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

# **SCHEDULE 13G**

#### **Under the Securities Exchange Act of 1934**

# ALX ONCOLOGY HOLDINGS INC.

(Name of Issuer)

# Common Stock, par value \$0.001 per share

(Title of Class of Securities)

#### 00166B105

(CUSIP Number)

October 4, 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)

\* 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. 00166B105

	i				
1	1 NAME OF REPORTING PERSON		NC		
	Redmile Group, LLC				
2					
	(A) 🗆				
	(в) 🗆				
3	SEC Use Only				
4	CITIZENSHIP OR PLACE OF ORGANIZATION				
	Delaware				
	·	5	Sole Voting Power		
Ν	UMBER OF		0		
	SHARES	6	Shared Voting Power		
	NEFICIALLY				
	NED BY EACH		4,991,545 <sup>(1)</sup>		
	EPORTING	7	Sole Dispositive Power		
PE	RSON WITH				
			0		
			Shared Dispositive Power		
			<b>4,991,545</b> <sup>(1)</sup>		
9	Aggregate Amou	INT BENE	eficially Owned by Each Reporting Person		
	<b>4,991,545</b> <sup>(1)</sup>				
10	Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)				
10	Children mil me				
11	Percent of Class Represented by Amount in Row (9)				
	<b>9.6%</b> <sup>(2)</sup>				
12	Type of Reporting Person (See Instructions)				
16	I TE OF REFORTIN	G I EK30			
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<sup>&</sup>lt;sup>(1)</sup> Redmile Group, LLC's beneficial ownership of the Issuer's common shares ("Common Stock") is comprised of (a) 3,741,545 shares of Common Stock and (b) 1,250,000 shares of Common Stock issuable upon exercise of certain pre-funded warrants (the "Warrants"), which, in each case, are owned by certain private investment vehicles and/or sub-advised accounts managed by Redmile Group, LLC (the "Redmile Clients"). The shares of Common Stock may be deemed beneficially owned by Redmile Group, LLC as investment manager of the Redmile Clients since, in such capacity, Redmile Group, LLC exercises voting and investment power over all of the shares held by the Redmile Clients. 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.

<sup>(2)</sup> Percentage based on: (i) 50,905,972 shares of Common Stock outstanding as of October 10, 2023, as reported by the Issuer in its Prospectus Supplement filed with the SEC on October 6, 2023 (the "Prospectus Supplement") and the Issuer's news release posted to its website on October 10, 2023, reporting the full exercise of the underwriters' option to purchase additional Common Stock (the "News Release"), plus (ii) 1,250,000 shares of Common Stock issuable upon exercise of the Warrants.

# CUSIP No. 00166B105

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1	NAME OF REPORTING PERSON					
	Jeremy C. Green					
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)					
	(A) 🗆					
3						
	Citizenship or Place of Organization					
4						
	United Kingdom	L				
		5	Sole Voting Power			
			0			
N	UMBER OF	6	Shared Voting Power			
	SHARES					
BE	NEFICIALLY		<b>4,991,54</b> 5 <sup>(3)</sup>			
OW	NED BY EACH	7	Sole Dispositive Power			
R	EPORTING	1				
PE	RSON WITH		0			
			Shared Dispositive Power			
		8				
			<b>4,991,545</b> <sup>(3)</sup>			
9		Dependent	FICIALLY OWNED BY EACH REPORTING PERSON			
9	AGGREGALE AMOU	JNI DENE	FICIALLY OWNED BY EACH REPORTING PERSON			
	(3)					
10	<b>4,991,545</b> <sup>(3)</sup>					
10	CHECK IF THE AGO	GREGATE A	Amount in Row (9) Excludes Certain Shares (See Instructions)			
		_				
11	Percent of Class Represented by Amount in Row (9)					
	<b>9.6%</b> <sup>(4)</sup>					
12	Type of Reporting Person (See Instructions)					
IN, HC						

<sup>(3)</sup> Jeremy C. Green's beneficial ownership of the Common Stock is comprised of (a) 3,741,545 shares of Common Stock and (b) 1,250,000 shares of Common Stock issuable upon exercise of the Warrants, which, in each case, are owned by the Redmile Clients. The shares of Common Stock may be deemed beneficially owned by Redmile Group, LLC as investment manager of the Redmile Clients since, in such capacity, Redmile Group, LLC exercises voting and investment power over all of the shares held by the Redmile Clients. 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.

<sup>(4)</sup> Percentage based on: (i) 50,905,972 shares of Common Stock outstanding as of October 10, 2023, as reported by the Issuer in its Prospectus Supplement and News Release, plus (ii) 1,250,000 shares of Common Stock issuable upon exercise of the Warrants.

# CUSIP No. 00166B105

· · · · ·					
1	NAME OF REPORTING PERSON				
	Redmile Biophar	ma Inve	stments III, L.P.		
2	CHECK THE APPRO	PRIATE B	DX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)		
	(A) 🗆				
	(в) 🗆				
3	SEC Use Only				
5	SEC USE ONEI				
CITIZENSHIP OR PLACE OF ORGANIZATION		RGANIZATION			
4					
	Delaware				
		5	Sole Voting Power		
			0		
		6	SHARED VOTING POWER		
NU	UMBER OF				
	SHARES		3,675,481 <sup>(5)</sup>		
BEN	FICIALLY	_			
OWN	ED BY EACH	7	Sole Dispositive Power		
	REPORTING				
PERSON WITH			0		
		8	Shared Dispositive Power		
			3,675,481 <sup>(5)</sup>		
9	Accordance Astor	Dever	FICIALLY OWNED BY EACH REPORTING PERSON		
9	AGGREGATE AMOU	NT DENE	FICIALLY OWNED BY EACH REPORTING PERSON		
	(E)				
	3,675,481 <sup>(5)</sup>				
10	CHECK IF THE AGG	regate <i>I</i>	Amount in Row (9) Excludes Certain Shares (See Instructions)		
11	Percent of Class Represented by Amount in Row (9)				
	<b>7.1%</b> <sup>(6)</sup>				
12	Type of Reporting Person (See Instructions)				
14	I IFE OF IVEFORIIN	G I EKSUN	(DEE INSTRUCTIONS)		
	PN				
	111				

<sup>(5)</sup> Redmile Biopharma Investments III, L.P. beneficially owns (i) 2,425,481 shares of Common Stock, and (ii) 1,250,000 shares of Common Stock issuable upon exercise of the Warrants.

<sup>(6)</sup> Percentage based on: (i) 50,905,972 shares of Common Stock outstanding as of October 10, 2023, as reported by the Issuer in its Prospectus Supplement and News Release, plus (ii) 1,250,000 shares of Common Stock issuable upon exercise of the Warrants.

# Item 1.

(a)	Name of Issuer		
	ALX Oncology Holdings Inc.		
(b)	Address of Issuer's Principal Executive Offices		
	323 Allerton Avenue South San Francisco, California 94080		
Item 2.			
(a)	Names of Persons Filing		
	Redmile Group, LLC Jeremy C. Green Redmile Biopharma Investments III, 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 III, 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 III, L.P.: Delaware		
(d)	Title of Class of Securities		
	Common Stock, par value \$0.001 per share		

(e) CUSIP Number

00166B105

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) o Broker or dealer registered under section 15 of the Act (15 U.S.C. 780);
- (b) o Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c);
- (c) o Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c);
- (d) o Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C 80a-8);
- (e) o An investment adviser in accordance with § 240.13d-1(b)(1)(ii)(E);
- (f) o An employee benefit plan or endowment fund in accordance with § 240.13d-1(b)(1)(ii)(F);
- (g) o A parent holding company or control person in accordance with § 240.13d-1(b)(1)(ii)(G);
- (h) o A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
- (i) o 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) o A non-U.S. institution in accordance with § 240.13d-1(b)(1)(ii)(J);
- (k) o 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 – 4,991,545 (1) Jeremy C. Green – 4,991,545 (1) Redmile Biopharma Investments III, L.P. – 3,675,481 (1)

(b) Percent of class:

Redmile Group, LLC – 9.6% (2) Jeremy C. Green – 9.6% (2) Redmile Biopharma Investments III, L.P. – 7.1% (2)

- (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:

4,991,545 (1)

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

### 0

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

4,991,545 (1)

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:

4,991,545 (1)

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

0

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

4,991,545 (1)

- Number of shares as to which Redmile Biopharma Investments III, L.P. has:
  - (i) Sole power to vote or to direct the vote:

0

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

3,675,481 (1)

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

0

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

3,675,481 (1)

(1) The Issuer's common shares reported herein are held by, or issuable upon exercise of the Warrants by, certain private investment vehicles and/or sub-advised accounts, including Redmile Biopharma Investments III, L.P. (collectively, the "Redmile Clients"), for which Redmile Group, LLC is the investment manager/adviser and, in such capacity, exercises voting and investment power over all of the common shares held by the Redmile Clients and may be deemed to be the beneficial owner of these shares. Jeremy C. Green serves as the principal of Redmile Group, LLC and also may be deemed to be the beneficial owner of these shares. 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.

Redmile Biopharma Investments III, L.P. is the direct beneficial owner of 2,425,481 shares of Common Stock and all of the shares of Common Stock issuable upon exercise of the Warrants.

(2) Percentage based on: (i) 50,905,972 shares of Common Stock outstanding as of October 10, 2023, as reported by the Issuer in its Prospectus Supplement and News Release, plus (ii) 1,250,000 shares of Common Stock issuable 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 [\_]

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: October 16, 2023

### **Redmile Group, LLC**

By: /s/ Jeremy C. Green

Name: Jeremy C. Green Title: Managing Member

/s/ Jeremy C. Green Jeremy C. Green

**Redmile Biopharma Investments III, L.P.** By: Redmile Biopharma Investments III (GP), LLC, its general partner

By: /s/ Jeremy C. Green

Name: Jeremy C. Green Title: Managing Member

#### **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 of ALX Oncology Holdings 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 16th day of October, 2023.

#### **REDMILE GROUP, LLC**

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

/s/ Jeremy C. Green JEREMY C. GREEN

#### **REDMILE BIOPHARMA INVESTMENTS III, L.P.**

By: Redmile Biopharma Investments III (GP), LLC, its general partner

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