

OMB APPROVAL	
OMB Number:	3235-0287
Estimated average burden hours per response:	0.5

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person* BAKER BROS. ADVISORS LP			2. Issuer Name and Ticker or Trading Symbol Neurogene Inc. [NGNE]			5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director 10% Owner Officer (give title below) <input checked="" type="checkbox"/> Other (specify below) Former 10% Owner		
(Last)	(First)	(Middle)	3. Date of Earliest Transaction (Month/Day/Year) 12/18/2023			6. Individual or Joint/Group Filing (Check Applicable Line) Form filed by One Reporting Person <input checked="" type="checkbox"/> Form filed by More than One Reporting Person		
860 WASHINGTON STREET, 3RD FLOOR			4. If Amendment, Date of Original Filed (Month/Day/Year)					
(Street)								
NEW YORK	NY	10014						
(City)	(State)	(Zip)	Rule 10b5-1(c) Transaction Indication <input type="checkbox"/> Check this box to indicate that a transaction was made pursuant to a contract, instruction or written plan that is intended to satisfy the affirmative defense conditions of Rule 10b5-1(c). See Instruction 10.					

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock								113	D ⁽¹⁾⁽²⁾⁽³⁾⁽⁴⁾	
Common Stock								113	D ⁽¹⁾⁽²⁾⁽⁵⁾	
Common Stock								38,968	I	See Footnotes ⁽²⁾⁽⁴⁾⁽⁶⁾⁽⁷⁾
Common Stock								414,547	I	See Footnotes ⁽²⁾⁽⁶⁾⁽⁷⁾⁽⁸⁾

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	V	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares				
Prefunded Warrants	\$0.00 ⁽⁹⁾							(9)(10)	(9)	Common Stock	45,693		45,693	I	See Footnotes ⁽¹⁾⁽²⁾⁽⁴⁾⁽⁶⁾⁽⁷⁾
Prefunded Warrants	\$0.00 ⁽⁹⁾							(9)(10)	(9)	Common Stock	380,294		380,294	I	See Footnotes ⁽¹⁾⁽²⁾⁽⁶⁾⁽⁷⁾⁽⁸⁾
Prefunded Warrants	\$0.00 ⁽¹¹⁾	12/18/2023		A		78,325		(10)(11)	(11)	Common Stock	78,325	(12)	78,325	I	See Footnotes ⁽¹⁾⁽⁴⁾⁽⁶⁾⁽⁷⁾⁽¹⁰⁾⁽¹¹⁾
Prefunded Warrants	\$0.00 ⁽¹¹⁾	12/18/2023		A		973,290		(10)(11)	(11)	Common Stock	973,290	(12)	973,290	I	See Footnotes ⁽¹⁾⁽⁶⁾⁽⁷⁾⁽⁸⁾⁽¹⁰⁾⁽¹¹⁾
Prefunded Warrants	\$0.00 ⁽¹¹⁾	12/18/2023		A		28,782		(10)(11)	(11)	Common Stock	28,782	(13)	107,107	I	See Footnotes ⁽¹⁾⁽⁴⁾⁽⁶⁾⁽⁷⁾
Prefunded Warrants	\$0.00 ⁽¹¹⁾	12/18/2023		A		310,130		(10)(11)	(11)	Common Stock	310,130	(13)	1,283,420	I	See Footnotes ⁽¹⁾⁽⁶⁾⁽⁷⁾⁽⁸⁾
Prefunded Warrants	\$0.00 ⁽¹¹⁾	12/18/2023		A		20,562		(10)(11)	(11)	Common Stock	20,562	(14)	127,669	I	See Footnotes ⁽¹⁾⁽⁴⁾⁽⁶⁾⁽⁷⁾
Prefunded Warrants	\$0.00 ⁽¹¹⁾	12/18/2023		A		221,557		(10)(11)	(11)	Common Stock	221,557	(14)	1,504,977	I	See Footnotes ⁽¹⁾⁽⁶⁾⁽⁷⁾⁽⁸⁾
Prefunded Warrants	\$0.00 ⁽¹¹⁾	12/18/2023		A		93,480		(10)(11)	(11)	Common Stock	93,480	(15)	221,149	I	See Footnotes ⁽¹⁾⁽⁴⁾⁽⁶⁾⁽⁷⁾
Prefunded Warrants	\$0.00 ⁽¹¹⁾	12/18/2023		A		1,151,124		(10)(11)	(11)	Common Stock	1,151,124	(15)	2,656,101	I	See Footnotes ⁽¹⁾⁽⁶⁾⁽⁷⁾⁽⁸⁾⁽¹⁰⁾

1. Name and Address of Reporting Person* BAKER BROS. ADVISORS LP		
(Last)	(First)	(Middle)
860 WASHINGTON STREET, 3RD FLOOR		
(Street)		
NEW YORK	NY	10014
(City)	(State)	(Zip)
1. Name and Address of Reporting Person* 667, L.P.		
(Last)	(First)	(Middle)
860 WASHINGTON STREET, 3RD FLOOR		

(Street)	NEW YORK	NY	10014
(City)	(State)	(Zip)	
1. Name and Address of Reporting Person*			
BAKER FELIX			
(Last)	(First)	(Middle)	
860 WASHINGTON STREET, 3RD FLOOR			
(Street)	NEW YORK	NY	10014
(City)	(State)	(Zip)	
1. Name and Address of Reporting Person*			
BAKER JULIAN			
(Last)	(First)	(Middle)	
860 WASHINGTON STREET, 3RD FLOOR			
(Street)	NEW YORK	NY	10014
(City)	(State)	(Zip)	
1. Name and Address of Reporting Person*			
Baker Bros. Advisors (GP) LLC			
(Last)	(First)	(Middle)	
860 WASHINGTON STREET, 3RD FLOOR			
(Street)	NEW YORK	NY	10014
(City)	(State)	(Zip)	
1. Name and Address of Reporting Person*			
Baker Brothers Life Sciences LP			
(Last)	(First)	(Middle)	
860 WASHINGTON STREET, 3RD FLOOR			
(Street)	NEW YORK	NY	10014
(City)	(State)	(Zip)	

Explanation of Responses:

- On December 18, 2023 (the "Closing Date"), Neurogene Inc., a Delaware corporation (formerly known as Neoleukin Therapeutics, Inc. (prior to the Closing Date, "Neoleukin", and after the Closing Date, the "Issuer")) consummated the previously announced business combination (the "Merger") pursuant to that certain Agreement and Plan of Merger, dated as of July 17, 2023 (the "Merger Agreement"), by and among Neoleukin, Project North Merger Sub, Inc., a wholly owned subsidiary of Neoleukin ("Merger Sub"), and Neurogene Inc., a Nevada corporation ("Neurogene"). At the closing of the Merger Neoleukin Therapeutics, Inc. changed its name to Neurogene Inc.
- Reflects a one-for-four reverse stock split of the common stock ("Common Stock") of the Issuer effected on December 18, 2023.
- Reflects shares of Common Stock held directly by Felix J. Baker.
- After giving effect to the transactions reported herein and as a result of their ownership interest in (i) Baker Biotech Capital, L.P. and (ii) 667, L.P. ("667"), Julian C. Baker and Felix J. Baker each may be deemed to have an indirect pecuniary interest in Common Stock reported in column 5 of Table I or securities reported in column 9 of Table II directly held by 667, a limited partnership of which the sole general partner is Baker Biotech Capital, L.P., a limited partnership of which the sole general partner is Baker Biotech Capital (GP), LLC, due to their interest in 667 and Baker Biotech Capital, L.P.'s right to receive an allocation of a portion of the profits from 667.
- Reflects shares of Common Stock held directly by Julian C. Baker.
- Baker Bros. Advisors LP (the "Adviser") serves as the investment adviser to 667 and Baker Brothers Life Sciences, L.P. ("Life Sciences", and together with 667, the "Funds"). In connection with the services provided by the Adviser, the Adviser receives an asset-based management fee that does not confer any pecuniary interest in the securities held directly by the Funds or for the benefit of the Funds. Baker Bros. Advisors (GP) LLC (the "Adviser GP") is the Adviser's sole general partner. Julian C. Baker and Felix J. Baker are managing members of the Adviser GP. The Adviser has complete and unlimited discretion and authority with respect to the investment and voting power of the securities held directly by the Funds. The general partners of the Funds have relinquished to the Adviser all discretion and authority with respect to the investment and voting power of the securities held directly by the Funds.
- Julian C. Baker, Felix J. Baker, the Adviser GP and the Adviser disclaim beneficial ownership of the securities held directly by the Funds except to the extent of their pecuniary interest therein, and this report shall not be deemed an admission that any of Julian C. Baker, Felix J. Baker, the Adviser GP or the Adviser is a beneficial owner of such securities for purposes of Section 16 or any other purpose.
- After giving effect to the transactions reported herein and as a result of their ownership interest in (i) Baker Brothers Life Sciences Capital, L.P. and (ii) Life Sciences, Julian C. Baker and Felix J. Baker each may be deemed to have an indirect pecuniary interest in Common Stock reported in column 5 of Table I or securities reported in column 9 of Table II directly held by Life Sciences, a limited partnership of which the sole general partner is Baker Brothers Life Sciences Capital, L.P., a limited partnership of which the sole general partner is Baker Brothers Life Sciences Capital (GP), LLC, due to their interest in Life Sciences and Baker Brothers Life Sciences Capital, L.P.'s right to receive an allocation of a portion of the profits from Life Sciences.
- Represents warrants to purchase Common Stock at an exercise price of \$0.00002 per share ("Prefunded Warrants") exercisable at any time, at the holder's election, on a 1-for-1 basis into Common Stock to the extent that immediately prior to or after giving effect to such exercise the holders thereof, together with their affiliates and any members of a Section 13(d) group with such holders, would beneficially own, for purposes of Rule 13d-3 under the Securities Act of 1934, as amended, no more than 4.99% of the outstanding shares of Common Stock (the "Maximum Percentage"). The Prefunded Warrants have no expiration date.
- By written notice to the Issuer, the Funds may increase or decrease the Maximum Percentage applicable to that fund to any other percentage not in excess of 19.99%; provided that any such increase will not be effective until the 61st day after such notice is delivered to the Issuer.
- The \$0.000001 Prefunded Warrants are exercisable at any time, at the holder's election, on a 1-for-1 basis into Common Stock to the extent that immediately prior to or after giving effect to such exercise the holders and/ or their affiliates thereof, together with their affiliates and any members of a Section 13(d) group with such holders, would beneficially own, for purposes of Rule 13d-3 under the Securities Exchange Act of 1934, as amended, no more than the Maximum Percentage. The Prefunded Warrants have no expiration date.
- 667 and Life Sciences acquired 78,325 and 973,290 warrants to purchase Common Stock, respectively, at an exercise price of \$0.000001 per share ("\$0.000001 Prefunded Warrants") in the Merger at a rate of 0.0756 \$0.000001 Prefunded Warrants for each Neurogen Prefunded Warrant.
- As a result of and upon the effective time of the Merger, the Funds acquired \$0.000001 Prefunded Warrants in exchange for existing shares of Neurogene Series A-1 Preferred Stock ("Series A-1 Preferred") at a rate of 0.0756 \$0.000001 Prefunded Warrants for each share of Series A-1 Preferred.
- As a result of and upon the effective time of the Merger, the Funds acquired \$0.000001 Prefunded Warrants in exchange for existing shares of Neurogene Series A-2 Preferred Stock ("Series A-2 Preferred") at a rate of 0.0756 \$0.000001 Prefunded Warrants for each share of Series A-2 Preferred.
- As a result of and upon the effective time of the Merger, the Funds acquired \$0.000001 Prefunded Warrants in exchange for existing shares of Neurogene Series B Preferred Stock ("Series B Preferred") at a rate of 0.0756 \$0.000001 Prefunded Warrants for each share of Series B Preferred.

Remarks:

M. Canteay Boyd, a full-time employee of Baker Bros. Advisors LP, resigned as a director on the board of directors (the "Board") of Neurogene Inc. (previously Neoleukin Therapeutics, Inc.) (the "Issuer") effective December 18, 2023. For purposes of Section 16 of the Securities Exchange Act of 1934, as amended, the reporting persons were deemed directors by deputation by virtue of their representation on the board of directors of the Issuer. On December 18, 2023, the Issuer changed its name from Neoleukin Therapeutics, Inc. to Neurogene Inc. and effected a 1-for-4 reverse stock split of its Common Stock. In addition, the Reporting Persons acquired certain contingent value rights of the Issuer in connection with the merger as described in the Schedule 13D/A filed by the Reporting Persons on December 20, 2023.

By: [Baker Bros. Advisors LP](#),

[12/20/2023](#)

Name: Scott L. Lessing, Title:
President /s/ Scott L. Lessing
Baker Bros. Advisors LP, Mgmt.
Co. and Inv. Adviser to 667, L.P.,
pursuant to authority granted by, 12/20/2023
Baker Biotech Capital, L.P., GP to
667, L.P. Name: Scott L. Lessing,
Title: President /s/ Scott L. Lessing
/s/ Felix J. Baker 12/20/2023
/s/ Julian C. Baker 12/20/2023
By: Baker Bros. Advisors (GP)
LLC, Name: Scott L. Lessing, 12/20/2023
Title: President /s/ Scott L. Lessing
Baker Bros. Advisors LP, Mgmt.
Co. and Inv. Adviser to Baker
Brothers Life Sciences, L.P.,
pursuant to authority granted by, 12/20/2023
Baker Brothers Life Sciences
Capital, L.P., GP to Baker Brothers
Life Sciences, L.P., Name: Scott L.
Lessing, Title: President /s/
** Signature of Reporting Person Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

* If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.