

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13G

UNDER THE SECURITIES EXCHANGE ACT OF 1934
(Amendment No. 7)*

Neurogene Inc.
(Name of Issuer)
Common Stock, \$0.000001 par value
(Title of Class of Securities)
(CUSIP Number)
06/30/2026
(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- ☒ Rule 13d-1(b)
- ☐ Rule 13d-1(c)
- ☒ Rule 13d-1(d)

SCHEDULE 13G

CUSIP No.

	Names of Reporting Persons
1	Redmile Group, LLC
	Check the appropriate box if a member of a Group (see instructions)
2	☐ (a)
	☐ (b)
3	Sec Use Only
	Citizenship or Place of Organization
4	DELAWARE

Number of Shares Beneficially Owned by Each Reporting Person With: 5 Sole Voting Power
0.00
Shared Voting Power
6
1,572,202.00
Sole Dispositive Power
7
0.00
Shared Dispositive Power
8
1,572,202.00

9 Aggregate Amount Beneficially Owned by Each Reporting Person

1,572,202.00

10 Check box if the aggregate amount in row (9) excludes certain shares (See Instructions)

☐

Percent of class represented by amount in row (9)

11 9.9 %

12 Type of Reporting Person (See Instructions)

IA, OO

Comment for Type of Reporting Person: The information in Item 4 relating to the shares of common stock, \$0.000001 par value, of the Issuer (the "Common Stock") that are or may be deemed beneficially owned by Redmile Group, LLC and the calculation of the percent of such class of securities is incorporated by reference herein.

SCHEDULE 13G

CUSIP No.

1 Names of Reporting Persons

Jeremy C. Green

Check the appropriate box if a member of a Group (see instructions)

2 ☐ (a)
☐ (b)

3 Sec Use Only

Citizenship or Place of Organization

4 UNITED KINGDOM

Sole Voting Power

5 0.00

Number of Shares Beneficially Owned by Each Reporting Person With: 6 Shared Voting Power

1,572,202.00

Sole Dispositive Power

7 0.00

Shared Dispositive Power

8 1,572,202.00

9 Aggregate Amount Beneficially Owned by Each Reporting Person

	1,572,202.00
10	Check box if the aggregate amount in row (9) excludes certain shares (See Instructions)
	☐
11	Percent of class represented by amount in row (9)
	9.9 %
12	Type of Reporting Person (See Instructions)
	HC, IN

Comment for Type of Reporting Person: The information in Item 4 relating to the shares of Common Stock that are or may be deemed beneficially owned by Jeremy Green and the calculation of the percent of such class of securities is incorporated by reference herein.

SCHEDULE 13G

CUSIP No.

	Names of Reporting Persons
1	Redmile Biopharma Investments I, L.P.
	Check the appropriate box if a member of a Group (see instructions)
2	☐ (a)
	☐ (b)
3	Sec Use Only
4	Citizenship or Place of Organization
	DELAWARE
	Sole Voting Power
5	0.00
Number of Shares Beneficially Owned by Each Reporting Person With:	Shared Voting Power
6	812,033.00
	Sole Dispositive Power
7	0.00
	Shared Dispositive
8	Power
	812,033.00
9	Aggregate Amount Beneficially Owned by Each Reporting Person
	812,033.00
10	Check box if the aggregate amount in row (9) excludes certain shares (See Instructions)
	☐
11	Percent of class represented by amount in row (9)
	5.1 %
12	Type of Reporting Person (See Instructions)
	PN

Comment for Type of Reporting Person: The information in Item 4 relating to the shares of Common Stock that are or may be deemed beneficially owned by Redmile Biopharma Investments I, L.P. and the calculation of the percent of such class of securities is incorporated by reference herein.

SCHEDULE 13G

Item 1.

Name of issuer:

(a)

Neurogene Inc.

Address of issuer's principal executive offices:

(b)

535 W 24th Street, 5th Floor, New York, NY 10011

Item 2.

Name of person filing:

(a)

Redmile Group, LLC Jeremy C. Green Redmile Biopharma Investments I, L.P.

Address or principal business office or, if none, residence:

(b)

Redmile Group, LLC 900 Larkspur Landing Circle, Suite 270 Larkspur, California 94939 Jeremy C. Green c/o Redmile Group, LLC (NY Office) 45 W. 27th Street, Floor 11 New York, NY 10001 Redmile Biopharma Investments I, L.P. c/o Redmile Group, LLC 900 Larkspur Landing Circle, Suite 270 Larkspur, California 94939
Citizenship:

(c)

Redmile Group, LLC: Delaware Jeremy C. Green: United Kingdom Redmile Biopharma Investments I, L.P.: Delaware

Title of class of securities:

(d)

Common Stock, \$0.000001 par value

(e)

CUSIP No.:

Item 3. If this statement is filed pursuant to §§ 240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a:

(a)

☐ Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o);

(b)

☐ Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c);

(c)

☐ Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c);

(d)

☐ Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8);

(e)

☐ An investment adviser in accordance with § 240.13d-1(b)(1)(ii)(E);

(f)

☐ An employee benefit plan or endowment fund in accordance with § 240.13d-1(b)(1)(ii)(F);

(g)

☐ A parent holding company or control person in accordance with § 240.13d-1(b)(1)(ii)(G);

(h)

☐ A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);

(i)

☐ A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);

(j)

☐ A non-U.S. institution in accordance with § 240.13d-1(b)(1)(ii)(J). If filing as a non-U.S. institution in accordance with § 240.13d-1(b)(1)(ii)(J), please specify the type of institution:

(k)

☐ Group, in accordance with Rule 240.13d-1(b)(1)(ii)(K).

Item 4. Ownership

Amount beneficially owned:

(a)

Redmile Group, LLC - 1,572,202 (1) Jeremy C. Green - 1,572,202 (1) Redmile Biopharma Investments I, L.P. - 812,033 (2)

Percent of class:

(b)

Redmile Group, LLC - 9.9% (3) Jeremy C. Green - 9.9% (3) Redmile Biopharma Investments I, L.P. - 5.1% (3) %

(c)

Number of shares as to which the person has:

(i) Sole power to vote or to direct the vote:

Redmile Group, LLC - 0 Jeremy C. Green - 0 Redmile Biopharma Investments I, L.P. - 0

(ii) Shared power to vote or to direct the vote:

(iii) Sole power to dispose or to direct the disposition of:

Redmile Group, LLC - 0 Jeremy C. Green - 0 Redmile Biopharma Investments I, L.P. - 0

(iv) Shared power to dispose or to direct the disposition of:

Redmile Group, LLC - 1,572,202 (1) Jeremy C. Green - 1,572,202 (1) Redmile Biopharma Investments I, L.P. - 812,033 (2) (1) Redmile's and Jeremy C. Green's beneficial ownership of the Issuer's Common Stock is comprised of (i) 1,412,199 shares of Common Stock and (ii) 160,003 shares of Common Stock issuable upon exercise of certain pre-funded warrants to purchase Common Stock (the "Warrants"). All of such shares of Common Stock and the Warrants are directly owned by certain investment vehicles, including Redmile Biopharma Investments I, L.P. ("RBI I"), for which Redmile is the investment manager (the "Redmile Funds"). Redmile may be deemed to beneficially own these securities in its capacity as their investment manager with discretion to vote and dispose of all shares of Common Stock held by the Redmile Funds. Mr. Green also may be deemed to beneficially own these securities as the principal of Redmile. Redmile and Mr. Green each disclaims beneficial ownership of these securities, except to the extent of its or his pecuniary interest in such securities, if any. (2) RBI I may be deemed to beneficially own (i) 652,030 shares of Common Stock, and (ii) 160,003 shares of Common Stock issuable upon exercise of the Warrants directly held by RBI I. (3) Percentage based on: (i) 15,801,901 shares of Common Stock outstanding as of May 8, 2026, as reported in the Form 10-Q for the quarterly period ended March 31, 2026 filed with the SEC on May 12, 2026; plus (ii) 160,003 shares of Common Stock issuable upon exercise of the Warrants.

Item 5. Ownership of 5 Percent or Less of a Class.

Item 6. Ownership of more than 5 Percent on Behalf of Another Person.
Not Applicable

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company or Control Person.
If a parent holding company has filed this schedule, pursuant to Rule 13d-1(b)(ii)(G), so indicate under Item 3(g) and attach an exhibit stating the identity and the Item 3 classification of the relevant subsidiary. If a parent holding company has filed this schedule pursuant to Rule 13d-1(c) or Rule 13d-1(d), attach an exhibit stating the identification of the relevant subsidiary.

See the response to Item 4.

Item 8. Identification and Classification of Members of the Group.
Not Applicable

Item 9. Notice of Dissolution of Group.
Not Applicable

Item 10. Certifications:
By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect, other than activities solely in connection with a nomination under § 240.14a-11.

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.

Redmile Group, LLC

Signature: /s/ Jeremy C. Green
Name/Title: Managing Member
Date: 08/14/2026

Jeremy C. Green

Signature: /s/ Jeremy C. Green
Name/Title: Jeremy C. Green
Date: 08/14/2026

Redmile Biopharma Investments I, L.P.

Signature: /s/ Jeremy C. Green

Name/Title: Managing Member of Redmile Group, LLC,
Managing Member of Redmile Biopharma
Investments I (GP), LLC, General Partner of
Redmile Biopharma Investments

Date: 08/14/2026