As filed with the Securities and Exchange Commission on March 23, 2023

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

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)

200 Talcott Ave, 2nd Floor Watertown, MA (Address of Principal Executive Offices) 82-3523180 (I.R.S. Employer Identification No.)

> **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," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	Accelerated filer	
Non-accelerated filer	Smaller reporting company	X
	Emerging growth company	X

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.

Registration No. 333-___

Statement of Incorporation by Reference This Registration Statement on Form S-8, relating to the 2021 Stock Incentive Plan and the 2021 Employee Stock Purchase Plan of Werewolf Therapeutics, Inc. (the "Registrant"), is being filed for the purpose of registering additional securities of the same class as other securities for which a Registration Statement on Form S-8 has previously been filed and is effective. Accordingly, this Registration Statement incorporates by reference the contents of (i) the Registration Statement on Form S-8, File No. 333-255636, filed with the Securities and Exchange Commission on April 30, 2021 by the Registrant, relating to the Registrant's 2017 Stock Incentive Plan, 2021 Stock Incentive Plan and 2021 Employee Stock Purchase Plan and (ii) the Registration Statement on Form S-8, File No. 333-263806, filed with the Securities and Exchanges Commission on March 24, 2022 by the Registrant, relating to the Registrant's 2021 Stock Incentive Plan, in each case except for Item 8, Exhibits thereof.

PART II INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 8. Exhibits.

The following exhibits are incorporated herein by reference:

Number	Description
<u>4.1</u>	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).
<u>4.2</u>	Amended and Restated Bylaws of the Registrant (incorporated by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8- K, filed with the Securities and Exchange Commission on May 5, 2021).
<u>5.1*</u>	Opinion of Wilmer Cutler Pickering Hale and Dorr LLP, counsel to the Registrant.
<u>23.1*</u>	Consent of Ernst & Young LLP, independent registered public accounting firm.
<u>23.2*</u>	Consent of Deloitte & Touche LLP, independent registered public accounting firm.
23.3*	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 this registration statement).
<u>99.1</u>	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.
<u>99.2</u>	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.
<u>107*</u>	Calculation of Filing Fee Tables.
*	Filed herewith

Filed herewith

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, 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 registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Watertown, Commonwealth of Massachusetts on this 23rd day of March, 2023.

WEREWOLF THERAPEUTICS, INC.

By: /s/ Daniel J. Hicklin

Daniel J. Hicklin, Ph.D. President and Chief Executive Officer

POWER OF ATTORNEY AND SIGNATURES

We, the undersigned officers and directors of Werewolf Therapeutics, Inc., hereby severally constitute and appoint Daniel J. Hicklin, Ph.D. and Timothy W. Trost, and each of them singly (with full power to each of them to act alone), our true and lawful attorneys with full power of substitution and resubstitution in each of them for him and in his name, place and stead, and in any and all capacities, to sign for us and in our names in the capacities indicated below, the registration statement on Form S-8 filed herewith and any and all subsequent amendments to said registration statement, and generally to do all such things in our names and on our behalf in our capacities as officers and directors to enable Werewolf Therapeutics, Inc. to comply with the provisions of the Securities Act of 1933, as amended, and all requirements of the Securities and Exchange Commission, hereby ratifying and confirming our signatures as they may be signed by our said attorneys, or any of them, to said registration statement and any and all amendments thereto.

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

Signature	Title	Date
/s/ Daniel J. Hicklin Daniel J. Hicklin, Ph.D.	President, Chief Executive Officer and Director (Principal Executive Officer)	March 23, 2023
/s/ Timothy W. Trost Timothy W. Trost	Chief Financial Officer and Treasurer (Principal Financial and Accounting Officer)	March 23, 2023
Luke Evnin, Ph.D.	Chairman of the Board of Directors	
/s/ Meeta Chatterjee Meeta Chatterjee, Ph.D.	Director	March 23, 2023
/s/ Derek DiRocco Derek DiRocco, Ph.D.	Director	March 23, 2023
/s/ Alon Lazarus Alon Lazarus, Ph.D.	Director	March 23, 2023
/s/ Briggs W. Morrison Briggs W. Morrison, M.D.	Director	March 23, 2023
/s/ Michael Sherman Michael Sherman	Director	March 23, 2023

Calculation of Filing Fee Tables

Form S-8

(Form Type) Werewolf Therapeutics, Inc. (Exact Name of Registrant as Specified in its Charter)

Table 1—Newly Registered Securities

Security Type	Security Class Title	Fee Calculation Rule	Amount Registered (1)	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
Equity	Common Stock, \$0.0001 par value per share	Other	1,890,903 shares (2)	\$2.35 (3)	\$4,443,622.05 (3)	\$11.20 per \$1,000,000	\$489.69
Total Offering Amounts				\$4,443,622.05		\$489.69	
Total Fee Offsets						\$0	
Net Fee Due						\$489.69	

- (1) In accordance with Rule 416 under the Securities Act of 1933, as amended, this registration statement shall be deemed to cover any additional securities that may from time to time be offered or issued to prevent dilution resulting from stock splits, stock dividends or similar transactions.
- (2) Consists of (i) 1,575,753 shares issuable under the 2021 Stock Incentive Plan and (ii) 315,150 shares issuable under the 2021 Employee Stock Purchase Plan, pursuant to each plan's evergreen provision.
- (3) Estimated solely for the purpose of calculating the registration fee pursuant to Rules 457(c) and 457(h) of the Securities Act of 1933, as amended, and based upon the average of the high and low prices of the Registrant's Common Stock as reported on the Nasdaq Global Select Market on March 16, 2023.

March 23, 2023

Exhibit 5.1 WILMERHALE

> +1 617 526 6000 (t) +1 617 526 5000 (f) wilmerhale.com

Werewolf Therapeutics, Inc. 200 Talcott Ave, 2nd Floor Watertown, MA 02472 Re: 2021 Stock Incentive Plan

2021 Employee Stock Purchase Plan

Ladies and Gentlemen:

We have assisted in the preparation of a Registration Statement on Form S-8 (the "Registration Statement") to be filed with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"), relating to an aggregate of 1,890,903 shares of common stock, \$0.0001 par value per share ("Common Stock"), of Werewolf Therapeutics, Inc., a Delaware corporation (the "Company"), consisting of (i) an aggregate of 1,575,753 additional shares of Common Stock issuable under the Company's 2021 Stock Incentive Plan and (ii) an aggregate of 315,150 additional shares of Common Stock issuable under the Company's 2021 Employee Stock Purchase Plan (collectively, the "Plans").

We have examined the Certificate of Incorporation and Bylaws of the Company, each as amended and restated to date, and originals, or copies certified to our satisfaction, of all pertinent records of the meetings of the board of directors and stockholders of the Company, the Registration Statement, the Plans and such other documents relating to the Company as we have deemed material for the purposes of this opinion.

In our examination of the foregoing documents, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified, photostatic or other copies, the authenticity of the originals of any such documents and the legal competence of all signatories to such documents.

We assume that the appropriate action will be taken, prior to the offer and sale of the Shares in accordance with the Plans, to register and qualify the Shares for sale under all applicable state securities or "blue sky" laws.

We express no opinion herein as to the laws of any state or jurisdiction other than the General Corporation Law of the State of Delaware.

It is understood that this opinion is to be used only in connection with the offer and sale of the Shares while the Registration Statement is in effect.

Please note that we are opining only as to the matters expressly set forth herein, and no opinion should be inferred as to any other matters.

Based on the foregoing, we are of the opinion that the Shares have been duly authorized for issuance and, when the Shares are issued and paid for in accordance with the respective terms and conditions of the Plans, the Shares will be validly issued, fully paid and nonassessable. Wilmer Cutler Pickering Hale and Dorr LLP, 60 State Street, Boston, Massachusetts 02109

Beijing Berlin Boston Brussels Denver Frankfurt London Los Angeles New York Palo Alto San Francisco Washington

WILMERHALE

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We hereby consent to the filing of this opinion with the Commission in connection with the Registration Statement in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act. In giving such consent, we do not hereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission.

Very truly yours,

/s/ Wilmer Cutler Pickering Hale and Dorr LLP

WILMER CUTLER PICKERING HALE AND DORR LLP

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the 2021 Stock Incentive Plan and the 2021 Employee Stock Purchase Plan of Werewolf Therapeutics, Inc. of our report dated March 23, 2023, 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, 2022, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Boston, Massachusetts March 23, 2023

Exhibit 23.2

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated March 24, 2022, relating to the financial statements of Werewolf Therapeutics, Inc. as of and for the year ended December 31, 2021, appearing in the Annual Report on Form 10-K of Werewolf Therapeutics, Inc. for the year ended December 31, 2022.

/s/ Deloitte & Touche LLP

Boston, Massachusetts March 23, 2023