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

Werewolf Therapeutics, Inc.

(Exact Name of Registrant as Specified in Its Charter)

Delaware (State or Other Jurisdiction of Incorporation or Organization) 82-3523180 (I.R.S. Employer Identification No.)

200 Talcott Ave, 2nd Floor Watertown, MA (Address of Principal Executive Offices)

02472 (Zip Code)

2021 Stock Incentive Plan 2021 Employee Stock Purchase Plan (Full Title of the Plan)

Daniel J. Hicklin, Ph.D.
President and Chief Executive Officer
Werewolf Therapeutics, Inc.
200 Talcott Ave, 2nd Floor
Watertown, MA 02472
(Name and Address of Agent for Service)

(617) 952-0555

(Telephone Number, Including Area Code, of Agent for Service)

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.

Large accelerated filer

Non-accelerated filer

Smaller reporting company

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. \boxtimes

Explanatory Note

This Post-Effective Amendment No. 1 (this "Amendment No. 1") relates to the Registration Statement on Form S-8, File No. 333-270764, filed with the Securities and Exchange Commission (the "Commission") on March 23, 2023 (the "Original Registration Statement") by Werewolf Therapeutics, Inc. (the "Registrant"). The Original Registration Statement registered 1,890,903 shares of the Registrant's common stock, par value \$0.0001 per share (the "Common Stock"), including 1,575,753 shares of Common Stock issuable under the Werewolf Therapeutics, Inc. 2021 Stock Incentive Plan and 315,150 shares of Common Stock issuable under the Werewolf Therapeutics, Inc. 2021 Employee Stock Purchase Plan pursuant to each plan's evergreen provision.

This Amendment No. 1 is being filed by the Registrant solely for the purpose of (i) including Ernst & Young LLP's consent to the incorporation by reference in the Original Registration Statement of its report dated March 7, 2024, with respect to the consolidated financial statements of the Registrant included in its Annual Report on Form 10-K filed with the Commission for the year ended December 31, 2023 and (ii) updating Part II – Information Required in the Registration Statement – Item 8, Exhibits. This Amendment No. 1 does not update, amend or modify any other information, statements or disclosure contained in the Original Registration Statement, except as otherwise referenced herein.

PART II INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 8. Exhibits.

The following exhibits are incorporated herein by reference:

Number	Description
4.1	Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K, filed with the Securities and Exchange Commission on May 5, 2021).
4.2	Second Amended and Restated Bylaws of the Registrant (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K, filed with the Securities and Exchange Commission on June 27, 2023).
5.1**	Opinion of Wilmer Cutler Pickering Hale and Dorr LLP, counsel to the Registrant.
23.1*	Consent of Ernst & Young LLP, independent registered public accounting firm.
23.2**	Consent of Wilmer Cutler Pickering Hale and Dorr LLP (included in Exhibit 5.1).
24.1**	Power of attorney (included on the signature pages of the Original Registration Statement).
99.1	2021 Stock Incentive Plan (incorporated by reference to Exhibit 10.4 to Amendment No. 1 to the Registrant's Registration Statement on Form S-1 (File No. 333-255132) filed with the Securities Exchange Commission on April 26, 2021.
99.2	2021 Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.8 to Amendment No. 1 to the Registrant's Registration Statement on Form S-1 (File No. 333-255132) filed with the Securities Exchange Commission on April 26, 2021.
107**	Calculation of Filing Fee Tables.

- * Filed herewith.
- ** Previously filed with 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 to the Original Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Watertown, Commonwealth of Massachusetts, on this 8th day of August, 2024.

WEREWOLF THERAPEUTICS, INC.

By: /s/ Timothy W. Trost
Timothy W. Trost
Chief Financial Officer and Treasurer

Note: No other person is required to sign this Post-Effective Amendment to the Original Registration Statement in reliance on Rule 478 of the Securities Act of 1933, as amended.

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. 333-270764), pertaining to the 2021 Stock Incentive Plan and 2021 Employee Stock Purchase Plan of Werewolf Therapeutics, Inc. of our report dated March 7, 2024, with respect to the consolidated financial statements of Werewolf Therapeutics, 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 8, 2024