

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934

(Amendment No. 2)*

ALX ONCOLOGY HOLDINGS INC

(Name of Issuer)

Common Stock, par value \$0.001 per share

(Title of Class of Securities)

(CUSIP Number)

David Pezeshki
1700 Owens Street, Suite 595
San Francisco, CA, 94158
(415) 800-0800

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)
10/14/2026

(Date of Event Which Requires Filing of This Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§ 240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box. ☐

The information required on 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).

SCHEDULE 13D

CUSIP No.

- 1

Name of reporting person
venBio Global Strategic Fund, L.P.
Check the appropriate box if a member of a Group (See Instructions)
- 2

☐ (a)
☐ (b)
- 3

SEC use only
Source of funds (See Instructions)
- 4

WC

5 Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)



Citizenship or place of organization

6 CAYMAN ISLANDS

Sole Voting Power

7

0.00

Number of Shares Beneficially Owned by Each Reporting Person

Shared Voting Power

8

4,307,034.00

Sole Dispositive Power

9

0.00

With: Shared Dispositive Power

10

4,307,034.00

Aggregate amount beneficially owned by each reporting person

11 4,307,034.00

Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)

12 ☐ Percent of class represented by amount in Row (11)

13 3.3 %

Type of Reporting Person (See Instructions)

14 PN

Comment for Type of Reporting Person: The amounts reported in Rows 8, 10 and 11 include 129,260 shares of Common Stock issuable upon exercise of the Pre-Funded Warrant (as defined in Item 3), subject to the beneficial ownership limitation described in Items 5 and 6.

SCHEDULE 13D

CUSIP No.

Name of reporting person

1 venBio Global Strategic Fund II L.P.

Check the appropriate box if a member of a Group (See Instructions)

2 ☐ (a)
☐ (b)

3 SEC use only
Source of funds (See Instructions)

4 WC

Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)

5 ☐

Citizenship or place of organization

6 CAYMAN ISLANDS

Sole Voting Power

7

0.00

Number of Shares Beneficially Owned by Each Reporting Person

Shared Voting Power

8

8,453,038.00

Sole Dispositive Power

9

0.00

10 Shared Dispositive Power

	8,453,038.00
11	Aggregate amount beneficially owned by each reporting person
	8,453,038.00
12	Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)
	☐
13	Percent of class represented by amount in Row (11)
	6.5 %
14	Type of Reporting Person (See Instructions)
	PN

SCHEDULE 13D

CUSIP No.

1	Name of reporting person
	venBio Global Strategic GP, L.P.
	Check the appropriate box if a member of a Group (See Instructions)
2	☐ (a)
	☐ (b)
3	SEC use only
4	Source of funds (See Instructions)
	AF
5	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)
	☐
6	Citizenship or place of organization
	CAYMAN ISLANDS
	Sole Voting Power
7	0.00
Number of	Shared Voting Power
Shares	
Beneficially	8 4,307,034.00
Owned by	
Each	Sole Dispositive Power
Reporting	9 0.00
Person	
With:	Shared Dispositive Power
	10 4,307,034.00
	Aggregate amount beneficially owned by each reporting person
11	4,307,034.00
12	Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)
	☐
13	Percent of class represented by amount in Row (11)
	3.3 %
14	Type of Reporting Person (See Instructions)
	PN

Comment for Type of Reporting Person: The amounts reported in Rows 8, 10 and 11 include 129,260 shares of Common Stock issuable upon exercise of the Pre-Funded Warrant, subject to the beneficial ownership limitation described in Items 5 and 6.

SCHEDULE 13D

CUSIP No.

1	Name of reporting person
	venBio Global Strategic GP II, L.P.
	Check the appropriate box if a member of a Group (See Instructions)
2	☐ (a)
	☐ (b)
3	SEC use only
4	Source of funds (See Instructions)
	AF
5	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)
	☐
6	Citizenship or place of organization
	CAYMAN ISLANDS
	Sole Voting Power
7	0.00
Number of Shares Beneficially Owned by Each Reporting Person With:	Shared Voting Power
8	8,453,038.00
	Sole Dispositive Power
9	0.00
	Shared Dispositive Power
10	8,453,038.00
	Aggregate amount beneficially owned by each reporting person
11	8,453,038.00
	Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)
12	☐
	Percent of class represented by amount in Row (11)
13	6.5 %
	Type of Reporting Person (See Instructions)
14	PN

SCHEDULE 13D

CUSIP No.

1	Name of reporting person
	venBio Global Strategic GP, Ltd.
	Check the appropriate box if a member of a Group (See Instructions)
2	☐ (a)
	☐ (b)
3	SEC use only
4	Source of funds (See Instructions)
	AF
5	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)
	☐

6	Citizenship or place of organization
	CAYMAN ISLANDS
	Sole Voting Power
7	0.00
Number of Shares Beneficially Owned by Each Reporting Person With:	Shared Voting Power
8	4,307,034.00
	Sole Dispositive Power
9	0.00
	Shared Dispositive Power
10	4,307,034.00
	Aggregate amount beneficially owned by each reporting person
11	4,307,034.00
	Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)
12	☐
	Percent of class represented by amount in Row (11)
13	3.3 %
	Type of Reporting Person (See Instructions)
14	CO

Comment for Type of Reporting Person: The amounts reported in Rows 8, 10 and 11 include 129,260 shares of Common Stock issuable upon exercise of the Pre-Funded Warrant, subject to the beneficial ownership limitation described in Items 5 and 6.

SCHEDULE 13D

CUSIP No.

1	Name of reporting person
	venBio Global Strategic GP II, Ltd.
	Check the appropriate box if a member of a Group (See Instructions)
2	☐ (a)
	☐ (b)
3	SEC use only
	Source of funds (See Instructions)
4	AF
	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)
5	☐
	Citizenship or place of organization
6	CAYMAN ISLANDS
	Sole Voting Power
7	0.00
Number of Shares Beneficially Owned by Each Reporting Person With:	Shared Voting Power
8	8,453,038.00
	Sole Dispositive Power
9	0.00
	Shared Dispositive Power
10	8,453,038.00
11	Aggregate amount beneficially owned by each reporting person

	8,453,038.00
12	Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)
	☐
13	Percent of class represented by amount in Row (11)
	6.5 %
14	Type of Reporting Person (See Instructions)
	CO

SCHEDULE 13D

CUSIP No.

1	Name of reporting person
	GOODMAN COREY S
	Check the appropriate box if a member of a Group (See Instructions)
2	☐ (a)
	☐ (b)
3	SEC use only
4	Source of funds (See Instructions)
5	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)
	☐
6	Citizenship or place of organization
	UNITED STATES
	Sole Voting Power
7	0.00
Number of Shares Beneficially Owned by Each Reporting Person With:	Shared Voting Power
8	12,927,442.00
	Sole Dispositive Power
9	0.00
	Shared Dispositive Power
10	12,927,442.00
	Aggregate amount beneficially owned by each reporting person
11	12,927,442.00
12	Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)
	☐
13	Percent of class represented by amount in Row (11)
	9.99 %
14	Type of Reporting Person (See Instructions)
	IN, HC

Comment for Type of Reporting Person: The amounts reported in Rows 8, 10 and 11 include 129,260 shares of Common Stock issuable upon exercise of the Pre-Funded Warrant, subject to the beneficial ownership limitation described in Items 5 and 6.

SCHEDULE 13D

Item 1.	Security and Issuer
(a)	Title of Class of Securities:

Common Stock, par value \$0.001 per share

Name of Issuer:

(b)

ALX ONCOLOGY HOLDINGS INC

Address of Issuer's Principal Executive Offices:

(c)

323 Allerton Avenue, South San Francisco, CALIFORNIA , 94080.

Item 1 This Amendment No. 2 to Schedule 13D ("Amendment No. 2") is being filed by the undersigned, pursuant to Section 240.13d-
Comment: 2(a) of the Act, to amend and supplement the Schedule 13D filed with the U.S. Securities and Exchange Commission (the "SEC") on October 1, 2020 (the "Initial Schedule 13D"), as amended by Amendment No. 1 filed with the SEC on February 4, 2026 (as so amended, the "Schedule 13D"), with respect to the shares of common stock, par value \$0.001 per share (the "Common Stock"), of ALX Oncology Holdings Inc. (the "Issuer"), whose principal executive offices are located at 323 Allerton Avenue, South San Francisco, California 94080. Except as expressly amended and supplemented by this Amendment No. 2, the Schedule 13D remains unchanged. Capitalized terms used but not otherwise defined in this Amendment No. 2 have the meanings ascribed to them in the Schedule 13D.

Item 2. Identity and Background

Item 2 of the Schedule 13D is hereby amended and restated in its entirety as follows: This Schedule 13D is being filed by the following persons (each a "Reporting Person" and together the "Reporting Persons"): i. venBio Global Strategic Fund, L.P., a Cayman Islands partnership ("Fund I"); ii. venBio Global Strategic GP, L.P., a Cayman Islands partnership ("General Partner I"), which is the sole general partner of Fund I; iii. venBio Global Strategic GP, Ltd., a Cayman Islands company ("GP Ltd. I"), which is the sole general partner of General Partner I; iv. venBio Global Strategic Fund II, L.P., a Cayman Islands partnership ("Fund II"); v. venBio Global Strategic GP II, L.P., a Cayman Islands partnership ("General Partner II"), which is the sole general partner of Fund II; vi. venBio Global Strategic GP II, Ltd., a Cayman Islands company ("GP Ltd. II"), which is the sole general partner of General Partner II; and vii. Corey Goodman, the sole director of GP Ltd. I and GP Ltd. II. Since the filing of Amendment No. 1, Robert Adelman ceased to serve as a director of GP Ltd. I and GP Ltd. II and, as a result, is no longer included as a Reporting Person in this Schedule 13D. Each of the remaining Reporting Persons is a party to the Joint Filing Agreement, as further described in Item 6.

(b) The principal business address of each Reporting Person is c/o venBio Partners, LLC, 1700 Owens Street, Suite 595, San Francisco, California 94158.

The principal business of Fund I is to make strategic equity and equity-related investments principally in entities operating in the life sciences industry and/or assets relating thereto. The principal business of General Partner I is to act as the sole general partner of Fund I. The principal business of GP Ltd. I is to act as the sole general partner of General Partner I. The principal business of Fund II is to make strategic equity and equity-related investments principally in entities operating in the life sciences industry and/or assets relating thereto. The principal business of General Partner II is to act as the sole general partner of Fund II. The principal business of GP Ltd. II is to act as the sole general partner of General Partner II. The principal occupation of Corey Goodman is to manage General Partner I, GP Ltd. I, General Partner II and GP Ltd. II.

(d) During the last five years, none of the Reporting Persons has been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).

(e) During the last five years, none of the Reporting Persons has been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and, as a result of such proceeding, was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

(f) Fund I, General Partner I, GP Ltd. I, Fund II, General Partner II and GP Ltd. II are each organized under the laws of the Cayman Islands. Mr. Goodman is a citizen of the United States of America.

Item 3. Source and Amount of Funds or Other Consideration

Item 3 of the Schedule 13D is hereby amended and supplemented as follows: On October 14, 2026, Fund I entered into an exchange agreement (the "Exchange Agreement") with the Issuer, pursuant to which Fund I agreed to surrender 253,826 shares of Common Stock for no consideration, and the Issuer agreed to issue to Fund I a pre-funded warrant (the "Pre-Funded Warrant") to purchase up to 253,826 shares of Common Stock. Pursuant to the Exchange Agreement, the surrender of the shares of Common Stock and issuance of the Pre-Funded Warrant were expected to occur on or about October 15, 2026, subject to the satisfaction or waiver of the conditions set forth therein. The Pre-Funded Warrant has an exercise price of \$0.001 per share and is exercisable at any time on or after the date of issuance. Pursuant to the terms of the Pre-Funded Warrant, Fund I may not exercise the Pre-Funded Warrant to the extent that, immediately prior to or following such exercise, Fund I, together with the other Attribution Parties (as defined in the Pre-Funded Warrant), beneficially owns or would beneficially own more than 9.99% of the shares of Common Stock outstanding or the combined voting power of all of the Issuer's securities outstanding, in each case after giving effect to such exercise. By written notice to the Issuer, Fund I may increase or decrease such limitation to a percentage not exceeding 19.99%, provided that any increase will not become effective until the 61st day after such notice is delivered to the Issuer. The Pre-Funded Warrant does not expire until exercised in full and may be exercised on a cashless basis in accordance with its terms. The foregoing descriptions of the Exchange Agreement and Pre-Funded Warrant do not purport to be complete and are qualified in their entirety by reference to the form of Exchange Agreement and form of Pre-Funded Warrant, which are filed hereto as Exhibit 99.3 and Exhibit 99.4, respectively, and are incorporated by reference herein.

Item 4. Purpose of Transaction

Item 4 of the Schedule 13D is hereby amended and supplemented as follows: The responses to Items 3 and 6 of this Amendment No. 2 are incorporated by reference herein. Mr. Goodman resigned from the Issuer's board of directors effective June 29, 2026.

Item 5. Interest in Securities of the Issuer

(a) Items 5(a)-(c) of the Schedule 13D are hereby amended and restated as follows: The information set forth in rows 7 through 13 of the cover pages to this Amendment No. 2 is incorporated by reference herein. The amounts reported herein include 129,260 shares of Common Stock issuable upon exercise of the Pre-Funded Warrant due to the 9.99% beneficial ownership limitation described in Item 6 of this Amendment No. 2.

- (b) Fund I directly holds 3,715,963 shares of Common Stock and the Pre-Funded Warrant to purchase 253,826 shares of Common Stock. venBio SPV, LLC ("SPV") directly holds 461,811 shares of Common Stock. As the sole owner of SPV, Fund I may be deemed to beneficially own the shares of Common Stock directly held by SPV. As the sole general partner of Fund I, General Partner I may be deemed to beneficially own the shares of Common Stock directly held by Fund I and SPV. As the sole general partner of General Partner I, GP Ltd. I may also be deemed to beneficially own the shares of Common Stock directly held by Fund I and SPV. Fund II directly holds 8,453,038 shares of Common Stock. As the sole general partner of Fund II, General Partner II may be deemed to beneficially own the shares of Common Stock directly held by Fund II. As the sole general partner of General Partner II, GP Ltd. II may also be deemed to beneficially own the shares of Common Stock directly held by Fund II. As the sole director of GP Ltd. I and GP Ltd. II, Mr. Goodman may be deemed to beneficially own the shares of Common Stock directly held by Fund I, SPV and Fund II. In addition, Mr. Goodman may be deemed to beneficially own (i) 113,287 shares of Common Stock held of record by the Goodman Barinaga Trust, for which Mr. Goodman serves as trustee, and (ii) 54,083 shares of Common Stock held of record by Emaldi Corporation, for which Mr. Goodman serves as a director.
- (c) The response to Item 3 of this Amendment No. 2 is incorporated by reference herein. Except for the exchange described therein, none of the Reporting Persons has effected any transactions in securities of the Issuer during the past 60 days.
- Item 6. Contracts, Arrangements, Understandings or Relationships With Respect to Securities of the Issuer
Item 6 of the Schedule 13D is hereby amended and supplemented as follows: The response to Item 3 of this Amendment No. 2 is incorporated by reference herein. On October 16, 2026, the Reporting Persons entered into a Joint Filing Agreement (the "Joint Filing Agreement"), pursuant to which they agreed to the joint filing on behalf of each of them of statements on Schedule 13D with respect to securities of the Issuer to the extent required by applicable law. A copy of the Joint Filing Agreement is filed as Exhibit 99.5 hereto and is incorporated by reference herein.
- Item 7. Material to be Filed as Exhibits.
Item 7 of the Schedule 13D is hereby amended and supplemented to add the following exhibits: Exhibit 99.3 - Form of Exchange Agreement (incorporated by reference to Exhibit 10.1 to the Issuers current report on Form 8-K filed with the SEC on October 15, 2026). Exhibit 99.4 - Form of Pre-Funded Warrant (incorporated by reference to Exhibit 4.1 to the Issuer's current report on Form 8-K filed with the SEC on October 15, 2026). Exhibit 99.5 - Joint Filing Agreement, dated October 16, 2026.

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.

venBio Global Strategic Fund, L.P.

Signature: /s/ David Pezeshki

Name/Title: David Pezeshki, as attorney-in-fact for Corey Goodman,
sole director of GP Ltd. I.

Date: 10/16/2026

venBio Global Strategic Fund II L.P.

Signature: /s/ David Pezeshki

Name/Title: David Pezeshki, as attorney-in-fact for Corey Goodman,
sole director of GP Ltd. II.

Date: 10/16/2026

venBio Global Strategic GP, L.P.

Signature: /s/ David Pezeshki

Name/Title: David Pezeshki, as attorney-in-fact for Corey Goodman,
sole director of GP Ltd. I.

Date: 10/16/2026

venBio Global Strategic GP II, L.P.

Signature: /s/ David Pezeshki

Name/Title: David Pezeshki, as attorney-in-fact for Corey Goodman,
sole director of GP Ltd. II.

Date: 10/16/2026

venBio Global Strategic GP, Ltd.

Signature: /s/ David Pezeshki

Name/Title: David Pezeshki, as attorney-in-fact for Corey Goodman,
sole director of GP Ltd. I.

Date: 10/16/2026

venBio Global Strategic GP II, Ltd.

Signature: /s/ David Pezeshki

Name/Title: David Pezeshki, as attorney-in-fact for Corey Goodman,
sole director of GP Ltd. II.

Date: 10/16/2026

Signature: /s/ David Pezeshki

Name/Title: David Pezeshki, as attorney-in-fact

Date: 10/16/2026

**Comments
accompanying
signature:**

This Schedule 13D was executed by David Pezeshki on behalf of the individual listed above, pursuant to a Power of Attorney, a copy of which is attached as Exhibit 99.2 to the Initial Schedule 13D filed October 1, 2020, which is incorporated herein by reference.

JOINT FILING AGREEMENT

The persons below hereby agree that the Schedule 13D to which this agreement is attached as an exhibit, as well as all future amendments to such Schedule 13D, shall be filed jointly on behalf of each of them. This agreement is intended to satisfy the requirements of Rule 13d-1(k)(1)(iii) under the Securities Exchange Act of 1934.

Dated: October 16, 2026

VENBIO GLOBAL STRATEGIC FUND, L.P.

By: VENBIO GLOBAL STRATEGIC GP, L.P.
General Partner

By: VENBIO GLOBAL STRATEGIC GP, LTD.
General Partner

By:
*
Title: Director

VENBIO GLOBAL STRATEGIC GP, L.P.

By: VENBIO GLOBAL STRATEGIC GP, LTD.
General Partner

By:
*
Title: Director

VENBIO GLOBAL STRATEGIC GP, LTD.

By:
*
Title: Director

VENBIO GLOBAL STRATEGIC FUND II, L.P.

By: VENBIO GLOBAL STRATEGIC GP II, L.P.
General Partner

By: VENBIO GLOBAL STRATEGIC GP II, LTD.
General Partner

By:
*
Title: Director

VENBIO GLOBAL STRATEGIC GP II, L.P.

By: VENBIO GLOBAL STRATEGIC GP II, LTD.
General Partner

By:
*
Title: Director

VENBIO GLOBAL STRATEGIC GP II, LTD.

By:
*
Title: Director

*

Corey Goodman

* By: /s/ David Pezeshki
David Pezeshki
As attorney-in-fact

This Agreement was executed by David Pezeshki on behalf of the individual listed above pursuant to a Power of Attorney, a copy of which was attached as Exhibit 99.1 to the Initial Schedule 13D.
