

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13G/A

Under the Securities Exchange Act of 1934
(Amendment No. 1)*

Neurogene Inc.
(formerly known as Neoleukin Therapeutics, Inc.)

(Name of Issuer)

Common Stock, \$0.000001 par value per share

(Title of Class of Securities)

64049K104

(CUSIP Number)

December 31, 2023

(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)

(Page 1 of 7 Pages)

*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 the disclosures provided in a prior cover page.

The information required in 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	NAME OF REPORTING PERSON Lynx1 Capital Management LP	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER 0
	6	SHARED VOTING POWER 46
	7	SOLE DISPOSITIVE POWER 0
	8	SHARED DISPOSITIVE POWER 46
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 46	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) < 0.1%	
12	TYPE OF REPORTING PERSON PN	

1	NAME OF REPORTING PERSON Weston Nichols	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION United States of America	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER 0
	6	SHARED VOTING POWER 46
	7	SOLE DISPOSITIVE POWER 0
	8	SHARED DISPOSITIVE POWER 46
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 46	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) < 0.1%	
12	TYPE OF REPORTING PERSON IN	

Item 1(a). Name of Issuer:

Neurogene Inc. (f/k/a Neoleukin Therapeutics, Inc.) (the "Issuer")

Item 1(b). Address of Issuer's Principal Executive Offices:

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

Item 2(a). Name of Person Filing:

This statement is filed by:

- (i) Lynx1 Capital Management LP (the "Investment Manager"), a Delaware limited partnership, and the investment manager to Lynx1 Master Fund LP (the "Lynx1 Fund"), with respect to the shares of Common Stock (as defined in Item 2(d) below) directly held by the Lynx1 Fund; and
- (ii) Mr. Weston Nichols ("Mr. Nichols"), the sole member of Lynx1 Capital Management GP LLC, the general partner of the Investment Manager, with respect to the shares of Common Stock directly held by the Lynx1 Fund.

The foregoing persons are hereinafter sometimes collectively referred to as the "Reporting Persons."

The filing of this statement should not be construed as an admission that any of the foregoing persons or any Reporting Person is, for the purposes of Section 13 of the Act, the beneficial owner of the shares of Common Stock reported herein.

Item 2(b). Address of Principal Business Office:

Lynx1 Capital Management LP
151 Calle de San Francisco
Suite 200, PMB 1237
San Juan, PR 00901-1607

Weston Nichols
c/o Lynx1 Capital Management LP
151 Calle de San Francisco
Suite 200, PMB 1237
San Juan, PR 00901-1607

Item 2(c). Place of Organization:

Investment Manager – Delaware
Mr. Nichols – United States of America

Item 2(d). Title of Class of Securities:

Common stock, \$0.000001 par value per share (the "Common Stock")

Item 2(e). CUSIP Number:

64049K104

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 association 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);
- (k) Group, in accordance with §240.13d-1(b)(1)(ii)(K).

If filing as a non-U.S. institution in accordance with Rule 13d-1(b)(1)(ii)(J), please specify the type of institution: _____

Item 4. Ownership:

The information required by Items 4(a) – (c) is set forth in Rows (5) – (11) of the cover page for each Reporting Person hereto and is incorporated herein by reference for each Reporting Person.

The percentages set forth herein are calculated based upon 12,823,696 shares of Common Stock outstanding as reported in the Issuer's Current Report on Form 8-K filed with the Securities and Exchange Commission on December 19, 2023.

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

If this statement is being filed to report the fact that as of the date hereof the Reporting Persons have ceased to be the beneficial owner of more than five percent of the class of securities, check the following:

Item 6. Ownership of More Than Five Percent on Behalf of Another Person:

See Item 2. The Lynx1 Fund has the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the shares of Common Stock reported herein.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company or Control Person:

Not applicable.

Item 8. Identification and Classification of Members of the Group:

Not applicable.

Item 9. Notice of Dissolution of Group:

Not applicable.

Item 10. Certification:

By signing below each Reporting Person certifies that, to the best of his or its knowledge and belief, the securities referred to above were not acquired 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.

SIGNATURE

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

Date: February 14, 2024

LYNX1 CAPITAL MANAGEMENT LP

By: Lynx1 Capital Management GP LLC, its general partner

By: /s/ Weston Nichols

Name: Weston Nichols

Title: Sole Member

/s/ Weston Nichols

WESTON NICHOLS