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

SCHEDULE 13G

Under the Securities Exchange Act of 1934 (Amendment No. 4)

ANNEXON, INC.

(Name of Issuer)

Common Stock, par value \$0.001 per share

(Title of Class of Securities)

03589W102

(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:

 \Box Rule 13d-1(b)

 \boxtimes Rule 13d-1(c)

 \square Rule 13d-1(d)

* 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).

CUSIP No. 03589W102

CUSIP	P No. 03589W1						
1	NAME OF REPORTING PERSON						
	Redmile Group, LLC						
2			OPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)				
	(A) 🗆						
3	SEC Use Only						
4	CITIZENSHIP OR PLACE OF ORGANIZATION						
	Delaware						
		5	Sole Voting Power				
	NUMBER OF SHARES BENEFICIALLY OWNED BY		0				
			Shared Voting Power				
			8,083,776 ⁽¹⁾				
0							
RF	EACH EPORTING	7	Sole Dispositive Power				
	RSON WITH		0				
			Shared Dispositive Power				
			8,083,776 ⁽¹⁾				
9	Aggregate Amount Beneficially Owned by Each Reporting Person						
	8,083,776 ⁽¹⁾						
10	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)						
11	Percent of Class Represented by Amount in Row (9)						
	9.9% ⁽²⁾						
12	Type of Reporting Person (See Instructions)						
	IA, OO						
	•						

(1) Redmile Group, LLC's beneficial ownership of the Issuer's Common Stock ("Common Stock") is comprised of 5,503,190 shares of Common Stock owned by certain private investment vehicles and/or sub-advised accounts managed by Redmile Group, LLC, including Redmile Biopharma Investments II, L.P., which shares of Common Stock may be deemed beneficially owned by Redmile Group, LLC as investment manager of such private investment vehicles and/or sub-advised accounts. The reported securities may also be deemed beneficially owned by Jeremy C. Green as the principal of Redmile Group, LLC. Redmile Group, LLC and Mr. Green each disclaim beneficial ownership of these shares, except to the extent of its or his pecuniary interest in such shares, if any. Subject to the Beneficial Ownership Blocker (as defined below), Redmile Group, LLC may also be deemed to beneficially own 35,324,622 shares of Common Stock issuable upon exercise of certain Pre-Funded Warrants and Common Warrants to purchase Common Stock (collectively, the "Warrants"). Pursuant to the terms of the Warrants, the Issuer may not effect any exercise of any Warrant, and a holder of a Warrant does not have the right to exercise any portion of the Warrant held by such holder, to the extent that, after giving effect to the attempted exercise set forth in a notice of exercise, such holder, together with such holder's affiliates and any other person whose beneficial ownership of Common Stock would be aggregated with such holder's for the purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and the applicable regulations of the Securities and Exchange Commission (the "SEC"), including any "group" of which such holder is a member, would beneficially own a number of shares of Common Stock in excess of the Beneficial Ownership Limitation (the "Beneficial Ownership Blocker"). The "Beneficial Ownership Limitation" is 9.99% of the shares of Common Stock then issued and outstanding, which percentage may be changed at a holder's election upon 61 days' notice to the Issuer. The 8,083,776 shares of Common Stock reported as beneficially owned by Redmile Group, LLC in this Schedule 13G represent 9.99% of the outstanding shares of Common Stock (calculated in accordance with footnote (2) below).

 $^{(2)}$ Percentage based on the sum of (i) 78,338,098 shares of Common Stock outstanding as of December 26, 2023, as reported by the Issuer in its Prospectus Supplement filed with the SEC on December 21, 2023 (the "Prospectus") and its Form 8-K/A filed with the SEC on December 22, 2023 (the "Form 8-K/A"), plus (ii) 2,580,586 shares of Common Stock issuable upon exercise of certain of the Warrants, which due to the Beneficial Ownership Limitation is the maximum number of shares that could be issued upon exercise of the Warrants.

CUSIP No. 03589W102

1	No. 03589W10						
1	NAME OF REPORTING PERSON						
	Jeremy C. G	reen					
2			ate Box if a Member of a Group (See Instructions)				
2	CHECK THE AF	IECK THE AFFROFRIATE DOA IF A INEMIDER OF A OROUP (SEE INSTRUCTIONS)					
(A) 🗆							
3	(B) SEC Use Only						
	Citizenship or Place of Organization						
4							
	United Kingdom						
		5	Sole Voting Power				
			0				
NILL	MBED OF	6	Shared Voting Power				
	MBER OF HARES						
	EFICIALLY		8,083,776 ⁽³⁾				
	WNED BY	7	Sole Dispositive Power				
	EACH	/	SOLE DISPOSITIVE POWER				
RE	PORTING		0				
PER	SON WITH	8	SHARED DISPOSITIVE POWER				
			8,083,776 ⁽³⁾				
9	Aggregate Amount Beneficially Owned by Each Reporting Person						
	8,083,776 ⁽³⁾						
10	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)						
11	PERCENT OF CI	.ass Re	epresented by Amount in Row (9)				
	9.9% ⁽⁴⁾						
12	9.9% Y Type of Reporting Person (See Instructions)						
	IN, HC						

⁽³⁾ Jeremy C. Green's beneficial ownership of Common Stock is comprised of 5,503,190 shares of Common Stock owned by certain private investment vehicles and/or sub-advised accounts managed by Redmile Group, LLC, including Redmile Biopharma Investments II, L.P., which shares of Common Stock may be deemed beneficially owned by Redmile Group, LLC as investment manager of such private investment vehicles and/or sub-advised accounts. The reported securities may also be deemed beneficially owned by Jeremy C. Green as the principal of Redmile Group, LLC. Redmile Group, LLC and Mr. Green each disclaim beneficial ownership of these shares, except to the extent of its or his pecuniary interest in such shares, if any. Subject to the Beneficial Ownership Blocker, Mr. Green may also be deemed to beneficially own 35,324,622 shares of Common Stock issuable upon exercise of the Warrants. Pursuant to the terms of the Warrants, the Issuer may not effect any exercise of any Warrant, and a holder of a Warrant does not have the right to exercise any portion of the Warrant held by such holder, if the Beneficial Ownership Blocker applies. The 8,083,776 shares of Common Stock (calculated in accordance with footnote (4) below).

⁽⁴⁾ Percentage based on the sum of (i) 78,338,098 shares of Common Stock outstanding as of December 26, 2023, as reported by the Issuer in the Prospectus and the Form 8-K/A, plus (ii) 2,580,586 shares of Common Stock issuable upon exercise of certain of the Warrants, which due to the Beneficial Ownership Limitation is the maximum number of shares that could be issued upon exercise of the Warrants.

CUSIP No. 03589W102

CUSH	No. 03589W10	12						
1	NAME OF REPO	Name of Reporting Person						
	Redmile Biopharma Investments II, L.P.							
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)							
	(B) SEC Use Only							
3								
4	CITIZENSHIP OR PLACE OF ORGANIZATION							
-	Delaware							
	Delutture	5	Sole Voting Power					
		č						
			0					
			Shared Voting Power					
	MBER OF							
	SHARES		4,492,281 ⁽⁵⁾					
	EFICIALLY							
OV	VNED BY	7	Sole Dispositive Power					
DE	EACH PORTING							
	SON WITH		0					
ILN		8	Shared Dispositive Power					
			4,492,281 ⁽⁵⁾					
9	Aggregate Amount Beneficially Owned by Each Reporting Person							
,	AGGREGATE AMOUNT BENEFICIALLY UWNED BY EACH KEPORTING PERSON							
	4,492,281 (5)							
10	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)							
11	PERCENT OF CI	.ass Re	EPRESENTED BY AMOUNT IN ROW (9)					
	5.6% ⁽⁶⁾							
12	Type of Reporting Person (See Instructions)							
	PN							

⁽⁵⁾ Redmile Biopharma Investments II, L.P.'s beneficial ownership of Common Stock is comprised of 1,911,695 shares of Common Stock. Subject to the Beneficial Ownership Blocker, Redmile Biopharma Investments II, L.P. ("RBI II") may also be deemed to beneficially own 6,702,359 shares of Common Stock issuable upon exercise of the Warrants directly held by RBI II. Pursuant to the terms of the Warrants, the Issuer may not effect any exercise of any Warrant, and a holder of a Warrant does not have the right to exercise any portion of the Warrant held by such holder, if the Beneficial Ownership Blocker applies. The shares of Common Stock reported as beneficially owned by RBI II in this Schedule 13G represent the shares of Common Stock held directly by RBI II and the 2,580,586 shares of Common Stock that could be issued to RBI II upon exercise of certain of the Warrants directly held by RBI II under the Beneficial Ownership Blocker.

(6) Percentage based on the sum of (i) 78,338,098 shares of Common Stock outstanding as of December 26, 2023, as reported by the Issuer in the Prospectus and the Form 8-K/A, plus (ii) 2,580,586 shares of Common Stock issuable upon exercise of certain of the Warrants, which due to the Beneficial Ownership Limitation is the maximum number of shares that could be issued upon exercise of the Warrants.

Item 1.

(a) Name of Issuer

Annexon, Inc.

(b) Address of Issuer's Principal Executive Offices

1400 Sierra Point Parkway Bldg C, Suite 200 Brisbane, California 94005

Item 2.

(a) Names of Persons Filing

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

(b) Address of Principal Business office or, if None, Residence

Redmile Group, LLC One Letterman Drive Building D, Suite D3-300 The Presidio of San Francisco San Francisco, California 94129

Jeremy C. Green c/o Redmile Group, LLC (NY Office) 45 W. 27th Street, Floor 11 New York, NY 10001

Redmile Biopharma Investments II, L.P. c/o Redmile Group, LLC One Letterman Drive Building D, Suite D3-300 The Presidio of San Francisco San Francisco, California 94129

(c) Citizenship

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

(d) Title of Class of Securities

Common Stock, \$0.001 par value

(e) CUSIP Number

03589W102

- 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) \Box Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o);
 - (b) \square Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c);
 - (c) \Box 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) \Box An investment adviser in accordance with § 240.13d-1(b)(1)(ii)(E);
 - (f) \Box An employee benefit plan or endowment fund in accordance with § 240.13d-1(b)(1)(ii)(F);
 - (g) \Box 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) \Box A non-U.S. institution in accordance with § 240.13d-1(b)(1)(ii)(J);
 - (k) \Box Group, in accordance with § 240.13d-1(b)(1)(ii)(K). If filing as a non-U.S. institution in accordance with § 240.13d-1(b)(1)(ii) (J), please specify the type of institution: _____

Item 4. Ownership.

(a) Amount beneficially owned:

Redmile Group, LLC – 8,083,776 * Jeremy C. Green – 8,083,776 * Redmile Biopharma Investments II, L.P. – 4,492,281**

(b) Percent of class:

Redmile Group, LLC – 9.9%*** Jeremy C. Green – 9.9%*** Redmile Biopharma Investments II, L.P. – 5.6% ***

- (c) Number of shares as to which Redmile Group, LLC has:
 - (i) Sole power to vote or to direct the vote:

0

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

8,083,776 *

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

0

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

8,083,776 *

Number of shares as to which Jeremy C. Green has:

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

0

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

8,083,776*

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

0

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

8,083,776*

Number of shares as to which Redmile Biopharma Investments II, L.P. has:

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

0

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

4,492,281**

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

0

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

4,492,281**

Redmile Group, LLC's and Jeremy C. Green's beneficial ownership of the Issuer's Common Stock is comprised of 5,503,190 shares of Common Stock owned by certain private investment vehicles and/or sub-advised accounts managed by Redmile Group, LLC, including Redmile Biopharma Investments II, L.P., which shares of Common Stock may be deemed beneficially owned by Redmile Group, LLC as investment manager of such private investment vehicles and/or sub-advised accounts. The reported securities may also be deemed beneficially owned by Jeremy C. Green as the principal of Redmile Group, LLC. Redmile Group, LLC and Mr. Green each disclaim beneficial ownership of these shares, except to the extent of its or his pecuniary interest in such shares, if any. Subject to the Beneficial Ownership Blocker, Redmile Group, LLC and Mr. Green may also be deemed to beneficially own 35,324,622 shares of Common Stock issuable upon exercise of the Warrants. Pursuant to the terms of the Warrants, the Issuer may not effect any exercise of any Warrant, and a holder of a Warrant does not have the right to exercise any portion of the Warrant held by such holder, if the Beneficial Ownership Blocker applies. The 8,083,776 shares of Common Stock reported as beneficially owned by Redmile Group, LLC and Mr. Green in this Schedule 13G represent 9.99% of the outstanding shares of Common Stock (calculated in accordance with footnote (***) below).

- ** RBI II's beneficial ownership of Common Stock is comprised of 1,911,695 shares of Common Stock. Subject to the Beneficial Ownership Blocker, RBI II may also be deemed to beneficially own 6,702,359 shares of Common Stock issuable upon exercise of the Warrants directly held by RBI II. Pursuant to the terms of the Warrants, the Issuer may not effect any exercise of any Warrant, and a holder of a Warrant does not have the right to exercise any portion of the Warrant held by such holder, if the Beneficial Ownership Blocker applies. The shares of Common Stock reported as beneficially owned by RBI II in this Schedule 13G represent the shares of Common Stock held directly by RBI II and the 2,580,586 shares of Common Stock that could be issued to RBI II upon exercise of certain of the Warrants directly held by RBI II under the Beneficial Ownership Blocker.
- *** Percentage based on the sum of (i) 78,338,098 shares of Common Stock outstanding as of December 26, 2023, as reported by the Issuer in the Prospectus and the Form 8-K/A, plus (ii) 2,580,586 shares of Common Stock issuable upon exercise of certain of the Warrants, which due to the Beneficial Ownership Limitation is the maximum number of shares that could be issued upon exercise of the Warrants.

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 person has ceased to be the beneficial owner of more than 5 percent of the class of securities, check the following \Box

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

N/A.

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

See the response to Item 4.

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

N/A.

Item 9. Notice of Dissolution of Group.

N/A.

Item 10. Certifications.

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above 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.

Date: February 14, 2024

Redmile Group, LLC

By: /s/ Jeremy C. Green

Name: Jeremy C. Green Title: Managing Member

Redmile Biopharma Investments II, L.P.

By: Redmile Biopharma Investments II (GP), LLC, its General Partner

By: /s/ Jeremy C. Green Name: Jeremy C. Green Title: Managing Member

/s/ Jeremy C. Green

Jeremy C. Green

Joint Filing Agreement

In accordance with Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, as amended (the "<u>Exchange Act</u>"), the undersigned hereby agree to the joint filing on behalf of each of them of a Statement on Schedule 13G (including any and all amendments thereto, the "<u>Schedule 13G</u>") relating to the Common Stock, \$0.001 par value per share, of Annexon, Inc., which may be deemed necessary pursuant to Regulation 13D or 13G promulgated under the Exchange Act.

The undersigned further agree that each party hereto is responsible for the timely filing of the Schedule 13G, and for the accuracy and completeness of the information concerning such party contained therein; provided, however, that no party is responsible for the accuracy or completeness of the information concerning any other party, unless such party knows or has a reason to believe that such information is inaccurate.

It is understood and agreed that a copy of this Joint Filing Agreement shall be attached as an exhibit to the Schedule 13G, filed on behalf of each of the parties hereto.

IN WITNESS WHEREOF, each of the undersigned has executed this Joint Filing Agreement as of the 14th day of February, 2024.

REDMILE GROUP, LLC

/s/ Jeremy C. Green Name: Jeremy C. Green Title: Managing Member

REDMILE BIOPHARMA INVESTMENTS II, L.P.

By: Redmile Biopharma Investments II (GP), LLC, its General Partner

/s / Jeremy C. Green Name: Jeremy C. Green Title: Managing Member

/s/ Jeremy C. Green JEREMY C. GREEN