

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

SCHEDULE 13D/A

Under the Securities Exchange Act of 1934

(Amendment No. 4)*

Werewolf Therapeutics, Inc.

(Name of Issuer)

Common Stock, par value \$0.0001 per share

(Title of Class of Securities)

95075A107

(CUSIP Number)

RA Capital Management, L.P.

200 Berkeley Street, 18th Floor

Boston, MA 02116

Telephone: 617.778.2500

Attn: Peter Kolchinsky

(Name, Address and Telephone Number of Person Authorized to
Receive Notices and Communications)

February 12, 2024

(Date of Event Which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box.

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Rule 13d-7 for other parties to whom copies are to be sent.

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

1 Names of Reporting Persons.

RA Capital Management, L.P.

2 Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b)

3 SEC Use Only

4 Source of Funds (See Instructions):

AF

5 Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e):

6 Citizenship or Place of Organization. **Delaware**

Number of Shares Beneficially Owned by Each Reporting Person With	7	Sole Voting Power 0 shares
	8	Shared Voting Power 6,179,035 shares
	9	Sole Dispositive Power 0 shares
	10	Shared Dispositive Power 6,179,035 shares

11 Aggregate Amount Beneficially Owned by Each Reporting Person
6,179,035 shares

12 Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

13 Percent of Class Represented by Amount in Row (11)
15.2%¹

14 Type of Reporting Person (See Instructions)
IA, PN

¹ The Reporting Person is the beneficial owner of 6,144,881 shares of the Issuer's Common Stock as well as an aggregate of 34,154 shares underlying vested stock options (right to buy) and stock options (right to buy) which will vest within 60 days held by Dr. Derek DiRocco for the benefit of RA Capital. The percentage calculation assumes that there are 40,694,886 outstanding shares of Common Stock of the Issuer, based on 40,660,732 outstanding shares of Common Stock of the Issuer as of January 31, 2024, as disclosed in the Issuer's Current Report on Form 8-K filed with Securities and Exchange Commission ("SEC") on February 9, 2024, and giving effect to the stock options referenced above.

1 Names of Reporting Persons.

Peter Kolchinsky

2 Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b)

3 SEC Use Only

4 Source of Funds (See Instructions):

AF

5 Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e):

6 Citizenship or Place of Organization. **United States**

Number of Shares Beneficially Owned by Each Reporting Person With	7	Sole Voting Power 0 shares
	8	Shared Voting Power 6,179,035 shares
	9	Sole Dispositive Power 0 shares
	10	Shared Dispositive Power 6,179,035 shares

11 Aggregate Amount Beneficially Owned by Each Reporting Person
6,179,035 shares

12 Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

13 Percent of Class Represented by Amount in Row (11)
15.2%²

14 Type of Reporting Person (See Instructions)
HC, IN

² The Reporting Person is the beneficial owner of 6,144,881 shares of the Issuer's Common Stock as well as an aggregate of 34,154 shares underlying vested stock options (right to buy) and stock options (right to buy) which will vest within 60 days held by Dr. Derek DiRocco for the benefit of RA Capital. The percentage calculation assumes that there are 40,694,886 outstanding shares of Common Stock of the Issuer, based on 40,660,732 outstanding shares of Common Stock of the Issuer as of January 31, 2024, as disclosed in the Issuer's Current Report on Form 8-K filed with Securities and Exchange Commission ("SEC") on February 9, 2024, and giving effect to the stock options referenced above.

1 Names of Reporting Persons.

Rajeev Shah

2 Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b)

3 SEC Use Only

4 Source of Funds (See Instructions):

AF

5 Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e):

6 Citizenship or Place of Organization. **United States**

Number of Shares Beneficially Owned by Each Reporting Person With	7	Sole Voting Power 0 shares
	8	Shared Voting Power 6,179,035 shares
	9	Sole Dispositive Power 0 shares
	10	Shared Dispositive Power 6,179,035 shares

11 Aggregate Amount Beneficially Owned by Each Reporting Person
6,179,035 shares

12 Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

13 Percent of Class Represented by Amount in Row (11)
15.2%³

14 Type of Reporting Person (See Instructions)
HC, IN

³ The Reporting Person is the beneficial owner of 6,144,881 shares of the Issuer's Common Stock as well as an aggregate of 34,154 shares underlying vested stock options (right to buy) and stock options (right to buy) which will vest within 60 days held by Dr. Derek DiRocco for the benefit of RA Capital. The percentage calculation assumes that there are 40,694,886 outstanding shares of Common Stock of the Issuer, based on 40,660,732 outstanding shares of Common Stock of the Issuer as of January 31, 2024, as disclosed in the Issuer's Current Report on Form 8-K filed with Securities and Exchange Commission ("SEC") on February 9, 2024, and giving effect to the stock options referenced above.

1 Names of Reporting Persons.

RA Capital Healthcare Fund, L.P.

2 Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b)

3 SEC Use Only

4 Source of Funds (See Instructions):

WC

5 Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e):

6 Citizenship or Place of Organization. **United States**

Number of Shares Beneficially Owned by Each Reporting Person With	7	Sole Voting Power 0 shares
	8	Shared Voting Power 5,701,056 shares
	9	Sole Dispositive Power 0 shares
	10	Shared Dispositive Power 5,701,056 shares

11 Aggregate Amount Beneficially Owned by Each Reporting Person
5,701,056 shares

12 Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

13 Percent of Class Represented by Amount in Row (11)
14.0%⁴

14 Type of Reporting Person (See Instructions)
PN

⁴ The reporting person is the beneficial owner of 5,701,056 shares of the Issuer's Common Stock. The percentage calculation is based on 40,660,732 outstanding shares of Common Stock of the Issuer as of January 31, 2024, as disclosed in the Issuer's Current Report on Form 8-K filed with Securities and Exchange Commission ("SEC") on February 9, 2024.

SCHEDULE 13D/A**Item 1. Security and Issuer**

Item 1 of the Statement is hereby amended and supplemented as follows:

This Amendment No. 4 amends and supplements the statement on Schedule 13D originally filed with the Securities and Exchange Commission on May 6, 2021, as amended by Amendment No. 1 filed on June 16, 2021, Amendment No. 2 filed on August 12, 2022 and Amendment No. 3 filed on January 10, 2023 (as amended, the “Statement”) by the Reporting Persons with respect to the Common Stock, \$0.0001 par value (the “Common Stock”), of Werewolf Therapeutics, Inc. (the “Issuer”). Unless otherwise defined herein, capitalized terms used in this Amendment No. 4 shall have the meanings ascribed to them in the Statement. Unless amended or supplemented below, the information in the Statement remains unchanged.

Item 2. Identity and Background

Item 2 of the Statement is hereby amended and restated as follows:

- (a) This Schedule 13D/A is being filed on behalf of RA Capital Management, L.P. (“RA Capital”), Peter Kolchinsky, Rajeev Shah, and RA Capital Healthcare Fund, L.P. (the “Fund”) who are collectively referred to herein as the “Reporting Persons.”

The Reporting Persons’ ownership of the Issuer’s securities include (1) 5,701,056 shares of Common Stock held by the Fund, (2) 443,825 shares of Common Stock held by the RA Capital Nexus Fund II, L.P. (the “Nexus Fund II”), (3) a total of 32,866 vested stock options (right to buy), and (4) 1,288 stock options (right to buy) which shall vest within 60 days of this filing.

RA Capital Healthcare Fund GP, LLC is the general partner of the Fund and RA Capital Nexus Fund II GP, LLC is the general partner of the Nexus Fund II. The general partner of RA Capital is RA Capital Management GP, LLC, of which Dr. Kolchinsky and Mr. Shah are the controlling persons. RA Capital serves as investment adviser for the Fund and the Nexus Fund II and may be deemed a beneficial owner, for purposes of Section 13(d) of the Securities Exchange Act of 1934 (the “Act”), of any securities of the Issuer held by the Fund or the Nexus Fund II. The Fund and the Nexus Fund II have delegated to RA Capital the sole power to vote and the sole power to dispose of all securities held in the Fund’s and the Nexus Fund II’s portfolio, including the shares of the Issuer’s Common Stock reported herein. Because the Fund and the Nexus Fund II have divested themselves of voting and investment power over the reported securities they hold and may not revoke that delegation on less than 61 days’ notice, the Fund and the Nexus Fund II disclaim beneficial ownership of the securities they hold for purposes of Section 13(d) of the Act and therefore disclaim any obligation to report ownership of the reported securities under Section 13(d) of the Act. As managers of RA Capital, Dr. Kolchinsky and Mr. Shah may be deemed beneficial owners, for purposes of Section 13(d) of the Act, of any securities of the Issuer beneficially owned by RA Capital. RA Capital, Dr. Kolchinsky, and Mr. Shah disclaim beneficial ownership of the securities reported in this Statement other than for the purpose of determining their obligations under Section 13(d) of the Act, and the filing of the Statement shall not be deemed an admission that either RA Capital, Dr. Kolchinsky, or Mr. Shah is the beneficial owner of such securities for any other purpose.

- (b) The address of the principal business office of each of the Reporting Persons is 200 Berkeley Street, 18th Floor, Boston, MA 02116.
- (c) The Fund is a private investment vehicle. RA Capital provides investment management services to the Fund and the Nexus Fund II. The principal occupation of Dr. Kolchinsky and Mr. Shah is investment management.
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- (d) During the last five years, none of the Reporting Persons has been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).
- (e) During the last five years, none of the Reporting Persons has been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree of final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.
- (f) See Item 6 of the cover pages.

Item 5. Interest in Securities of the Issuer

Item 5 of the Statement is hereby amended and restated as follows:

- (a) The information set forth in rows 11 and 13 of the cover pages to this Statement is incorporated herein by reference. The percentages set forth in row 13 of the cover pages are based on 40,660,732 outstanding shares of Common Stock of the Issuer as of January 31, 2024, as reported in the Issuer's Form 8-K filed with the Securities and Exchange Commission ("SEC") on February 9, 2024 plus, as applicable, an aggregate of 34,154 shares underlying vested stock options and stock options which will vest within 60 days.
- (b) The information set forth in rows 7 through 10 of the cover pages to this Statement and Item 2 above is incorporated herein by reference.
- (c) The following table lists the Reporting Persons' transactions in Common Stock that were effected during the sixty day period prior to the filing of this Schedule 13D/A⁵:

Transaction	Purchaser	Date	No. Shares	Price
Vest Stock Option (Right to Buy)	RA Capital	December 30, 2023	644	(1)
Vest Stock Option (Right to Buy)	RA Capital	January 30, 2024	644	(1)
Vest Stock Option (Right to Buy)	RA Capital	February 29, 2024	644	(1)*
Vest Stock Option (Right to Buy)	RA Capital	March 30, 2024	644	(1)*

- (1) This option represents a right to purchase a total of 23,200 shares of the Issuer's Common Stock, one third of which vested on April 30, 2022, with the remaining two-thirds vesting in equal monthly installments over the following two years, subject to Dr. DiRocco's continued service to the Issuer through each vesting date. These options have an exercise price of \$16.00.

* Represents future vesting within 60 days from the filing date of this Schedule 13D/A.

- (d) No person (other than the Reporting Persons) is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the Common Stock subject to this Statement.
- (e) Not applicable.

⁵ The Common Stock and percentage ownership reported in this amendment reflect an increase in the number of outstanding shares of the Issuer. The vesting options in Item 5(c) did not cause a material change in the Reporting Persons' beneficial ownership.

Item 7. Material to Be Filed as Exhibits

Exhibit 1 Joint Filing Agreement

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Date: February 14, 2024

RA CAPITAL MANAGEMENT, L.P.

By: /s/ Peter Kolchinsky
Name: Peter Kolchinsky
Title: Authorized Signatory

PETER KOLCHINSKY

/s/ Peter Kolchinsky

RAJEEV SHAH

/s/ Rajeev Shah

RA CAPITAL HEALTHCARE FUND, L.P.

By: RA Capital Healthcare Fund GP, LLC
Its: General Partner

By: /s/ Peter Kolchinsky
Name: Peter Kolchinsky
Title: Manager

EXHIBIT 1

JOINT FILING AGREEMENT

This Joint Filing Agreement, dated as of February 14, 2024, is by and among RA Capital Management, L.P., Peter Kolchinsky, Rajeev Shah, and RA Capital Healthcare Fund, L.P. (the foregoing are collectively referred to herein as the "Filers").

Each of the Filers may be required to file with the United States Securities and Exchange Commission a statement on Schedule 13G and/or 13D with respect to Common Stock, par value \$0.0001 per share of Werewolf Therapeutics, Inc. beneficially owned by them from time to time.

Pursuant to and in accordance with Rule 13(d)(1)(k) promulgated under the Securities Exchange Act of 1934, as amended, the Filers hereby agree to file a single statement on Schedule 13G and/or 13D (and any amendments thereto) on behalf of each of such parties, and hereby further agree to file this Joint Filing Agreement as an exhibit to such statement, as required by such rule.

This Joint Filing Agreement may be terminated by any of the Filers upon one week's prior written notice or such lesser period of notice as the Filers may mutually agree.

Executed and delivered as of the date first above written.

RA CAPITAL MANAGEMENT, L.P.

By: /s/ Peter Kolchinsky
Name: Peter Kolchinsky
Title: Authorized Signatory

PETER KOLCHINSKY

/s/ Peter Kolchinsky

RAJEEV SHAH

/s/ Rajeev Shah

RA CAPITAL HEALTHCARE FUND, L.P.

By: RA Capital Healthcare Fund GP, LLC
Its: General Partner

By: /s/ Peter Kolchinsky
Name: Peter Kolchinsky
Title: Manager
