with the SEC on February 6, 2020.

Resignation from Board of Directors

On April 18, 2025, Mr. Greg Petersen resigned as a member of the Board. Mr. Petersen informed the Company that his resignation was not the result of any disagreement with the Company on any matter relating to the Company’s operations, policies or practices.

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: April 18, 2025

PLUS THERAPEUTICS, INC.

By: /s/ Marc H. Hedrick, M.D.
Marc H. Hedrick, M.D.
President and Chief Executive Officer

