Filed Pursuant to Rule 424(b)(5) Registration No. 333-263863

The information in this preliminary prospectus supplement is not complete and may be changed. A registration statement relating to these securities has been declared effective by the Securities and Exchange Commission. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell these securities and they are not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

Subject to completion, dated October 4, 2023

Preliminary Prospectus Supplement (To Prospectus Dated May 25, 2022)



Common Stock

Pre-Funded Warrants to Purchase Shares of Common Stock

We are offering shares of our common stock, par value \$0.001 per share (common stock) and, in lieu of common stock to certain investors that so choose, pre-funded warrants to purchase shares of our common stock in this offering. The purchase price of each pre-funded warrant will equal the price per share at which shares of our common stock are being sold to the public in this offering, minus \$0.001 multiplied by the number of shares subject to the warrant, and the exercise price of each pre-funded warrant will equal \$0.001 per share. This prospectus supplement also relates to the offering of the shares of our common stock issuable upon the exercise of such pre-funded warrants.

Our common stock is listed on The Nasdaq Global Select Market under the symbol "ALXO". On October 3, 2023, the last reported sale price of our common stock on The Nasdaq Global Select Market was \$7.51 per share. There is no established public trading market for the pre-funded warrants, and we do not expect a market to develop. We do not intend to list the pre-funded warrants on The Nasdaq Global Select Market, any other national securities exchange or any other recognized trading system.

We are a "smaller reporting company" as defined under the federal securities laws and, as such, we have elected to comply with certain reduced reporting requirements for this prospectus supplement and may elect to do so in future filings.

Investing in our securities involves a high degree of risk. See "Risk Factors" beginning on page S-7 of this prospectus supplement, page 2 of the accompanying prospectus and in the reports we file with the Securities and Exchange Commission pursuant to the Securities and Exchange Act of 1934, as amended, incorporated by reference in this prospectus supplement and the accompanying prospectus.

		Per Pre-Funded			
	Per Share	Warrant	Total		
Public offering price	\$	\$	\$		
Underwriting discounts and commissions ⁽¹⁾	\$	\$	\$		
Proceeds, before expenses, to us	\$	\$	\$		

(1) See "Underwriting" beginning on page S-21 for additional information regarding underwriter compensation.

We have granted the underwriters an option for a period of 30 days to purchase up to an additional \$ of shares of our common stock.

Delivery of the shares of common stock and pre-funded warrants is expected to be made on or about , 2023.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus supplement or the accompanying prospectus. Any representation to the contrary is a criminal offense.

Piper Sandler Cantor

This date of this prospectus supplement is October , 2023

TABLE OF CONTENTS

Prospectus Supplement	Page
ABOUT THIS PROSPECTUS SUPPLEMENT	S-1
PROSPECTUS SUPPLEMENT SUMMARY	S-2
RISK FACTORS	S-7
SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS	S-9
USE OF PROCEEDS	S-11
DESCRIPTION OF PRE-FUNDED WARRANTS	S-12
DILUTION	S-14
MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS FOR NON-U.S. HOLDERS	S-16
UNDERWRITING	S-21
LEGAL MATTERS	S-31
<u>EXPERTS</u>	S-31
WHERE YOU CAN FIND MORE INFORMATION	S-31
INCORPORATION OF CERTAIN INFORMATION BY REFERENCE	S-32
	Page
Prospectus	
ABOUT THIS PROSPECTUS	ii
THE COMPANY	1
RISK FACTORS	2
SPECIAL NOTE REGARDING FORWARD LOOKING STATEMENTS	3
<u>USE OF PROCEEDS</u>	5
DESCRIPTION OF SECURITIES	6
DESCRIPTION OF CAPITAL STOCK	7
DESCRIPTION OF WARRANTS	13
DESCRIPTION OF PURCHASE CONTRACTS	14
DESCRIPTION OF UNITS	15
PLAN OF DISTRIBUTION	16
<u>LEGAL MATTERS</u>	17
<u>EXPERTS</u>	17
WHERE YOU CAN FIND MORE INFORMATION	17
INCORPORATION OF CERTAIN INFORMATION BY REFERENCE	18

ABOUT THIS PROSPECTUS SUPPLEMENT

This document is part of the registration statement that we filed with the Securities and Exchange Commission (the SEC) using a "shelf" registration process and consists of two parts. The first part is this prospectus supplement, including the documents incorporated by reference, which describes the specific terms of this offering. The second part, the accompanying prospectus, including the documents incorporated by reference, gives more general information, some of which may not apply to this offering. Generally, when we refer to the "prospectus", we are referring to both parts combined. This prospectus supplement may add to, update or change information in the accompanying prospectus and the documents incorporated by reference into this prospectus supplement or the accompanying prospectus.

If information in this prospectus supplement is inconsistent with the accompanying prospectus or with any document incorporated by reference that was filed with the SEC before the date of this prospectus supplement, you should rely on this prospectus supplement. This prospectus supplement, the accompanying prospectus and the documents incorporated by reference into each include important information about us, the securities being offered and other information you should know before investing in our securities. You should also read and consider information in the documents we have referred you to in the sections of this prospectus supplement and the accompanying prospectus titled "Where You Can Find More Information" and "Incorporation of Certain Information by Reference."

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference herein or into the accompanying prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

We take no responsibility for, and can provide no assurances as to the reliability of, any information that is in addition to or different from that contained or incorporated by reference in this prospectus supplement and the accompanying prospectus. We are not offering to sell these securities in any jurisdiction where the offer or sale is not permitted. You should not assume that the information contained or incorporated by reference in this prospectus supplement or the accompanying prospectus is accurate as of any date other than as of the date of this prospectus supplement or the accompanying prospectus, as the case may be, or in the case of the documents incorporated by reference, the date of such documents regardless of the time of delivery of this prospectus supplement and the accompanying prospectus or any sale of our securities. Our business, financial condition, liquidity, results of operations and prospects may have changed since those dates.

When we refer to "ALX Oncology Holdings," "the Company," "we," "us" and "our" in this prospectus supplement or the accompanying prospectus, we mean ALX Oncology Holdings Inc., unless the context indicates otherwise or unless otherwise specified. When we refer to "you," we mean the potential purchasers of the applicable series of securities offered by this prospectus supplement.

No action is being taken in any jurisdiction outside the United States to permit a public offering of the securities or possession or distribution of this prospectus supplement or the accompanying prospectus in that jurisdiction. Persons who come into possession of this prospectus supplement or the accompanying prospectus in jurisdictions outside the United States are required to inform themselves about and to observe any restrictions as to this offering and the distribution of this prospectus supplement or the accompanying prospectus applicable to that jurisdiction.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights selected information contained in this prospectus supplement and the accompanying prospectus and in the documents we incorporate by reference herein and therein. This summary does not contain all the information that you should consider before making an investment decision. You should read this entire prospectus supplement and the accompanying prospectus carefully, especially the risks of investing in our common stock and pre-funded warrants discussed under "Risk Factors" beginning on page S-7 of this prospectus supplement, the "Risk Factors" section of our most recent Quarterly Report on Form 10-Q for the quarter ended June 30, 2023, as well as any amendments thereto, along with our consolidated financial statements and notes to those consolidated financial statements and the other information incorporated by reference in this prospectus supplement and the accompanying prospectus and in our filings with the SEC. This prospectus supplement may add to, update or change information in the accompanying prospectus.

Overview

We are a clinical-stage immuno-oncology company focused on helping patients fight cancer by developing therapies that block the CD47 immune checkpoint inhibitor and bridge the innate and adaptive immune system. Our lead product candidate, the CD47 blocker evorpacept, is currently in multiple Phase 1 and 2 clinical trials. Cancer cells leverage CD47, a cell surface protein, as a "don't eat me" signal to evade macrophage phagocytosis or as a "don't activate T-cells" signal that prevents activation of T-cells by dendritic cells. We are developing evorpacept to be a next-generation checkpoint inhibitor designed to have a high affinity for CD47 and to avoid the limitations caused by hematologic toxicities inherent in other CD47 binding blocking approaches. Rationally engineered with an inactive Fc effector function, evorpacept's clinical data has demonstrated a substantially better safety profile to date than other anti-CD47 molecules in the clinic with an active Fc (i.e., binding the Fc gamma receptor on macrophages). This favorable safety profile allows us to dose higher with minimal overlapping toxicity in the combination treatment setting. CD47 expressed on cancer cells binds to its receptor SIRP α , which is predominantly expressed on two cell types: macrophages and dendritic cells. We are focused on evorpacept development with the standard-of-care agents, revolving around these two cell types. As of September 30, 2023, we had dosed over 400 subjects with evorpacept across a range of solid and hematologic malignancies in combination with a number of leading anti-cancer agents. Based on our clinical results to date in multiple oncology indications showing encouraging anti-tumor activity and tolerability as well as our clinical development plans, our strategy is to pursue evorpacept as a potentially critical component for future combination treatments in oncology.

Our second program combines our SIRP α antibodies with Tallac Therapeutics' toll-like receptor 9 agonist antibody conjugate to deliver a potent immune activator to myeloid cells in the tumor to promote innate and adaptive anti-cancer immune responses. Additionally, with our acquisition of ScalmiBio, Inc. (ScalmiBio) in October 2021, we are developing antibody drug conjugate candidates based on our expertise in protein engineering and oncology.

Recent Developments

Recently Announced Positive Prespecified Interim Phase 2 Data from our ASPEN-06 Clinical Trial

We recently announced positive prespecified interim Phase 2 clinical data from our ASPEN-06 clinical trial, a randomized Phase 2 (open-label) / Phase 3 (double-blinded), multi-center international clinical trial of patients with second or third line metastatic HER2-overexpressing gastric/GEJ adenocarcinoma that has progressed on or after prior HER2-directed therapy and fluoropyrimidine- or platinum-containing chemotherapy. The ASPEN-06 clinical trial is evaluating evorpacept in combination with trastuzumab, CYRAMZA® (ramucirumab) and paclitaxel for the treatment of patients with HER2-positive gastric/gastroesophageal junction (GEJ) cancer. This prespecified interim analysis represents results from 54 randomized patients with second and third line gastric/GEJ cancer, including a meaningful number of patients previously treated with ENHERTU® (trastuzumab deruxtecan) and checkpoint inhibitors.

Phase 2 ASPEN-06 Interim Analysis Results:

- A confirmed overall response rate (ORR) of 52% was demonstrated for evorpacept in combination with trastuzumab + CYRAMZA + paclitaxel compared to 22% for the control group of trastuzumab + CYRAMZA + paclitaxel.
- Median duration of response (mDOR) was not reached for the evorpacept combination treatment arm compared to 7.4 months for the control group.
- The safety profile of evorpacept was consistent with previous clinical trials and was well-tolerated.
- These interim results compare favorably to the efficacy reported for CYRAMZA + paclitaxel in the RAINBOW study (ORR of 28% and mDOR of 4.4 months), which is the regulatory benchmark and global standard of care for second line and greater HER2-positive gastric/GEJ cancer.

These data also compare favorably to the efficacy reported for ENHERTU in the third line setting in the DESTINY-Gastric01 study (ORR of 41% and mDOR of 11 months), which has defined regional standard of care.

We also provided updates for the anticipated upcoming clinical milestones for evorpacept's development pipeline:

- 1H 2024
 - Non-Hodgkin Lymphoma Phase 1b investigator-sponsored trial with rituximab + lenalidomide top line results (Q1/Q2 2024)
 - Gastric/GEJ Cancer Phase 2 ASPEN-06 randomized top line final results (Q2 2024)
- 2H 2024
 - Head and Neck Squamous Cell Carcinoma Phase 2 ASPEN-03 with KEYTRUDA randomized top line results
 - Head and Neck Squamous Cell Carcinoma Phase 2 ASPEN-04 with KEYTRUDA + chemotherapy randomized top line results
 - Gastric/GEJ Cancer Phase 3 ASPEN-06 study initiation
 - Urothelial Carcinoma Phase 1b ASPEN-07 with PADCEV® (enfortumab vedotin-ejfv) top line results
 - Breast Cancer Phase 1b I-SPY study with ENHERTU top line results

Preliminary Financial Results for the Quarter Ended September 30, 2023

Our financial statements for the quarter ended September 30, 2023 will not be available until after this offering is completed and consequently will not be available to you prior to investing in our common stock offered in this offering. Based upon preliminary estimates and information available to us as of the date of this prospectus supplement, we expect to report that we had approximately \$196.5 million of cash, cash equivalents and short-term and long-term investments as of September 30, 2023. We have not yet completed our quarter-end financial close process for the quarter ended September 30, 2023. This estimate of our cash, cash equivalents and short-term and long-term investments as of September 30, 2023 is preliminary, has not been audited and is subject to change upon completion of our financial statement closing procedures. Additional information and disclosure would be required for a more complete understanding of our financial position and results of operations as of September 30, 2023. Our independent registered public accounting firm has not audited, reviewed or performed any procedures with respect to this preliminary result and, accordingly, does not express an opinion or any other form of assurance about it.

Corporate Information

We were formed as a Delaware corporation on April 1, 2020 for the purpose of completing the Company's initial public offering of its common stock and related transactions in order to carry on the business of ALX Oncology Limited. Subsequently, ALX Oncology Limited became a wholly-owned subsidiary of the Company as a result of the internal reorganization. Our office is located at 323 Allerton Avenue, South San Francisco, California 94080. Our telephone number is 650-466-7125. Our website address is https://www.alxoncology.com. Information contained on, or that can be accessed through, our website is not incorporated by reference into this prospectus supplement and should not be considered to be part of this prospectus supplement or the accompanying prospectus. We have included our website address in this prospectus supplement and the accompanying prospectus solely as an inactive textual reference.

We use ALX Oncology and other marks as trademarks in the United States and other countries. Solely for convenience, trademarks and trade names referred to in this prospectus, including logos, artwork and other visual displays, may appear without the ® or TM symbols, but such references are not intended to indicate in any way that we will not assert, to the fullest extent under applicable law, our rights or the rights of the applicable licensor to these trademarks and trade names.

Implications of Being a Smaller Reporting Company

We are a "smaller reporting company," meaning that the market value of our stock held by non-affiliates plus the proposed aggregate amount of gross proceeds to us as a result of this offering is less than \$700 million and our annual revenue was less than \$100 million during the most recently completed fiscal year. We may continue to be a smaller reporting company after this offering if either (1) the market value of our stock held by non-affiliates is less than \$250 million or (2) our annual revenue was less than \$100 million during the most recently completed fiscal year and the market value of our stock held by non-affiliates is less than \$700 million. Specifically, as a smaller reporting company we may choose to present only the two most recent fiscal years of audited financial statements in our Annual Report on Form 10-K and, similar to emerging growth companies, smaller reporting companies have reduced disclosure obligations regarding executive compensation.

THE OFFERING

Common Stock offered by Us

shares of our common stock in this offering, or shares of common stock if the underwriters exercise their option to purchase additional shares in full. We are also offering, in lieu of common stock to certain investors that so choose, pre-funded warrants to purchase shares of our common stock.

Pre-funded warrants offered by us

The purchase price of each pre-funded warrant will equal the price per share at which shares of common stock are being sold to the public in this offering minus \$0.001, multiplied by the number of shares subject to the warrant, and the exercise price of each pre-funded warrant will equal \$0.001 per share. Each pre-funded warrant will be exercisable from the date of issuance until the date the warrant is exercised in full, subject to an ownership limitation. See "Description of Pre-Funded Warrants." This prospectus supplement also relates to the offering of the shares of common stock issuable upon the exercise of such pre-funded warrants.

Option to purchase additional shares

We have granted the underwriters an option, exercisable for 30 days after the date of this prospectus supplement, to purchase up to an additional shares of common stock.

Total common stock to be outstanding immediately after this offering

shares of common stock (assuming all of the pre-funded warrants issued in this offering are exercised), or shares of common stock if the underwriters exercise their option to purchase additional shares in full.

Use of proceeds

We estimate that the net proceeds from this offering will be approximately \$ million (or approximately \$ million if the underwriters exercise their option to purchase additional shares in full), after deducting underwriting discounts and commissions and estimated offering expenses payable to us. We intend to use the net proceeds from this offering, together with our existing cash, cash equivalents and short-term and long-term investments, to fund the continued clinical development of evorpacept and the related clinical trials, including our ASPEN-06 clinical trial, and for working capital and other general corporate purposes. See "Use of Proceeds."

Risk factors

Investing in our securities involves substantial risks. You should read the "Risk Factors" section beginning on page S-7 of this prospectus supplement and in the documents incorporated by reference into this prospectus supplement and the accompanying prospectus for a discussion of the factors you should carefully consider before deciding to invest in our securities.

Nasdaq Global Select Market Symbol

"ALXO"

The number of shares of common stock to be outstanding immediately after this offering is based on 40,992,179 shares of common stock outstanding as of June 30, 2023, and excludes:

• 6,648,245 shares of our common stock issuable upon the exercise of options outstanding as of June 30, 2023, at a weighted-average exercise price of \$19.56 per share;

- 714,705 shares of our common stock issuable pursuant to restricted stock units outstanding as of June 30, 2023;
- 2,530,400 shares of our common stock issuable upon the exercise of options granted after June 30, 2023, at a weighted-average exercise price of \$5.39 per share;
- 563,350 shares of common stock issuable pursuant to restricted stock units granted after June 30, 2023;
- 4,143,116 shares of our common stock reserved for future issuance pursuant to future awards under our Amended and Restated 2020
 Equity Incentive Plan (2020 Plan), as of June 30, 2023, plus any future increases in the number of shares of common stock reserved
 for issuance under our 2020 Plan pursuant to provisions thereof that automatically increase the share reserve under the plan each year;
 and
- 1,095,066 shares of our common stock reserved for future issuance under our 2020 Employee Stock Purchase Plan (ESPP), plus any
 future increases in the number of shares of common stock reserved for issuance under the ESPP pursuant to provisions thereof that
 automatically increase the share reserve under the plan each year.

Except as otherwise indicated, all information in this prospectus supplement assumes:

- no exercise by the underwriters of their option to purchase additional shares of common stock in this offering;
- no exercise or settlement of stock options, RSUs or other equity awards described above, no grant of additional awards under our Amended and Restated 2020 Equity Incentive Plan, and no issuance of shares under the ESPP, in each case, after June 30, 2023; and
- all of the pre-funded warrants issued in this offering are exercised.

In addition, the number of shares of our common stock to be outstanding immediately after this offering as shown above does not include the \$150.0 million shares of our common stock that remain available for sale at June 30, 2023 pursuant to our Sales Agreement (the Sales Agreement) with Cantor Fitzgerald & Co. and UBS Securities LLC, dated December 17, 2021, as amended on August 25, 2023. Between June 30, 2023 and the date of this prospectus supplement, we have not sold any shares of our common stock under the Sales Agreement. We have agreed not to make any sales under the Sales Agreement until the expiration or waiver of the 60-day lock-up period applicable to us and described in the section titled "Underwriting."

RISK FACTORS

Investing in our securities involves a high degree of risk. Before making a decision to invest in our securities, in addition to the other information contained in this prospectus supplement, the accompanying prospectus and in the documents we incorporate by reference herein or therein, you should carefully consider the risks discussed below, as well as the risks described in the section titled "Risk Factors" contained in our most recent Quarterly Report on Form 10-Q for the quarter ended June 30, 2023, as well as any amendments thereto, which are incorporated by reference into this prospectus in their entirety, together with other information in this prospectus supplement, the accompanying prospectus, the documents incorporated by reference, and any related free writing prospectus that we may authorize. The risks and uncertainties we have described are not the only ones we face. Additional risks and uncertainties not presently known to us, or that we currently see as immaterial, may also harm our business. If any of these risks occur, our business, financial condition and operating results could be harmed, the trading price of our common stock could decline and you could lose part or all of your investment. See the sections titled "Where You Can Find More Information" and "Information Incorporated by Reference."

Risks Related to this Offering

We have broad discretion in how we use the net proceeds from this offering. We may not use these proceeds effectively, which could affect our results of operations and cause our stock price to decline.

Our management team will have broad discretion in the application of the net proceeds from this offering, including for any of the purposes described in the section titled "Use of Proceeds," and you will not have the opportunity as part of your investment decision to assess whether the net proceeds are being used appropriately. Accordingly, investors will need to rely on our management team's judgment with respect to the use of these proceeds. The failure by management to apply these funds effectively could negatively affect our ability to operate and grow our business.

We cannot specify with any certainty all of the particular uses of the net proceeds that we will receive from this offering. In addition, the amount, allocation and timing of our actual expenditures will depend upon numerous factors, including any milestone payments received from any future strategic partnerships and royalties on sales of any future approved product. Because of the number and variability of factors that will determine our use of the net proceeds from this offering, their ultimate use may vary substantially from their currently intended use. Until the net proceeds are used, they may be placed in investments that do not produce significant income or that may lose value. Our investments may not yield a favorable return to our investors and may negatively impact the price of our common stock.

If you purchase our common stock in this offering, you will incur immediate and substantial dilution in the book value of your investment.

Investors who purchase shares of our common stock or pre-funded warrants in this offering will incur immediate and substantial dilution in the net tangible book value of the common stock or the shares of common stock underlying the pre-funded warrants purchased in this offering if the price per share of common stock in this offering is substantially higher than the net tangible book value per common share based on the total value of our tangible assets less our total liabilities immediately following this offering. Our net tangible book value as of June 30, 2023 was approximately \$212.7 million, or \$5.19 per share of our common stock. Therefore, if you purchase shares of common stock in this offering, you will suffer immediate and substantial dilution of \$ per share with respect to the net tangible book value of our common stock, based on the public offering price of \$ per share. See the section titled "Dilution" in this prospectus supplement for a detailed discussion of the dilution you will incur if you purchase common stock in this offering.

Future sales of our common stock in the public market, or the perception that such sales could occur, could cause our stock price to fall.

The sale of a substantial number of shares of our common stock or other equity-related securities in the public markets, or the perception that such sales could occur, could depress the market price of our common stock and impair our ability to raise capital through the sale of additional equity securities. We may sell large

quantities of our common stock at any time in one or more separate offerings. We cannot predict the effect that future sales of common stock or other equity-related securities would have on the market price of our common stock.

There is no public market for the pre-funded warrants being offered in this offering.

There is no public trading market for the pre-funded warrants being offered in this offering, and we do not expect a market to develop. In addition, we do not intend to list the pre-funded warrants on The Nasdaq Global Select Market or any other national securities exchange or nationally recognized trading system. Without an active trading market, the liquidity of the pre-funded warrants will be limited.

Holders of the pre-funded warrants will have no rights as common stockholders until such holders exercise their pre-funded warrants and acquire our common stock.

Until holders of the pre-funded warrants exercise their pre-funded warrants and acquire shares of our common stock, such holders will have no rights with respect to the shares of our common stock underlying such pre-funded warrants.

Significant holders or beneficial owners of our common stock may not be permitted to exercise the pre-funded warrants that they hold.

A holder of the pre-funded warrants will not be entitled to exercise any portion of any pre-funded warrant that, upon giving effect to such exercise, would cause (i) the aggregate number of shares of our common stock beneficially owned by such holder (together with its affiliates) to exceed 9.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise; or (ii) the combined voting power of our securities beneficially owned by such holder (together with its affiliates) to exceed 9.99% of the combined voting power of all of our securities outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the pre-funded warrants and subject to such holder's rights under the pre-funded warrants to increase or decrease such percentage to any other percentage not in excess of 19.99% upon at least 61 days' prior notice from the holder to us. As a result, you may not be able to exercise your pre-funded warrants for shares of our common stock at a time when it would be financially beneficial for you to do so. In such a circumstance, you could seek to sell your pre-funded warrants to realize value, but you may be unable to do so in the absence of an established trading market.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus and the information incorporated by reference herein and therein and any free writing prospectus that we may have authorized for use in connection with this offering contain statements that are not historical facts and are considered forward-looking within the meaning of Section 27A of the Securities Act of 1933, as amended (the Securities Act), and Section 21E of the Securities Exchange Act of 1934, as amended (the Exchange Act). All statements other than statements of historical facts contained in this prospectus, the accompanying prospectus and the documents incorporated herein and therein by reference, including statements regarding our future results of operations and financial position, business strategy, product candidates, planned preclinical studies and clinical trials, results of clinical trials, research and development costs, regulatory approvals, timing and likelihood of success, as well as plans and objectives of management for future operations, are forward-looking statements. These statements involve known and unknown risks, uncertainties and other important factors that are in some cases beyond our control and may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "would," "expect," "plan," "anticipate," "could," "intend," "target," "project," "believe," "estimate," "predict," "potential," or "continue" or the negative of these terms or other similar expressions. Those statements may appear in this prospectus supplement, the accompanying prospectus and the documents incorporated herein and therein by reference, particularly in the sections titled "Prospectus Summary," "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business," and include statements regarding our, and our management's intent, belief or current expectations that are subject to known and unknown risks, uncertainties and assumptions. Forward-looking statements contained in this prospectus supplement include, but are not limited to, statements about:

- our financial performance;
- the sufficiency of our existing cash to fund our future operating expenses and capital expenditure requirements;
- the accuracy of our estimates regarding expenses, future revenue, capital requirements, and needs for additional financing;
- our plans relating to commercializing our product candidates, if approved, including the geographic areas of focus and our ability to grow a sales team;
- the implementation of our strategic plans for our business and product candidates;
- our ability to obtain and maintain regulatory approval of our product candidates and the timing or likelihood of regulatory filings and approvals, including our expectation to seek special designations, such as orphan drug designation, for our product candidates for various diseases;
- our reliance on third parties to conduct preclinical research activities, and for the manufacture of our product candidates;
- the beneficial characteristics, mechanisms of action, safety profile, efficacy and therapeutic effects of our product candidates;
- the progress and focus of our current and future clinical trials, and the reporting of data from those trials;
- our ability to advance product candidates into and successfully complete clinical trials;
- the ability of our clinical trials, including collaborations and investigator sponsored trials, to demonstrate the safety and efficacy of our product candidates, and other positive results;
- the success of competing therapies that are or may become available;
- developments relating to our competitors and our industry, including competing product candidates and therapies;
- our plans relating to the further development and manufacturing of our product candidates, including additional indications that we may pursue;
- existing regulations and regulatory developments in the United States and other jurisdictions;

- our potential and ability to successfully manufacture and supply our product candidates for clinical trials and for commercial use, if approved;
- our continued reliance on third parties to conduct clinical trials of our product candidates, and for the manufacture of our product candidates;
- our plans and ability to obtain or protect intellectual property rights, including extensions of existing patent terms where available;
- the scope of protection we are able to establish and maintain for intellectual property rights, including our technology platform and product candidates;
- our ability to retain the continued service of our key personnel and to identify, hire, and then retain additional qualified personnel;
- the impact of the COVID-19 pandemic, rising interest rates, bank failures or instability in the financial services sector, or geopolitical risks on our business:
- our plans for and prospects of our acquisitions and other business development activities, and our ability to successfully capitalize on these
 opportunities;
- changes in our financial and internal controls; and
- our anticipated use of our existing cash, cash equivalents, short-term and long-term investments, and the funds available from our term loan.

We have based these forward-looking statements largely on our current expectations and projections about our business, the industry in which we operate, and financial trends that we believe may affect our business, financial condition, results of operations and prospects, and these forward-looking statements are not guarantees of future performance or development. These forward-looking statements speak only as of the date of the document containing the applicable statement and are subject to a number of risks, uncertainties and assumptions described in the section titled "Risk Factors" and elsewhere in this prospectus supplement, the accompanying prospectus and the documents incorporated herein and therein by reference. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified, you should not rely on these forward-looking statements as predictions of future events. The events and circumstances reflected in our forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Except as required by applicable law, we undertake no obligation to update publicly any forward-looking statements for any reason after the date of this prospectus supplement to conform these statements to actual results or to changes in expectations.

In addition, statements that "we believe" and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this prospectus supplement or the accompanying prospectus, as the case may be, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and you are cautioned not to unduly rely upon these statements.

This prospectus supplement, the accompanying prospectus and the documents incorporated herein and therein by reference, and any free writing prospectus that we may have authorized for use in connection with this offering contain estimates, projections and other information concerning our industry, our business and the markets for our product candidates. We obtained the industry, market and similar data set forth in this prospectus supplement, the accompanying prospectus and the documents incorporated herein and therein by reference, or any free writing prospectus, as the case may be, from our own internal estimates and research and from academic and industry research, publications, surveys and studies conducted by third parties, including governmental agencies. Information that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances that are assumed in this information. While we believe that the data we use from third parties are reliable, we have not separately verified these data. Further, while we believe our internal research is reliable, such research has not been verified by any third party. You are cautioned not to give undue weight to any such information, projections and estimates.

USE OF PROCEEDS

We estimate that the net proceeds to us from this offering will be approximately \$ million, or approximately \$ million if the underwriters exercise their option to purchase additional shares of common stock from us in full, after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

We intend to use the net proceeds from this offering, together with our existing cash, cash equivalents and short-term and long-term investments, to fund the continued clinical development of evorpacept and the related clinical trials, including our ASPEN-06 clinical trial, and for working capital and other general corporate purposes.

Pending the specific use of net proceeds as described in this prospectus supplement, we intend to invest the net proceeds to us from this offering in short and intermediate-term investment grade instruments, certificates of deposit or guaranteed obligations of the U.S. government in accordance with our investment policy.

Our expected use of the net proceeds from this offering represents our current intentions based on our present plans and business condition. As of the date of this prospectus supplement, we cannot predict with certainty all of the particular uses for the proceeds to be received upon the completion of this offering or the actual amounts that we will spend on the uses set forth above. We may also use a portion of the proceeds to in-license, acquire or invest in additional businesses, technologies, products or assets. Although we have no specific agreements, commitments or understandings with respect to any in-licensing activity or acquisition, we evaluate these opportunities and engage in related discussions with other companies from time to time.

The net proceeds from this offering, together with our existing cash, cash equivalents and short-term and long-term investments, will not be sufficient for us to fund our clinical programs through completion, and we will need to raise additional capital to achieve our business objectives.

Based on current business plans, we believe that the net proceeds to us from this offering, together with our existing cash, cash equivalents and short-term and long-term investments, will be sufficient to fund our planned operations through

The amount and timing of our actual expenditures will depend on numerous factors, including the results of our research and development efforts, the timing and outcome of any ongoing or future preclinical studies and clinical trials the timing and outcome of regulatory submissions and any unforeseen cash needs. As a result, our management will have broad discretion over the use of the proceeds from this offering.

DESCRIPTION OF PRE-FUNDED WARRANTS

The following is a brief summary of certain terms and conditions of the pre-funded warrants being offered by this prospectus supplement. The following description is subject in all respects to the provisions contained in the pre-funded warrants.

Form

The pre-funded warrants will be issued as individual warrant agreements to the investors. You should review the form of pre-funded warrant, which will be filed as an exhibit to a Current Report on Form 8-K that we expect to file with the SEC.

Term

The pre-funded warrants will expire on the date the warrant is exercised in full.

Exercisability

The pre-funded warrants are exercisable at any time on or after their original issuance. The pre-funded warrants will be exercisable, at the option of each holder, in whole or in part by delivering to us a duly executed exercise notice and by payment in full in immediately available funds for the number of shares of common stock purchased upon such exercise. As an alternative to payment in immediately available funds, the holder may, in its sole discretion, elect to exercise the pre-funded warrant through a cashless exercise, in which case the holder would receive upon such exercise the net number of shares of common stock determined according to the formula set forth in the pre-funded warrant. No fractional shares of common stock will be issued in connection with the exercise of a pre-funded warrant. In lieu of fractional shares, we will pay the holder an amount in cash equal to the fractional amount multiplied by the fair market value of the common stock on the exercise date.

Exercise Limitations

We may not effect the exercise of any pre-funded warrant, and a holder will not be entitled to exercise any portion of any pre-funded warrant that, upon giving effect to such exercise, would cause: (i) the aggregate number of shares of our common stock beneficially owned by such holder (together with its affiliates) to exceed 9.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise; or (ii) the combined voting power of our securities beneficially owned by such holder (together with its affiliates) to exceed 9.99% of the combined voting power of all of our securities outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the pre-funded warrants. However, any holder of a pre-funded warrant may increase or decrease such percentage to any other percentage not in excess of 19.99% upon at least 61 days' prior notice from the holder to us.

Exercise Price

The exercise price per whole share of our common stock purchasable upon the exercise of the pre-funded warrants is \$0.001 per share of common stock. The exercise price of the pre-funded warrants is subject to appropriate adjustment in the event of certain stock dividends and distributions, stock splits, stock combinations, reclassifications or similar events affecting our common stock and also upon any distributions of assets, including cash, stock or other property to our stockholders.

Transferability

Subject to applicable laws, the pre-funded warrants may be offered for sale, sold, transferred or assigned without our consent.

Exchange Listing

There is no established trading market for the pre-funded warrants, and we do not expect a market to develop. We do not plan on applying to list the pre-funded warrants on The Nasdaq Global Select Market, any other national securities exchange or any other nationally recognized trading system.

Fundamental Transactions

In the event of a fundamental transaction, as described in the pre-funded warrants and generally including any reorganization, recapitalization or reclassification of our common stock, the sale, transfer or other disposition of all or substantially all of our properties or assets, our consolidation or merger with or into another person, the acquisition of more than 50% of our outstanding common stock, or any person or group becoming the beneficial owner of 50% of the voting power represented by our outstanding common stock, the holders of the pre-funded warrants will be entitled to receive upon exercise of the pre-funded warrants the kind and amount of securities, cash or other property that the holders would have received had they exercised the pre-funded warrants immediately prior to such fundamental transaction. In the event a holder does not exercise its pre-funded warrants in connection with a fundamental transaction, such holder's pre-funded warrants will be deemed exercised in full pursuant to the "cashless exercise" mechanic described above upon the consummation of such transaction.

Rights as a Stockholder

Except by virtue of such holder's ownership of shares of our common stock, the holder of a pre-funded warrant does not have the rights or privileges of a holder of our common stock, including any voting rights, until the holder exercises the pre-funded warrant.

DILUTION

If you invest in our common stock in this offering, your ownership interest will be diluted immediately to the extent of the difference between the price per share of our common stock in this offering and the as adjusted net tangible book value per share of our common stock immediately after this offering.

Our historical net tangible book value as of June 30, 2023 was \$212.7 million, or \$5.19 per share of our common stock, based on 40,992,179 shares of common stock outstanding as of such date. Our historical net tangible book value per share represents total tangible assets, less total liabilities, all divided by the number of shares of common stock outstanding on June 30, 2023.

After giving effect to the sale by us of shares of our common stock and pre-funded warrants having an aggregate offering price of \$ in shares of our common stock at the public offering price of \$ per share and \$ per pre-funded warrant (which equals the public offering price of the common stock less the \$0.001 per share exercise price of each such pre-funded warrant), and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us and excluding the proceeds, if any, from the exercise of the pre-funded warrants issued pursuant to this offering, our as adjusted net tangible book value as of June 30, 2023 would have been approximately \$ million, or approximately \$ per share of common stock. This represents an immediate increase in as adjusted net tangible book value per share of \$ to our existing stockholders and an immediate dilution in as adjusted net tangible book value per share of approximately \$ to new investors purchasing common stock in this offering. Dilution per share to new investors purchasing common stock in this offering is determined by subtracting as adjusted net tangible book value per share paid by new investors.

The following table illustrates this dilution on a per share basis.

Public offering price per share		\$
Historical net tangible book value per share as of June 30, 2023	\$5.19	
Increase in net tangible book value per share attributable to new investors in this offering		
As adjusted net tangible book value per share after this offering		
Dilution per share to new investors purchasing shares in this offering		\$

The foregoing tables and calculations (other than historical net tangible book value) are based on 40,992,179 shares of our common stock outstanding as of June 30, 2023 and exclude as of such date:

- 6,648,245 shares of our common stock issuable upon the exercise of options outstanding as of June 30, 2023, at a weighted-average exercise price of \$19.56 per share;
- 714,705 shares of our common stock issuable pursuant to restricted stock units outstanding as of June 30, 2023
- 2,530,400 shares of our common stock issuable upon the exercise of options granted after June 30, 2023, at a weighted-average exercise price of \$5.39 per share;
- 563,350 shares of our common stock issuable pursuant to restricted stock units granted after June 30, 2023;
- 4,143,116 shares of our common stock reserved for future issuance pursuant to future awards under our Amended and Restated 2020 Equity Incentive Plan (2020 Plan), as of June 30, 2023, plus any future increases in the number of shares of common stock reserved for issuance under our 2020 Plan pursuant to provisions thereof that automatically increase the share reserve under the plan each year; and
- 1,095,066 shares of our common stock reserved for future issuance under our 2020 Employee Stock Purchase Plan (ESPP), plus any future increases in the number of shares of common stock reserved for issuance under the ESPP pursuant to provisions thereof that automatically increase the share reserve under the plan each year.

If the underwriters exercise in full their option to purchase additional shares of common stock at the public offering price of \$ per share, the as adjusted net tangible book value after this offering would be \$ per share, representing an increase in net tangible book value of \$ per share to existing stockholders and immediate dilution in net tangible book value of \$ per share to investors purchasing our common stock in this offering at the public offering price.

To the extent that any options are exercised, any RSUs are settled, any new awards are issued under our equity incentive plans, or we otherwise issue additional shares of common stock or securities convertible into shares of our common stock in the future (including shares issued in connection with acquisitions), there will be further dilution to new investors.

MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS FOR NON-U.S. HOLDERS

The following is a summary of the material U.S. federal income tax considerations of the ownership and disposition of our common stock and pre-funded warrants acquired in this offering by a "non-U.S. holder" (as defined below), but does not purport to be a complete analysis of all the potential tax considerations relating thereto. This summary is based upon the provisions of the United States Internal Revenue Code of 1986, as amended (the Code), Treasury Regulations promulgated thereunder, administrative rulings and judicial decisions, all as of the date hereof. These authorities may be changed, possibly retroactively, so as to result in U.S. federal income tax consequences different from those set forth below. We have not sought, and do not intend to seek, any ruling from the Internal Revenue Service (IRS) with respect to the statements made and the conclusions reached in the following summary, and there can be no assurance that the IRS or a court will agree with such statements and conclusions.

This summary also does not address the tax considerations arising under the laws of any non-U.S., state or local jurisdiction or under U.S. federal gift and estate tax rules. In addition, this discussion does not address tax considerations applicable to an investor's particular circumstances or to investors that may be subject to special tax rules, including, without limitation:

- banks, insurance companies, regulated investment companies, real estate investment trusts or other financial institutions;
- persons subject to the alternative minimum tax or the tax on net investment income;
- tax-exempt organizations;
- pension plans and tax-qualified retirement plans;
- controlled foreign corporations, passive foreign investment companies or corporations that accumulate earnings to avoid U.S. federal income tax;
- brokers or dealers in securities or currencies;
- traders in securities that elect to use a mark-to-market method of tax accounting for their securities holdings;
- persons that own, or are deemed to own, more than five percent of our capital stock (except to the extent specifically set forth below);
- certain former citizens or long-term residents of the United States;
- persons who hold our common stock or pre-funded warrants as a position in a hedging transaction, "straddle," "conversion transaction" or other risk reduction transaction;
- persons who hold or receive our common stock pursuant to the exercise of any option or otherwise as compensation;
- persons subject to special tax accounting rules under Section 451 of the Code;
- persons who do not hold our common stock or pre-funded warrants as a capital asset within the meaning of Section 1221 of the Code (generally, property held for investment); or
- persons deemed to sell our common stock or pre-funded warrants under the constructive sale provisions of the Code.

In addition, if a partnership (or an entity or arrangement classified as a partnership or flow-through entity for U.S. federal income tax purposes) holds our common stock or pre-funded warrants, the tax treatment of a partner generally will depend on the status of the partner and upon the activities of the partnership (or other entity or arrangement). A partner in a partnership (or other such entity or arrangement) that will hold our common stock

or pre-funded warrants should consult his, her or its own tax advisor regarding the tax consequences of the ownership and disposition of our common stock or pre-funded warrants through a partnership (or other such entity or arrangement), as applicable.

You are urged to consult your tax advisor with respect to the application of the U.S. federal income tax laws to your particular situation, as well as any tax consequences of the purchase, ownership and disposition of our common stock or pre-funded warrants arising under the U.S. federal income, gift or estate tax rules or under the laws of any state, local, non-U.S. or other taxing jurisdiction or under any applicable tax treaty.

Non-U.S. Holder Defined

For purposes of this discussion, you are a "non-U.S. holder" if you are a beneficial owner of our common stock or pre-funded warrants that, for U.S. federal income tax purposes, is not a partnership or:

- an individual who is a citizen or resident of the United States;
- a corporation or other entity taxable as a corporation created or organized in the United States or under the laws of the United States or any political subdivision thereof, or otherwise treated as such for U.S. federal income tax purposes;
- an estate whose income is subject to U.S. federal income tax regardless of its source; or
- a trust (x) whose administration is subject to the primary supervision of a U.S. court and that has one or more U.S. persons who have the authority to control all substantial decisions of the trust or (y) that has made a valid election under applicable Treasury Regulations to be treated as a U.S. person.

General Treatment of Pre-Funded Warrants

Although the law in this area is not completely settled, the pre-funded warrants are generally expected to be treated as outstanding stock for U.S. federal income tax purposes. Accordingly, upon exercise, no income, gain or loss should be recognized upon the exercise of a prefunded warrant except to the extent of cash received in exchange for a fractional share, which will be treated as a sale subject to the rules described below under "Gain on Disposition of Common Stock or Pre-Funded Warrants," and the holding period of a pre-funded warrant should carry over to the share of common stock received. The tax basis of the pre-funded warrant should carry over to the share of common stock received upon exercise increased by the exercise price. If you are contemplating the acquisition of pre-funded warrants, you should discuss with your personal tax advisor the consequences of the purchase, ownership and disposition of the pre-funded warrants, as well as the exercise of, certain adjustments to, and any payments in respect of the pre-funded warrants (including potential alternative characterizations).

Distributions

We have never declared or paid cash dividends on our common stock, and we do not anticipate paying any dividends on our common stock in the foreseeable future. However, if we do make distributions on our common stock, those payments will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. To the extent those distributions exceed both our current and our accumulated earnings and profits, the excess will constitute a return of capital and will first reduce your basis in our common stock, but not below zero, and then will be treated as gain from the sale of stock.

Subject to the discussions below on effectively connected income, backup withholding and Foreign Account Tax Compliance Act (FATCA) withholding, any dividend paid to you generally will be subject to U.S. federal withholding tax either at a rate of 30% of the gross amount of the dividend or such lower rate as may be specified

by an applicable income tax treaty between the United States and your country of residence. In order to receive a reduced treaty rate, you must provide the applicable withholding agent with an IRS Form W-8BEN or W-8BEN-E or other appropriate version of IRS Form W-8 certifying qualification for the reduced rate. A non-U.S. holder of shares of our common stock or pre-funded warrants eligible for a reduced rate of U.S. federal withholding tax pursuant to an income tax treaty may obtain a refund of any excess amounts withheld by filing an appropriate claim for refund with the IRS. If the non-U.S. holder holds our common stock or pre-funded warrants through a financial institution or other agent acting on the non-U.S. holder's behalf, the non-U.S. holder will be required to provide appropriate documentation to the agent, which then will be required to provide certification to the applicable withholding agent, either directly or through other intermediaries.

Dividends received by you that are treated as effectively connected with your conduct of a U.S. trade or business (and, if required by an applicable income tax treaty, such dividends are attributable to a permanent establishment or fixed base maintained by you in the United States) are generally exempt from the 30% U.S. federal withholding tax, subject to the discussion below on backup withholding and FATCA withholding. In order to obtain this exemption, you must provide the applicable withholding agent with a properly executed IRS Form W-8ECI or other applicable IRS Form W-8 properly certifying such exemption. Such effectively connected dividends, although not subject to U.S. federal withholding tax, are taxed at the same rates applicable to U.S. persons, net of certain deductions and credits. In addition, if you are a corporate non-U.S. holder, dividends you receive that are effectively connected with your conduct of a U.S. trade or business may also be subject to a branch profits tax at a rate of 30% or such lower rate as may be specified by an applicable income tax treaty between the United States and your country of residence. You should consult your tax advisor regarding the tax consequences of the ownership and disposition of our common stock or pre-funded warrants, including any applicable tax treaties that may provide for different rules.

The taxation of a distribution received with respect to a pre-funded warrant is unclear. It is possible such a distribution would be treated as a distribution as described in this section, although other treatments may also be possible. You should consult your own tax advisors regarding the proper treatment of any payments in respect of the pre-funded warrants.

Gain on Disposition of Common Stock or Pre-Funded Warrants

Subject to the discussion below regarding backup withholding and FATCA withholding, you generally will not be required to pay U.S. federal income tax on any gain realized upon the sale or other disposition of our common stock or pre-funded warrants unless:

- the gain is effectively connected with your conduct of a U.S. trade or business (and, if an applicable income tax treaty so provides, the gain is attributable to a permanent establishment or fixed base maintained by you in the United States);
- you are an individual who is present in the United States for a period or periods aggregating 183 days or more during the calendar year in which the sale or disposition occurs and certain other conditions are met; or
- our common stock constitutes a United States real property interest by reason of our status as a "United States real property holding corporation" (USRPHC) for U.S. federal income tax purposes at any time within the shorter of the five-year period preceding your disposition of, or your holding period for, our common stock.

We believe that we are not currently and will not become a USRPHC for U.S. federal income tax purposes, and the remainder of this discussion so assumes. However, because the determination of whether we are a USRPHC depends on the fair market value of our United States real property interests relative to the fair market value of our U.S. and worldwide real property interests plus our other assets used or held for use in a trade or business, there can be no assurance that we will not become a USRPHC in the future. Even if we become a USRPHC,

however, as long as our common stock is regularly traded on an established securities market, your common stock will be treated as United States real property interests only if you actually (directly or indirectly) or constructively hold more than five percent of such regularly traded common stock at any time during the shorter of the five-year period preceding your disposition of, or your holding period for, our common stock. Special rules may apply to non-U.S. holders of pre-funded warrants, who should consult their tax advisors.

If you are a non-U.S. holder described in the first bullet above, you will be required to pay tax on the gain derived from the sale (net of certain deductions and credits) under regular U.S. federal income tax rates applicable to U.S. persons, and a corporate non-U.S. holder described in the first bullet above also may be subject to the branch profits tax at a 30% rate, or such lower rate as may be specified by an applicable income tax treaty. If you are an individual non-U.S. holder described in the second bullet above, you will be subject to tax at 30% (or such lower rate specified by an applicable income tax treaty) on the gain derived from the sale, which gain may be offset by U.S. source capital losses for the year, provided you have timely filed U.S. federal income tax returns with respect to such losses. You should consult your tax advisor regarding any applicable income tax or other treaties that may provide for different rules.

Certain Adjustments to Pre-Funded Warrants

Under Section 305 of the Code, an adjustment to the number of shares of common stock that will be issued on the exercise of the pre-funded warrants, or an adjustment to the exercise price of the pre-funded warrants, may be treated as a constructive distribution to you of the pre-funded warrants if, and to the extent that, such adjustment has the effect of increasing your proportionate interest in our "earnings and profits" or assets, depending on the circumstances of such adjustment (for example, if such adjustment is to compensate for a distribution of cash or other property to our shareholders).

Backup Withholding and Information Reporting

Generally, we must report annually to the IRS the amount of dividends paid to you, your name and address, and the amount of tax withheld, if any. A similar report will be sent to you. Pursuant to applicable income tax treaties or other agreements, the IRS may make these reports available to tax authorities in your country of residence.

Payments of dividends on or of proceeds from the disposition of our common stock or pre-funded warrants made to you may be subject to information reporting and backup withholding at the applicable statutory rate (currently 24%) unless you establish an exemption, for example, by properly certifying your non-U.S. status on a properly completed IRS Form W-8BEN or W-8BEN-E or another appropriate version of IRS Form W-8. Notwithstanding the foregoing, backup withholding and information reporting may apply if the applicable withholding agent has actual knowledge, or reason to know, that you are a U.S. person.

Backup withholding is not an additional tax; rather, the U.S. federal income tax liability of persons subject to backup withholding will be reduced by the amount of tax withheld. If withholding results in an overpayment of taxes, a refund or credit may generally be obtained from the IRS, provided that the required information is furnished to the IRS in a timely manner.

Foreign Account Tax Compliance Act (FATCA)

The Foreign Account Tax Compliance Act, and the Treasury Regulations and official IRS guidance issued thereunder, collectively "FATCA," generally impose a U.S. federal withholding tax of 30% on dividends on and, subject to the discussion of certain proposed Treasury Regulations below, the gross proceeds from a sale or other disposition of our common stock or pre-funded warrants paid to a "foreign financial institution" (as specially defined under these rules), unless such institution enters into an agreement with the U.S. government to, among other things, withhold on certain payments and to collect and provide to the U.S. tax authorities substantial information regarding the U.S. account holders of such institution (which includes certain equity and debt

holders of such institution, as well as certain account holders that are non-U.S. entities with U.S. owners) or otherwise establishes an exemption. FATCA also generally imposes a U.S. federal withholding tax of 30% on dividends on and, subject to the discussion of certain proposed Treasury Regulations below, the gross proceeds from a sale or other disposition of our common stock or pre-funded warrants paid to a "non-financial foreign entity" (as specially defined under these rules) unless such entity provides the withholding agent with a certification identifying the substantial direct and indirect U.S. owners of the entity, certifies that it does not have any substantial U.S. owners, or otherwise establishes an exemption. The withholding tax will apply regardless of whether the payment otherwise would be exempt from withholding tax, including under the exemptions described above. The Treasury Secretary has issued proposed Treasury Regulations, which, if finalized in their present form, would eliminate withholding under FATCA with respect to payment of gross proceeds from a sale or other disposition of our common stock or pre-funded warrants. In its preamble to such proposed Treasury Regulations, the U.S. Treasury stated that taxpayers may generally rely on the proposed Treasury Regulations until final regulations are issued.

Under certain circumstances, a non-U.S. holder might be eligible for refunds or credits of such taxes. An intergovernmental agreement between the United States and your country of residence may modify the requirements described in this section. Prospective investors should consult with their own tax advisors regarding the application of FATCA withholding to their investment in, and ownership and disposition of, our common stock or pre-funded warrants.

The preceding discussion of material U.S. federal income tax considerations is for general information only. It is not tax advice to investors in their particular circumstances. Each prospective investor should consult its own tax advisor regarding the particular U.S. federal, state and local and non-U.S. tax consequences of purchasing, owning and disposing of our common stock or pre-funded warrants, including the consequences of any proposed change in applicable laws.

UNDERWRITING

We are offering the shares of common stock and pre-funded warrants described in this prospectus supplement through Piper Sandler & Co. and Cantor Fitzgerald & Co. as joint book-running managers. We will enter into an underwriting agreement with Piper Sandler & Co. and Cantor Fitzgerald & Co., as representatives of the several underwriters named below. Subject to the terms and conditions set forth in the underwriting agreement, we will agree to sell to the underwriters, and each of the underwriters will agree, severally and not jointly, to purchase from us, the number of shares of our common stock and pre-funded warrants listed opposite its name below.

Underwriter	Number of Shares	Number of Pre-Funded
	Snares	Warrants
Piper Sandler & Co.		
Cantor Fitzgerald & Co.		
Total		

Option to Purchase Additional Shares

We have granted the underwriters an option to buy up to additional shares of common stock from us to cover over-allotments, if any. The underwriters may exercise this option at any time and from time to time during the 30-day period from the date of this prospectus supplement. If any additional shares of common stock are purchased, the underwriters will offer the additional shares on the same terms as those on which the shares are being offered.

Discounts and Commissions

The underwriters have advised us that they propose to offer the common stock and pre-funded warrants directly to the public at the offering price set forth on the cover page of this prospectus supplement. The underwriters propose to offer the shares to certain dealers at the same price less a concession of not more than \$ per share. After the offering, these figures may be changed by the underwriters.

The underwriting fee is equal to the public offering price per share of common stock and per pre-funded warrant less the amount paid by the underwriters to us per share of common stock and per pre-funded warrant. The following table shows the per share, per pre-funded warrant and total underwriting discount to be paid by the underwriters in connection with this offering, assuming either no exercise and full exercise of the option to purchase additional shares:

	Per Share		Total		
	Without	With		Without	With
	Option to	Option to		Option to	Option to
	Purchase	Purchase	_	Purchase	Purchase
	Additional	Additional	Per	Additional	Additional
	Common	Common	Pre-Funded	Common	Common
	Shares	Shares	Warrant	Shares	Shares
Public offering price	\$	\$	\$	\$	\$
Underwriting discounts and commissions, paid by us	\$	\$	\$	\$	\$
Proceeds to us, before expenses	\$	\$	\$	\$	\$

We estimate that the total fees and expenses payable by us, excluding underwriting discount, will be approximately \$. We have agreed to reimburse the underwriters for expenses relating to clearance of this offering with the Financial Industry Regulatory Authority up to \$20,000. We have also agreed to reimburse the underwriters for certain other expenses incurred by them in connection with the offering.

Indemnification of Underwriters

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act, or to contribute to payments that the underwriters may be required to make in respect of those liabilities.

No Sales of Similar Securities

We have agreed, subject to certain exceptions, that, without the prior written consent of Piper Sandler & Co. and Cantor Fitzgerald & Co. on behalf of the underwriters, we will not, or publicly disclose an intention to, during the period ending 60 days after the date of this prospectus supplement:

- sell, offer to sell, contract to sell or lend any shares of common stock or any securities convertible into or exercisable or exchangeable for shares of common stock ("Related Securities");
- effect any short sale, or establish or increase any "put equivalent position" (as defined in Rule 16a-1(h) under the Exchange Act) or liquidate or decrease any "call equivalent position" (as defined in Rule 16a-1(b) under the Exchange Act) of any shares of common stock or Related Securities;
- pledge, hypothecate or grant any security interest in any shares of common stock or Related Securities;
- in any other way transfer or dispose of any shares of common stock or Related Securities;
- enter into any swap, hedge or similar arrangement or agreement that transfers, in whole or in part, the economic risk of ownership of any shares of common stock or Related Securities, regardless of whether any such transaction is to be settled in securities, in cash or otherwise;
- announce the offering of any shares of common stock or Related Securities;
- submit or file any registration statement under the Securities Act in respect of any shares of common stock or Related Securities (other than as contemplated with respect to this offering);
- effect a reverse stock split, recapitalization, share consolidation, reclassification or similar transaction affecting the outstanding shares of common stock; or
- publicly announce the intention to do any of the foregoing.

Provided, however, we may (i) effect the transactions contemplated hereby, (ii) issue shares of common stock or Related Securities, or issue shares of common stock upon exercise of Related Securities, in each case, pursuant to any stock option, stock bonus, employee stock purchase plan, or other stock plan or arrangement, (iii) issue shares of common stock or Related Securities to any non-employee director pursuant to any non-employee director compensation plan or program, (iv) issue shares of common stock pursuant to the exercise or settlement of Related Securities, or upon the conversion of convertible securities outstanding on the date hereof, (v) file one or more registration statements on Form S-8 to register shares of common stock or Related Securities, or enter into an agreement to issue shares of common stock or Related Securities, or enter into an agreement to issue shares of common stock or Related Securities, in connection with any merger, joint venture, strategic alliances, commercial, lending or other collaborative or strategic transaction, the creation of a scientific advisory board, or the acquisition or license of the business, property, technology or other assets of another individual or entity or the assumption of an employee benefit plan in connection with a merger or acquisition; provided that the aggregate number of shares of common stock or Related Securities (on an as-converted or as-exercised basis, as the case may be) that we may issue or agree to issue pursuant to this clause (vi) shall not exceed 5% of the total number of shares of our common stock immediately following the completion of the offering; and provided, that, in the case of clauses (ii), (iii), (iv) and (vi), each newly appointed director or executive officer that is a recipient thereof provides to Piper Sandler & Co. and Cantor Fitzgerald & Co. a signed lockup agreement.

Our directors, executive officers and certain of our stockholders have agreed, subject to certain exceptions, that, without the prior written consent of Piper Sandler & Co. and Cantor Fitzgerald & Co. on behalf of the underwriters, they will not, during the period up to 60 days after the date of this prospectus supplement (the "restricted period"):

- sell or offer to sell any shares of our common stock or related owned by the restricted party or any family member,
- enter into any swap,
- make any demand for, or exercise any right with respect to, the registration under the Securities Act of the offer and sale of any shares of our common stock or related securities, or cause to be filed a registration statement, prospectus or prospectus supplement (or an amendment or supplement thereto) with respect to any such registration, or
- · publicly announce any intention to do any of the foregoing.

The restrictions described in the immediately preceding paragraph do not apply to our directors, executive officers and securityholders with respect to, among other things, the transfer of shares of our common stock or related securities:

- (i) as a bona fide gift or gifts,
- (ii) by will or intestacy,
- (iii) to any trust or other entities formed for the direct or indirect benefit of the restricted party or any family member,
- (iv) to any family member of the restricted party,
- (v) if the restricted party is a trust, to a trustor, trustee or beneficiary of the trust or to the estate of a beneficiary of such trust,
- (vi) to a corporation, partnership, limited liability company or other entity of which the restricted party or any family member is the legal and beneficial owner of all of the outstanding equity securities or similar interests,
- (vii) if the restricted party is a corporation, partnership, limited liability company, trust or other business entity, (A) to another corporation, partnership, limited liability company, trust or other business entity that is an affiliate of the restricted party, or to any investment fund or other entity controlling, controlled by, managing or managed by or under common control with the restricted party, or (B) as part of a distribution, transfer or other disposition by the restricted party to its stockholders, partners, members or other equity holders,
- (viii) that the restricted party may purchase in open market transactions on or after the date hereof,
- (ix) by operation of law pursuant to a court order or settlement agreement related to the distribution of assets in connection with the dissolution of a marriage or civil union,
- (x) in connection with the exercise or settlement on a cash basis of options or restricted stock units granted under a stock incentive plan or other equity award plan, which plan is described herein, provided that any shares of our common stock or related securities received as a result of such exercise, vesting or settlement shall remain subject to the restrictions above,
- (xi) to us (A) in connection with the "net" or "cashless" exercise of options or other rights to purchase shares of our common stock or related securities from us and (B) in connection with the vesting or settlement of restricted stock units, for the payment of tax withholdings or remittance payments due as a result of the vesting or settlement of such restricted stock units, in all such cases, pursuant to equity awards granted under a stock incentive plan or other equity award plan, which plan is described herein, provided that any shares of our common stock or related securities received as a result of such exercise, vesting or settlement shall remain subject to the restrictions above,

- (xii) pursuant to a bona fide third-party tender offer, merger, consolidation or other similar transaction that is approved by our Board of Directors and made to all holders of our capital stock involving a change of control, provided that in the event that such tender offer, merger, consolidation or other similar transaction is not completed, the restricted party's shares of our common stock and related securities shall remain subject to the restrictions above, and
- (xiii) the sale of shares of common stock pursuant to a trading plan established pursuant to Rule 10b5-1 under the Exchange Act (provided that such plan was established prior to the execution of the lockup agreement by the restricted party); provided that no filing under the Exchange Act or other public announcement shall be made voluntarily during the restricted period in connection with such transfer and, if the filing of a report is required under Section 16 of the Exchange Act during the restricted period, such filing shall state that such sales have been executed under a 10b5-1 trading plan and shall also state the date such 10b5-1 trading plan was adopted;

provided, in the case of any transfer pursuant to clauses (i) through (vii) and (ix) above, each transferee executes and delivers to Piper Sandler & Co. and Cantor Fitzgerald & Co. a lock-up letter; in the case of any transfer pursuant to clauses (i) through (vii) and (viii) above, no public disclosure or filing shall be required, or made voluntarily, during the restricted period reporting a change in beneficial ownership of shares of our common stock or related securities in connection with such transfer; in the case of any transfer pursuant to clauses (ix), (x) and (xi) above, no public disclosure or filing reporting a change in beneficial ownership of our shares of common stock or related securities shall be made voluntarily during the restricted period, and if the restricted party is required to file a report under Section 16 of the Exchange Act reporting a change in beneficial ownership of shares of our common stock or related securities during the restricted period, the restricted party shall include a statement in such report to the effect that such transfer relates to the circumstances described in clause (ix), (x) or (xi), as applicable; and in the case of any transfer pursuant to clauses (i) through (vii) above, such transfer shall not involve a disposition for value.

Listing

Our common stock is listed on The Nasdaq Global Select Market under the symbol "ALXO."

Price Stabilization, Short Positions and Penalty Bids

To facilitate the offering, the underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of our common stock during and after the offering. Specifically, the underwriters may over-allot or otherwise create a short position in the common stock for their own account by selling more shares of common stock than we have sold to them. Short sales involve the sale by the underwriters of a greater number of shares than the underwriters are required to purchase in the offering. The underwriters may close out any short position by either exercising their option to purchase additional shares or purchasing shares in the open market.

In addition, the underwriters may stabilize or maintain the price of the common stock by bidding for or purchasing shares of common stock in the open market and may impose penalty bids. If penalty bids are imposed, selling concessions allowed to syndicate members or other broker-dealers participating in the offering are reclaimed if shares of common stock previously distributed in the offering are repurchased, whether in connection with stabilization transactions or otherwise. The effect of these transactions may be to stabilize or maintain the market price of the common stock at a level above that which might otherwise prevail in the open market. The imposition of a penalty bid may also affect the price of the common stock to the extent that it discourages resales of the common stock. The magnitude or effect of any stabilization or other transactions is uncertain. These transactions may be effected on The Nasdaq Global Select Market or otherwise and, if commenced, may be discontinued at any time. The underwriters may also engage in passive market making transactions in our common stock. Passive market making consists of displaying bids on The Nasdaq Global Select Market limited by the prices of independent market makers and effecting purchases limited by those prices in response to order flow. Rule 103 of Regulation M promulgated by the SEC limits the amount of net purchases

that each passive market maker may make and the displayed size of each bid. Passive market making may stabilize the market price of the common stock at a level above that which might otherwise prevail in the open market and, if commenced, may be discontinued at any time.

Electronic Distribution

This prospectus supplement and the accompanying prospectus in electronic format may be made available on the web sites maintained by one or more of the underwriters and the underwriters may distribute prospectuses and prospectus supplements electronically.

Affiliations

From time to time in the ordinary course of its businesses, the underwriters and certain of their affiliates have engaged, and may in the future engage, in commercial banking or investment banking transactions with us and our affiliates. We entered into an "at-the-market" sales agreement with certain of the underwriters in December 2021.

Selling Restrictions

General

Other than in the United States, no action has been taken by us or the underwriters that would permit a public offering of the securities offered by this prospectus supplement in any jurisdiction where action for that purpose is required. The securities offered by this prospectus supplement may not be offered or sold, directly or indirectly, nor may this prospectus supplement or any other offering material or advertisements in connection with the offer and sale of any such securities be distributed or published in any jurisdiction, except under circumstances that will result in compliance with the applicable rules and regulations of that jurisdiction. Persons into whose possession this prospectus supplement comes are advised to inform themselves about and to observe any restrictions relating to the offering and the distribution of this prospectus supplement. This prospectus supplement does not constitute an offer to sell or a solicitation of an offer to buy any securities offered by this prospectus supplement in any jurisdiction in which such an offer or a solicitation is unlawful.

European Economic Area

In relation to each member State of the European Economic Area (each, a "Relevant State"), no shares of common stock and pre-funded warrants have been offered or will be offered pursuant to the offering to the public in that Relevant State prior to the publication of a prospectus in relation to the shares of common stock and pre-funded warrants which has been approved by the competent authority in that Relevant State or, where appropriate, approved in another Relevant State and notified to the competent authority in that Relevant State, all in accordance with the Prospectus Regulation, except that offers of shares of common stock and pre-funded warrants may be made to the public in that Relevant State at any time:

- (a) to any legal entity which is a qualified investor as defined under Article 2 of the Prospectus Regulation;
- (b) to fewer than 150 natural or legal persons (other than qualified investors as defined under Article 2 of the Prospectus Regulation), subject to obtaining the prior consent of the underwriters; or
- (c) in any other circumstances falling within Article 1(4) of the Prospectus Regulation,

provided that no such offer of shares of common stock and pre-funded warrants shall require us or any underwriter to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation and each person who initially acquires any shares of common stock and pre-funded warrants or to whom any offer is made will be deemed to have represented, acknowledged and agreed to and with each of the underwriters and us that it is a "qualified investor" within the

meaning of Article 2(e) of the Prospectus Regulation. In the case of any shares of common stock and pre-funded warrants being offered to a financial intermediary as that term is used in the Prospectus Regulation, each such financial intermediary will be deemed to have represented, acknowledged and agreed that the shares of common stock and pre-funded warrants acquired by it in the offer have not been acquired on a non-discretionary basis on behalf of, nor have they been acquired with a view to their offer or resale to, persons in circumstances which may give rise to an offer of any shares of common stock and pre-funded warrants to the public other than their offer or resale in a Relevant State to qualified investors as so defined or in circumstances in which the prior consent of the underwriters have been obtained to each such proposed offer or resale.

For the purposes of this provision, the expression an "offer to the public" in relation to shares of common stock and pre-funded warrants in any Relevant State means the communication in any form and by any means of sufficient information on the terms of the offer and any shares of common stock and pre-funded warrants to be offered so as to enable an investor to decide to purchase or subscribe for any shares of common stock and pre-funded warrants, and the expression "Prospectus Regulation" means Regulation (EU) 2017/1129.

United Kingdom

No shares of common stock and pre-funded warrants have been offered or will be offered pursuant to the offering to the public in the United Kingdom prior to the publication of a prospectus in relation to the shares and pre-funded warrants which has been approved by the Financial Conduct Authority, except that the shares of common stock or pre-funded warrants may be offered to the public in the United Kingdom at any time:

- (a) to any legal entity which is a qualified investor as defined under Article 2 of the UK Prospectus Regulation;
- (b) to fewer than 150 natural or legal persons (other than qualified investors as defined under Article 2 of the UK Prospectus Regulation), subject to obtaining the prior consent of the representatives for any such offer; or
- (c) in any other circumstances falling within Section 86 of the FSMA;

provided that no such offer of the shares of common stock and pre-funded warrants shall require us or any underwriter to publish a prospectus pursuant to Section 85 of the FSMA or supplement a prospectus pursuant to Article 23 of the UK Prospectus Regulation. For the purposes of this provision, the expression an "offer to the public" in relation to the shares of common stock and pre-funded warrants in the United Kingdom means the communication in any form and by any means of sufficient information on the terms of the offer and any shares of common stock and pre-funded warrants to be offered so as to enable an investor to decide to purchase or subscribe for any shares and pre-funded warrants and the expression "UK Prospectus Regulation" means Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018.

Any invitation or inducement to engage in investment activity (within the meaning of Section 21 of the FSMA) in connection with the issue or sale of the shares of common stock and pre-funded warrants may only be communicated or caused to be communicated in circumstances in which Section 21(1) of the FSMA does not apply to us.

All applicable provisions of the FSMA must be complied with in respect to anything done by any person in relation to the shares of common stock and pre-funded warrants of our common stock in, from or otherwise involving the United Kingdom.

Canada

The shares of common stock and pre-funded warrants may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus

Exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the shares of common stock and pre-funded warrants must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus supplement (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 of National Instrument 33-105 Underwriting Conflicts (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

Germany

Each person who is in possession of this prospectus supplement is aware of the fact that no German securities prospectus (wertpapierprospekt) within the meaning of the German Securities Prospectus Act (Wertpapier-prospektgesetz, or the Act) of the Federal Republic of Germany has been or will be published with respect to the shares of common stock and pre-funded warrants. In particular, each underwriter has represented that it has not engaged and has agreed that it will not engage in a public offering in the Federal Republic of Germany within the meaning of the Act with respect to any of the shares of common stock and pre-funded warrants otherwise than in accordance with the Act and all other applicable legal and regulatory requirements.

Hong Kong

The shares of common stock and pre-funded warrants have not been and will not be offered or sold in Hong Kong by means of any document other than (i) in circumstances which do not constitute an offer to the public within the meaning of the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32, Laws of Hong Kong), or (ii) to "professional investors" within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder, or (iii) in other circumstances which do not result in the document being a "prospectus" within the meaning of the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32, Laws of Hong Kong); and no advertisement, invitation or document relating to the shares of common stock and pre-funded warrants have been or will be issued or have been or will be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to the shares of common stock and pre-funded warrants which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder.

Israel

In the State of Israel this prospectus supplement shall not be regarded as an offer to the public to purchase shares of common stock and pre-funded warrants under the Israeli Securities Law, 5728—1968, which requires a prospectus to be published and authorized by the Israel Securities Authority, if it complies with certain provisions of Section 15 of the Israeli Securities Law, 5728-1968, including, inter alia, if: (i) the offer is made, distributed or directed to not more than 35 investors, subject to certain conditions (the "Addressed Investors"); or (ii) the offer is made, distributed or directed to certain qualified investors defined in the First Addendum of the Israeli Securities Law, 5728—1968, subject to certain conditions (the "Qualified Investors"). The Qualified

Investors shall not be taken into account in the count of the Addressed Investors and may be offered to purchase securities in addition to the 35 Addressed Investors. The company has not and will not take any action that would require it to publish a prospectus in accordance with and subject to the Israeli Securities Law, 5728—1968. We have not and will not distribute this prospectus supplement or make, distribute or direct an offer to subscribe for shares of common stock and pre-funded warrants to any person within the State of Israel, other than to Qualified Investors and up to 35 Addressed Investors.

Qualified Investors may have to submit written evidence that they meet the definitions set out in of the First Addendum to the Israeli Securities Law, 5728—1968. In particular, we may request, as a condition to be offered common stock and pre-funded warrants, that Qualified Investors will each represent, warrant and certify to us and/or to anyone acting on our behalf: (i) that it is an investor falling within one of the categories listed in the First Addendum to the Israeli Securities Law, 5728—1968; (ii) which of the categories listed in the First Addendum to the Israeli Securities Law, 5728—1968 regarding Qualified Investors is applicable to it; (iii) that it will abide by all provisions set forth in the Israeli Securities Law, 5728—1968 and the regulations promulgated thereunder in connection with the offer to be issued common stock and pre-funded warrants; (iv) that the shares of common stock and pre-funded warrants that it will be issued are, subject to exemptions available under the Israeli Securities Law, 5728—1968: (a) for its own account; (b) for investment purposes only; and (c) not issued with a view to resale within the State of Israel, other than in accordance with the provisions of the Israeli Securities Law, 5728—1968; and (v) that it is willing to provide further evidence of its Qualified Investor status. Addressed Investor's name, address and passport number or Israeli identification number.

Singapore

Each underwriter has acknowledged that this prospectus supplement has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, each underwriter has represented and agreed that it has not offered or sold any shares of common stock or pre-funded warrants or caused the shares of common stock or pre-funded warrants to be made the subject of an invitation for subscription or purchase and will not offer or sell any shares of common stock or pre-funded warrants or cause the shares of common stock or pre-funded warrants to be made the subject of an invitation for subscription or purchase, and has not circulated or distributed, nor will it circulate or distribute, this prospectus supplement or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares of common stock and pre-funded warrants, whether directly or indirectly, to any person in Singapore other than:

- (a) to an institutional investor (as defined in Section 4A of the Securities and Futures Act (Chapter 289) of Singapore, as modified or amended from time to time (the "SFA")) pursuant to Section 274 of the SFA;
- (b) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or to any person pursuant to an offer referred to in Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA and (where applicable) Regulation 3 of the Securities and Futures (Classes of Investors) Regulations 2018; or
- (c) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the shares of common stock or pre-funded warrants are subscribed for or acquired under Section 275 of the SFA by a relevant person which is:

(a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or

- (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor, securities or securities-based derivatives contracts (each term as defined in Section 2(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has subscribed for or acquired the shares of common stock and pre-funded warrants pursuant to an offer made under Section 275 of the SFA except:
 - (i) to an institutional investor or to a relevant person, or to any person arising from an offer referred to in Section 275(1A) of the SFA (in the case of that corporation) or Section 276(4)(i)(B) of the SFA (in the case of that trust);
 - (ii) where no consideration is or will be given for the transfer;
 - (iii) where the transfer is by operation of law;
 - (iv) as specified in Section 276(7) of the SFA; or
 - (v) as specified in Regulation 37A of the Securities and Futures (Offers of Investments) (Securities and Securities-based Derivatives Contracts) Regulations 2018.

Singapore SFA Product Classification—In connection with Section 309B of the SFA and the Securities and Futures (Capital Markets Products) Regulations 2018 ("CMP Regulations 2018"), unless otherwise specified before an offer of shares of common stock and pre-funded warrants, we have determined, and hereby notify all relevant persons (as defined in Section 309A(1) of the SFA), that the shares of common stock and pre-funded warrants are "prescribed capital markets products" (as defined in the CMP Regulations 2018) and "Excluded Investment Products" (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).

Switzerland

This prospectus supplement is not intended to constitute an offer or solicitation to purchase or invest in the shares of common stock and pre-funded warrants. The shares of common stock and pre-funded warrants may not be publicly offered, directly or indirectly, in Switzerland within the meaning of the Swiss Financial Services Act (the "FinSA"), and no application has or will be made to admit the shares of common stock and pre-funded warrants to trading on any trading venue (exchange or multilateral trading facility) in Switzerland. Neither this prospectus supplement, the accompanying prospectus nor any other offering or marketing material relating to the shares of common stock and pre-funded warrants constitutes a prospectus pursuant to the FinSA, and neither this prospectus supplement, the accompanying prospectus nor any other offering or marketing material relating to the shares of common stock and pre-funded warrants may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this prospectus supplement nor any other offering or marketing material relating to the offering, us or the securities have been or will be filed with or approved by any Swiss regulatory authority. In particular, this prospectus supplement will not be filed with, and the offer of securities will not be supervised by, the Swiss Financial Market Supervisory Authority, or the FINMA, and the offer of securities has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes ("CISA"). The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of securities.

United Arab Emirates

This offering has not been approved or licensed by the Central Bank of the United Arab Emirates (the "UAE"), Securities and Commodities Authority of the UAE and/or any other relevant licensing authority in the UAE including any licensing authority incorporated under the laws and regulations of any of the free zones established and operating in the territory of the UAE, in particular the Dubai Financial Services Authority ("DFSA"), a

regulatory authority of the Dubai International Financial Centre ("DIFC"). The offering does not constitute a public offer of securities in the UAE, DIFC and/or any other free zone in accordance with the Commercial Companies Law, Federal Law No 8 of 1984 (as amended), DFSA Offered Securities Rules and NASDAQ Dubai Listing Rules, accordingly, or otherwise. The shares of common stock and pre-funded warrants may not be offered to the public in the UAE and/or any of the free zones.

The shares of common stock and pre-funded warrants may be offered and issued only to a limited number of investors in the UAE or any of its free zones who qualify as sophisticated investors under the relevant laws and regulations of the UAE or the free zone concerned.

France

This prospectus supplement (including any amendment, supplement or replacement thereto) is not being distributed in the context of a public offering in France within the meaning of Article L. 411-1 of the French Monetary and Financial Code (Code monétaire et financier).

This prospectus supplement has not been and will not be submitted to the French Autorité des marchés financiers (the "AMF") for approval in France and accordingly may not and will not be distributed to the public in France.

Pursuant to Article 211-3 of the AMF General Regulation, French residents are hereby informed that:

- 1. the transaction does not require a prospectus to be submitted for approval to the AMF;
- 2. persons or entities referred to in Point 2°, Section II of Article L.411-2 of the Monetary and Financial Code may take part in the transaction solely for their own account, as provided in Articles D. 411-1, D. 734-1, D. 744-1, D. 754-1 and D. 764-1 of the Monetary and Financial Code; and
- 3. the financial instruments thus acquired cannot be distributed directly or indirectly to the public otherwise than in accordance with Articles L. 411-1, L. 411-2, L. 412-1 and L. 621-8 to L. 621-8-3 of the Monetary and Financial Code.

This prospectus supplement is not to be further distributed or reproduced (in whole or in part) in France by the recipients of this prospectus supplement. This prospectus supplement has been distributed on the understanding that such recipients will only participate in the issue or sale of our common stock for their own account and undertake not to transfer, directly or indirectly, our common stock to the public in France, other than in compliance with all applicable laws and regulations and in particular with Articles L. 411-1 and L. 411-2 of the French Monetary and Financial Code.

LEGAL MATTERS

The validity of the securities offered in this prospectus supplement will be passed upon for us by Wilson Sonsini Goodrich & Rosati, Professional Corporation, Palo Alto, California. Cooley LLP, San Francisco, California, is acting as counsel for the underwriters.

EXPERTS

The consolidated financial statements of ALX Oncology Holdings Inc. and subsidiaries as of December 31, 2022 and 2021, and for each of the years in the three-year period ended December 31, 2022, have been incorporated by reference herein and in the registration statement in reliance upon the report of KPMG LLP, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3, including exhibits, under the Securities Act with respect to the securities being offered by this prospectus supplement. The registration statement, including exhibits, contains additional relevant information about us and the securities. This prospectus supplement, which constitutes part of the registration statement, does not contain all of the information set forth in the registration statement and its exhibits. For further information with respect to us and the securities offered by this prospectus supplement, we refer you to the registration statement and its exhibits. Statements contained in this prospectus supplement as to the contents of any contract or any other document referred to are not necessarily complete and, in each instance, we refer you to the copy of the contract or other document filed as an exhibit to the registration statement. Each of these statements is qualified in all respects by this reference.

Because we are subject to the information and reporting requirements of the Exchange Act, we file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at http://www.sec.gov. We also maintain a website at www.alxoncology.com where these materials are available. You may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. Information contained on or accessible through our website is not a part of this prospectus supplement and is not incorporated by reference herein, and the inclusion of our website address in this prospectus supplement is an inactive textual reference only.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC's rules allow us to "incorporate by reference" information into this prospectus supplement and the accompanying prospectus certain information we file with it, which means that we can disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is deemed to be a part of this prospectus supplement and the accompanying prospectus, and subsequent information that we file later with the SEC will automatically update and supersede information contained in this prospectus supplement and the accompanying prospectus. Any statement contained in a previously filed document incorporated by reference will be deemed to be modified or superseded for purposes of this prospectus supplement and accompanying prospectus to the extent that a statement contained in this prospectus supplement modifies or replaces that statement.

This prospectus supplement incorporates by reference the documents set forth below that have previously been filed with the SEC (excluding any portions of any Form 8-K that are not deemed "filed" pursuant to the General Instructions of Form 8-K):

- our Annual Report on Form 10-K for the year ended December 31, 2022, filed with the SEC on March 9, 2023;
- our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2023 and June 30, 2023, filed with the SEC on May 11, 2023 and August 10, 2023;
- Our Current Reports on Form 8-K filed with the SEC on <u>June</u> 20, 2023, <u>September</u> 6, 2023 and <u>October</u> 4, 2023;
- the information specifically incorporated by reference in our Annual Report on Form 10-K for the year ended December 31, 2022, from our <u>definitive proxy statement</u> relating to our 2023 annual meeting of stockholders, filed with the SEC on April 24, 2023; and
- the description of our common stock set forth in our registration statement on Form 8-A, filed with the SEC on July 13, 2020, including any amendments thereto or reports filed for the purposes of updating this description.

We also incorporate by reference into this prospectus supplement and the accompanying prospectus Any documents we file with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the completion or termination of the offering, including all such documents we may file with the SEC after the date of the initial registration statement and prior to the effectiveness of the registration statement, will automatically be deemed to be incorporated by reference into this prospectus and to be part hereof from the date of filing those documents. We are not, however, incorporating by reference any documents or portions thereof that are not deemed "filed" with the SEC, including any information furnished pursuant to Item 2.02 or Item 7.01 of Form 8-K or related exhibits furnished pursuant to Item 9.01 of Form 8-K. Any statements in any such future filings will automatically be deemed to modify and supersede any information in any document we previously filed with the SEC that is incorporated or deemed to be incorporated into this prospectus supplement and the accompanying prospectus by reference to the extent that statements in the later filed document modify or replace such earlier statements.

This prospectus supplement and the accompanying prospectus may contain information that updates, modifies or is contrary to information in one or more of the documents incorporated by reference in this prospectus supplement and the accompanying prospectus. You should rely only on the information incorporated by reference or provided in this prospectus supplement and the accompanying prospectus. We have not authorized anyone else to provide you with different information. You should not assume that the information in this prospectus supplement is accurate as of any date other than the date of this prospectus supplement, the accompanying prospectus or the date of the documents incorporated by reference in this prospectus.

We will provide to each person, including any beneficial owner, to whom this prospectus supplement is delivered, a copy of any or all of the information that is incorporated by reference in this prospectus supplement

(excluding certain exhibits to the documents) but not delivered with the prospectus supplement. You can request a copy of these filings, at no cost, by writing or telephoning us at the following address or telephone number:

ALX Oncology Holdings Inc. Attn: Investor Relations 323 Allerton Avenue South San Francisco, CA 94080 650-466-7125

You may also access the documents incorporated by reference in this prospectus supplement and the accompanying prospectus through our website at www.alxoncology .com. Except for the specific incorporated documents listed above, no information available on or through our website shall be deemed to be incorporated into this prospectus supplement and the accompanying prospectus or the registration statement of which it forms a part.

PROSPECTUS

ALX Oncology Holdings, Inc.



Up to \$450,000,000

Common Stock
Preferred Stock
Warrants
Purchase Contracts
Units

We may offer and sell the securities identified above from time to time in one or more offerings. This prospectus provides you with a general description of the securities.

Each time we offer and sell securities, we will provide a supplement to this prospectus that contains specific information about the offering and the amounts, prices and terms of the securities. The supplement may also add, update or change information contained in this prospectus with respect to that offering. You should carefully read this prospectus and the applicable prospectus supplement, together with any documents we incorporated by reference, before you invest in any of our securities.

We may offer and sell the securities described in this prospectus and any prospectus supplement to or through one or more underwriters, dealers and agents, or directly to purchasers, or through a combination of these methods. If any underwriters, dealers or agents are involved in the sale of any of the securities, their names and any applicable purchase price, fee, commission or discount arrangement between or among them will be set forth, or will be calculable from the information set forth, in the applicable prospectus supplement. See the sections of this prospectus entitled "About this Prospectus" and "Plan of Distribution" for more information. No securities may be sold without delivery of this prospectus and the applicable prospectus supplement describing the method and terms of the offering of such securities.

INVESTING IN OUR SECURITIES INVOLVES RISKS. SEE "RISK FACTORS" BEGINNING ON PAGE 2 OF THIS PROSPECTUS AND IN ANY SIMILAR SECTION CONTAINED IN OR INCORPORATED BY REFERENCE HEREIN OR IN THE APPLICABLE PROSPECTUS SUPPLEMENT CONCERNING FACTORS YOU SHOULD CONSIDER BEFORE INVESTING IN OUR SECURITIES.

Our common stock is listed on The Nasdaq Global Select Market under the symbol "ALXO." On May 12, 2022, the last reported sale price of our common stock on The Nasdaq Global Select Market was \$9.00 per share.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is May 25, 2022.

Table of Contents

	Page
ABOUT THIS PROSPECTUS	ii
THE COMPANY	1
RISK FACTORS	2
SPECIAL NOTE REGARDING FORWARD LOOKING STATEMENTS	3
<u>USE OF PROCEEDS</u>	5
DESCRIPTION OF SECURITIES	6
DESCRIPTION OF CAPITAL STOCK	7
DESCRIPTION OF WARRANTS	13
DESCRIPTION OF PURCHASE CONTRACTS	14
<u>DESCRIPTION OF UNITS</u>	15
<u>PLAN OF DISTRIBUTION</u>	16
<u>LEGAL MATTERS</u>	17
EXPERTS	17
WHERE YOU CAN FIND MORE INFORMATION	17
INCORPORATION OF CERTAIN INFORMATION BY REFERENCE	18

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the U.S. Securities and Exchange Commission (the "SEC") using a "shelf" registration process. By using a shelf registration statement, we may sell securities from time to time and in one or more offerings as described in this prospectus. Each time that we offer and sell securities, we will provide a prospectus supplement to this prospectus that contains specific information about the securities being offered and sold and the specific terms of that offering and, to the extent appropriate, any updates to the information about us contained in this prospectus. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. The prospectus supplement may also add, update or change information contained in this prospectus with respect to that offering. If there is any inconsistency between the information in this prospectus and the applicable prospectus supplement, you should rely on the prospectus supplement. Before purchasing any securities, you should carefully read both this prospectus and the applicable prospectus supplement, together with the additional information described under the headings "Where You Can Find More Information" and "Incorporation of Certain Information by Reference."

We have not authorized anyone to provide you with any information or to make any representations other than those contained in this prospectus, any applicable prospectus supplement or any free writing prospectuses prepared by or on behalf of us or to which we have referred you. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We will not make an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus and the applicable prospectus supplement to this prospectus is accurate as of the date on its respective cover or as otherwise specified therein and that any information incorporated by reference is accurate only as of the date of the document incorporated by reference, unless we indicate otherwise. Our business, financial condition, results of operations and prospects may have changed since those dates. This prospectus incorporates by reference, and any prospectus supplement or free writing prospectus may contain and incorporate by reference, market data and industry statistics and forecasts that are based on independent industry publications and other publicly available information. Although we believe these sources are reliable, we do not guarantee the accuracy or completeness of this information and we have not independently verified this information. Although we are not aware of any misstatements regarding the market and industry data presented in this prospectus and the documents incorporated herein by reference, these estimates involve risks and uncertainties and are subject to change based on various factors, including those discussed under the heading "Risk Factors" contained or incorporated by reference in this prospectus, the applicable prospectus supplement and any related free writing prospectus and under similar headings in other documents that are incorporated by reference into this prospectus. Accordingly, invest

When we refer to "ALX Oncology Holdings," "we," "our," "us" and the "Company" in this prospectus, we mean ALX Oncology Holdings Inc., unless the context indicates otherwise or unless otherwise specified. When we refer to "you," we mean the holders of the applicable series of securities.

THE COMPANY

We are a clinical-stage immuno-oncology company focused on helping patients fight cancer by developing a pipeline of product candidates based on expertise in protein engineering and oncology led by the CD47 blocker, evorpacept (evorpacept is the recommended United States Adopted Name (USAN); this product is also known as ALX148), currently in phase 1 and 2 clinical trials. Cancer cells leverage CD47, a cell surface protein, as a "don't eat me" signal to evade detection by the immune system. Our company is developing a next-generation checkpoint inhibitor designed to have a high affinity for CD47 and to avoid the limitations caused by hematologic toxicities inherent in other CD47 blocking approaches. We believe our lead product candidate, evorpacept will have a wide therapeutic window to block the "don't eat me" signal on cancer cells, and will leverage the immune activation of broadly used anti-cancer agents through combination strategies. As of March 31, 2022, we had dosed over 200 subjects with evorpacept across a range of hematologic and solid malignancies in combination with a number of leading anti-cancer agents. We plan to initiate additional studies in combination with leading anti-cancer agents. In solid tumors, we are conducting two ongoing randomized Phase 2 trials of evorpacept for the treatment of first-line advanced head and neck squamous cell carcinoma, or HNSCC, with the first subject enrolled in the first trial in May 2021 and the first subject enrolled in the second trial in July 2021. We also initiated a randomized Phase 2/3 trial of evorpacept in combination with trastuzumab, ramucirumab and paclitaxel for the treatment of second line advanced HER2-overexpressing gastric/gastroesophageal junction, or GEJ, cancer and dosed the first patient in March 2022. Our collaborator, Zymeworks, is also conducting an ongoing Phase 1 trial for the treatment of advanced HER2expressing breast cancer and other solid tumors and enrolled the first subject in October 2021. In hematologic malignancies, we have initiated two Phase 1 trials of evorpacept for the treatment of myelodysplastic syndromes, or MDS, and acute myeloid leukemia, or AML, and are enrolling patients in both trials. Based on our early clinical results to date in multiple oncology indications showing encouraging anti-tumor activity and tolerability and our clinical development plans, our strategy is to pursue evorpacept as a potentially critical component of future oncology combination treatments. Our second program, which is a collaboration between us and Tallac Therapeutics, Inc. (Tallac), combines our company's SIRPα antibodies with Tallac's toll-like receptor 9 (TRL9) agonist antibody conjugate to deliver ALTA-002, a potent immune activator to myeloid cells in the tumor to promote innate and adaptive anti-cancer immune responses. This novel Toll-like receptor agonist antibody conjugation platform (TRAAC) enables systemic delivery of targeted TLR9 activation. An IND for ALTA-002 is planned for 2023, Additionally, with our acquisition of ScalmiBio, Inc. (ScalmiBio) in the fourth quarter of 2021, we seek to expand our pipeline of drug candidates to antibody drug conjugates based on expertise in protein engineering and oncology.

Our office is located at 323 Allerton Avenue, South San Francisco, CA 94080. Our telephone number is 650-466-7125. Our website address is https://www.alxoncology.com. Information contained on, or that can be accessed through, our website is not incorporated by reference into this prospectus and should not be considered to be part of this prospectus.

RISK FACTORS

Investing in our securities involves a high degree of risk. Before making a decision to invest in our securities, in addition to carefully considering the other information contained in this prospectus, in any accompanying prospectus supplement and incorporated by reference herein or therein, you should carefully consider the risks described under the caption "Risk Factors" contained in the applicable prospectus supplement, and any related free writing prospectus, and the risks discussed under the caption "Risk Factors" contained in our most recent Annual Report on Form 10-K and our most recently Quarterly Report on Form 10-Q, as well as any amendments thereto, which are incorporated by reference into this prospectus in their entirety, together with other information in this prospectus, the documents incorporated by reference, and any free writing prospectus that we may authorize for use in connection with a specific offering. See "Where You Can Find More Information" and "Incorporation of Certain Information by Reference."

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, each prospectus supplement and the information incorporated by reference in this prospectus and each prospectus supplement contain forward-looking statements. All statements other than statements of historical facts contained in this prospectus, including statements regarding our future results of operations and financial position, business strategy, product candidates, planned preclinical studies and clinical trials, results of clinical trials, research and development costs, regulatory approvals, timing and likelihood of success, as well as plans and objectives of management for future operations, are forward-looking statements. These statements involve known and unknown risks, uncertainties and other important factors that are in some cases beyond our control and may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "would," "expect," "plan," "anticipate," "could," "intend," "target," "project," "believe," "estimate," "predict," "potential," or "continue" or the negative of these terms or other similar expressions. Forward-looking statements contained in this prospectus include, but are not limited to, statements about:

- · our financial performance;
- the sufficiency of our existing cash to fund our future operating expenses and capital expenditure requirements;
- the accuracy of our estimates regarding expenses, future revenue, capital requirements, and needs for additional financing;
- our plans relating to commercializing our product candidates, if approved, including the geographic areas of focus and our ability to grow a sales team;
- the implementation of our strategic plans for our business and product candidates;
- our ability to obtain and maintain regulatory approval of our product candidates and the timing or likelihood of regulatory filings and approvals, including our expectation to seek special designations, such as orphan drug designation, for our product candidates for various diseases:
- · our reliance on third parties to conduct preclinical research activities, and for the manufacture of our product candidates;
- the beneficial characteristics, safety, efficacy and therapeutic effects of our product candidates;
- the progress and focus of our current and future clinical trials, and the reporting of data from those trials;
- our ability to advance product candidates into and successfully complete clinical trials;
- the ability of our clinical trials to demonstrate the safety and efficacy of our product candidates, and other positive results;
- the success of competing therapies that are or may become available;
- · developments relating to our competitors and our industry, including competing product candidates and therapies;
- our plans relating to the further development and manufacturing of our product candidates, including additional indications that we may pursue:
- existing regulations and regulatory developments in the United States and other jurisdictions;
- our potential and ability to successfully manufacture and supply our product candidates for clinical trials and for commercial use, if approved;
- our continued reliance on third parties to conduct additional clinical trials of our product candidates, and for the manufacture of our product candidates;

- our plans and ability to obtain or protect intellectual property rights, including extensions of existing patent terms where available;
- the scope of protection we are able to establish and maintain for intellectual property rights, including our technology platform and product candidates:
- our ability to retain the continued service of our key personnel and to identify, hire, and then retain additional qualified personnel;
- our expectations regarding the impact of the ongoing COVID-19 pandemic or geopolitical risks on our business;
- our plans for and prospects of our acquisitions and other business development activities, and our ability to successfully capitalize on these
 opportunities; and
- and our anticipated use of our existing cash, cash equivalents and investments.

We have based these forward-looking statements largely on our current expectations and projections about our business, the industry in which we operate and financial trends that we believe may affect our business, financial condition, results of operations and prospects, and these forward-looking statements are not guarantees of future performance or development. These forward-looking statements speak only as of the date of this prospectus and are subject to a number of risks, uncertainties and assumptions described in the section titled "Risk Factors" and elsewhere in this prospectus. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified, you should not rely on these forward-looking statements as predictions of future events. The events and circumstances reflected in our forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein until after we distribute this prospectus, whether as a result of any new information, future events or otherwise.

In addition, statements that "we believe" and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this prospectus, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain, and you are cautioned not to unduly rely upon these statements.

USE OF PROCEEDS

We intend to use the net proceeds from the sale of the securities as set forth in the applicable prospectus supplement.

DESCRIPTION OF SECURITIES

We may issue from time to time, in one or more offerings, the following securities:

- shares of common stock, par value \$0.001 per share, of the Company;
- shares of preferred stock, par value \$0.001 per share, of the Company;
- warrants to purchase shares of our common stock or preferred stock or other securities from the Company;
- purchase contracts; and
- units representing two or more of the foregoing securities.

We will set forth in the applicable prospectus supplement and/or free writing prospectus a description of any warrants, purchase contracts or units issued by us that may be offered or sold pursuant to this prospectus. The terms of the offering of securities, the initial offering price and the net proceeds to us will be contained in the prospectus supplement, and other offering material, relating to such offer.

DESCRIPTION OF CAPITAL STOCK

The following descriptions of our capital stock and certain provisions of our amended and restated certificate of incorporation and amended and restated bylaws are summaries and are qualified by reference to our amended and restated certificate of incorporation and the amended and restated bylaws, copies of which are filed with the SEC as exhibits to our registration statement, of which this prospectus forms a part.

General

Our amended and restated certificate of incorporation authorizes preferred stock and common stock. Our authorized capital stock consists of 1,100,000,000 shares, \$0.001 par value per share, of which:

- 1,000,000,000 shares are designated as voting common stock; and
- 100,000,000 shares are designated as preferred stock.

Common Stock

Subject to preferences that may be applicable to any then outstanding preferred stock, holders of our common stock are entitled to receive ratably those dividends, if any, as may be declared by the board of directors out of legally available funds. In the event of our liquidation, dissolution or winding up, the holders of our common stock will be entitled to share ratably in the assets legally available for distribution to stockholders after the payment of or provision for all of our debts and other liabilities, subject to the prior rights of any preferred stock then outstanding. Holders of our common stock have no preemptive rights or other subscription rights and there are no redemption or sinking funds provisions applicable to our common stock. All outstanding shares of our common stock are duly authorized, validly issued, fully paid and nonassessable. The rights, preferences and privileges of holders of our common stock are subject to and may be adversely affected by the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future.

Voting Rights

Each holder of common stock is entitled to one vote for each share on all matters submitted to a vote of the stockholders, including the election of directors. Our amended and restated certificate of incorporation and amended and restated bylaws do not provide for cumulative voting rights. Because of this, the holders of a plurality of the shares of common stock entitled to vote in any election of directors can elect all of the directors standing for election, if they should so choose. With respect to matters other than the election of directors, at any meeting of the stockholders at which a quorum is present or represented, the affirmative vote of a majority of the voting power of the shares present in person or represented by proxy at such meeting and entitled to vote on the subject matter shall be the act of the stockholders, except as otherwise required by law. The holders of a majority of the stock issued and outstanding and entitled to vote, present in person or represented by proxy, shall constitute a quorum for the transaction of business at all meetings of the stockholders.

Dividends

Subject to preferences that may be applicable to any then-outstanding shares of convertible preferred stock, holders of our common stock are entitled to receive dividends, if any, as may be declared from time to time by our board of directors out of legally available funds.

Liquidation

In the event of our liquidation, dissolution, or winding up, holders of our common stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities and the satisfaction of any liquidation preference granted to the holders of any then-outstanding shares of convertible preferred stock.

Rights and Preferences

Holders of our common stock have no preemptive, conversion, subscription, or other rights, and there are no redemption or sinking fund provisions applicable to our common stock. The rights, preferences, and privileges of the holders of our common stock are subject to and may be adversely affected by the rights of the holders of shares of any series of our convertible preferred stock that we may designate in the future.

Fully Paid and Nonassessable

All of our outstanding shares of common stock are fully paid and nonassessable.

Preferred Stock

Our board of directors has the authority, without further action by the stockholders, to issue up to 100,000,000 shares of preferred stock in one or more series and to fix the rights, preferences, privileges, and restrictions thereof. These rights, preferences, and privileges could include dividend rights, conversion rights, voting rights, redemption rights, liquidation preferences, sinking fund terms, and the number of shares constituting any series or the designation of such series, any or all of which may be greater than the rights of common stock. The issuance of preferred stock could adversely affect the voting power of holders of common stock and the likelihood that such holders will receive dividend payments and payments upon liquidation. In addition, the issuance of preferred stock could have the effect of delaying, deferring or preventing change in our control or other corporate action. We have no present plan to issue any shares of preferred stock.

Registration Rights

We are party to that certain Amended and Restated Investors' Rights Agreement dated April 1, 2020, that provides that certain holders of our common stock have certain registration rights as set forth below. The registration of shares of our common stock by the exercise of registration rights described below would enable the holders to sell these shares without restriction under the Securities Act when the applicable registration statement is declared effective. Generally, in an underwritten offering, the managing underwriter, if any, has the right, subject to specified conditions, to limit the number of shares such holders may include.

Demand Registration Rights

Certain holders of our common stock are entitled to certain demand registration rights. At any time beginning 180 days after the effective date of our initial public offering and before the three-year anniversary of the date of the investors' rights agreement, the holders of at least 50% of the shares in the aggregate may request that we file a registration statement to register all or a portion of their shares. Such request for registration must cover at least 40% of the shares or shares with an anticipated aggregate public offering price, net of underwriting discounts and expenses, of at least \$15.0 million.

S-3 Registration Rights

Certain holders of our common stock are entitled to certain Form S-3 registration rights. At any time when we are eligible to file a registration statement on Form S-3, the holders of at least 10% of these shares can make a request that we register their shares on Form S-3 if such request covers shares with an anticipated aggregate public offering price, net of underwriting discounts and expenses, of at least \$1.0 million.

Piggyback Registration Rights

In connection with this offering, certain holders of our common stock were entitled to, and the necessary percentage of holders waived, their rights to notice of this offering and to include

their shares of registrable securities in this offering. After this offering, in the event that we propose to register any of our securities under the Securities Act, either for our own account or for the account of other security holders, the holders of these shares will be entitled to certain piggyback registration rights allowing the holder to include their shares in such registration, subject to certain marketing and other limitations. As a result, whenever we propose to file a registration statement under the Securities Act, the holders of these shares are entitled to notice of the registration and have the right to include their shares in the registration, subject to limitations that the underwriters may impose on the number of shares included in the offering.

Indemnification

Our amended and restated investors' rights agreement contains customary cross-indemnification provisions, under which we are obligated to indemnify holders of registrable securities in the event of material misstatements or omissions in the registration statement attributable to us, and they are obligated to indemnify us for material misstatements or omissions attributable to them.

Expenses of Registration

We will pay the registration expenses, other than underwriting discounts and commissions, of the shares registered by the demand, Form S-3 and piggyback registrations described above.

Termination of Registration Rights

The demand, Form S-3 and piggyback registration described above will expire upon the earliest of (1) the fifth anniversary after the closing of our initial public offering, (2) a deemed liquidation event (as defined in our amended and restated certificate of incorporation, in effect prior to the completion of our initial public offering) and (3) such time after the completion of our initial public offering that such stockholder can sell all of its shares entitled to registration rights under Rule 144 of the Securities Act.

Anti-Takeover Effects of Certain Provisions of Delaware Law, Our Amended and Restated Certificate of Incorporation and Our Amended and Restated Bylaws

Certain provisions of Delaware law and certain provisions included in our amended and restated certificate of incorporation and amended and restated bylaws summarized below may be deemed to have an anti-takeover effect and may delay, deter, or prevent a tender offer or takeover attempt that a stockholder might consider to be in its best interests, including attempts that might result in a premium being paid over the market price for the shares held by stockholders.

Preferred Stock

Our amended and restated certificate of incorporation contains provisions that permit our board of directors to issue, without any further vote or action by the stockholders, shares of preferred stock in one or more series and, with respect to each such series, to fix the number of shares constituting the series and the designation of the series, the voting rights (if any) of the shares of the series and the powers, preferences, or relative, participation, optional, and other special rights, if any, and any qualifications, limitations, or restrictions, of the shares of such series.

Classified Board

Our amended and restated certificate of incorporation provides that our board of directors is divided into three classes, designated Class I, Class II and Class III. The current board of directors consists of seven members, divided into three classes with staggered three-year terms. The term of initial Class I directors terminated on the date of the 2021 annual meeting. At the 2021 annual meeting, Corey Goodman, Ph.D., Jason Lettmann and

Sophia Randolph, M.D., Ph.D., were nominated and elected to serve as Class I directors for a three-year term until the 2024 annual meeting of stockholders or until their successors are duly elected and qualified. The term of the initial Class II directors shall terminate on the date of the 2022 annual meeting, and the term of the initial Class III directors shall terminate on the date of the 2023 annual meeting. At each subsequent annual meeting of stockholders, successors to the class of directors whose term expires at that annual meeting will be elected for a three-year term.

Removal of Directors

Our amended and restated certificate of incorporation provides that stockholders may only remove a director for cause by a vote of no less than a majority of the shares present in person or by proxy at the meeting and entitled to vote.

Director Vacancies

Our amended and restated certificate of incorporation authorizes only our board of directors to fill vacant directorships.

No Cumulative Voting

Our amended and restated certificate of incorporation provides that stockholders do not have the right to cumulate votes in the election of directors.

Special Meetings of Stockholders

Our amended and restated certificate of incorporation and amended and restated bylaws provide that, except as otherwise required by law, special meetings of the stockholders may be called only by an officer at the request of a majority of our board of directors, by the Chair of our board of directors or by our Chief Executive Officer.

Advance Notice Procedures for Director Nominations

Our amended and restated bylaws provide that stockholders seeking to nominate candidates for election as directors at an annual or special meeting of stockholders must provide timely notice thereof in writing. To be timely, a stockholder's notice generally will have to be delivered to and received at our principal executive offices before notice of the meeting is issued by the secretary of the Company, with such notice being served not less than 90 nor more than 120 days before the meeting. Although the amended and restated bylaws do not give the board of directors the power to approve or disapprove stockholder nominations of candidates to be elected at an annual meeting, the amended and restated bylaws may have the effect of precluding the conduct of certain business at a meeting if the proper procedures are not followed or may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect its own slate of directors or otherwise attempting to obtain control of the Company.

Action by Written Consent

Our amended and restated certificate of incorporation and amended and restated bylaws provide that any action to be taken by the stockholders must be effected at a duly called annual or special meeting of stockholders and may not be affected by written consent.

Amending our Certificate of Incorporation and Bylaws

Our amended and restated certificate of incorporation may be amended or altered in any manner provided by the DGCL. Our amended and restated bylaws may be adopted, amended, altered, or repealed by stockholders only

upon approval of at least majority of the voting power of all the then outstanding shares of the common stock, except for any amendment of the above provisions, which would require the approval of a two-thirds majority of our then outstanding common stock. Additionally, our amended and restated certificate of incorporation provides that our bylaws may be amended, altered, or repealed by the board of directors.

Authorized but Unissued Shares

Our authorized but unissued shares of common stock and preferred stock are available for future issuances without stockholder approval, except as required by the listing standards of the Nasdaq, and may be utilized for a variety of corporate purposes, including future offerings to raise additional capital, acquisitions and employee benefit plans. The existence of authorized but unissued and unreserved common stock and preferred stock may render more difficult or discourage an attempt to obtain control of the Company by means of a proxy contest, tender offer, merger, or otherwise.

Exclusive Jurisdiction

Our amended and restated bylaws provide that, unless we consent to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for any derivative action or proceeding brought on our behalf, any action asserting a claim of breach of fiduciary duty, any action asserting a claim arising pursuant to the DGCL, any action regarding our amended and restated certificate of incorporation or amended and restated bylaws, or any action asserting a claim against us that is governed by the internal affairs doctrine. This provision does not apply to suits brought to enforce a duty or liability created by the Exchange Act or any other claim for which the U.S. federal courts have exclusive jurisdiction. Our amended and restated bylaws further provide that the federal district courts of the United States will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act. Any person or entity purchasing or otherwise acquiring any interest in our securities shall be deemed to have notice of and consented to these provisions. Although we believe these provisions benefit us by providing increased consistency in the application of law for the specified types of actions and proceedings, the provisions may have the effect of discouraging lawsuits against us or our directors and officers.

Business Combinations with Interested Stockholders

We are governed by Section 203 of the DGCL. Subject to certain exceptions, Section 203 of the DGCL prohibits a public Delaware corporation from engaging in a business combination (as defined in such section) with an "interested stockholder" (defined generally as any person who beneficially owns 15% or more of the outstanding voting stock of such corporation or any person affiliated with such person) for a period of three years following the time that such stockholder became an interested stockholder, unless (i) prior to such time the board of directors of such corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder; (ii) upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder owned at least 85% of the voting stock of such corporation at the time the transaction commenced (excluding for purposes of determining the voting stock of such corporation outstanding (but not the outstanding voting stock owned by the interested stockholder) those shares owned (A) by persons who are directors and also officers of such corporation and (B) by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer); or (iii) at or subsequent to such time the business combination is approved by the board of directors of such corporation and authorized at a meeting of stockholders (and not by written consent) by the affirmative vote of at least 66 2/3% of the outstanding voting stock of such corporation not owned by the interested stockholder.

Limitation of Liability and Indemnification of Officers and Directors

Our amended and restated certificate of incorporation and our amended and restated bylaws provide that we must indemnify our directors and officers to the fullest extent authorized by the DGCL. We are expressly authorized

to, and do, carry directors' and officers' insurance providing coverage for our directors, officers and certain employees for some liabilities. We believe that these indemnification provisions and insurance are useful to attract and retain qualified directors and executive officers.

The limitation on liability and indemnification provisions in our certificate of incorporation and bylaws may discourage stockholders from bringing a lawsuit against directors for breach of their fiduciary duty. These provisions may also have the effect of reducing the likelihood of derivative litigation against directors and officers, even though such an action, if successful, might otherwise benefit us and our stockholders. Investors may be adversely affected to the extent we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions.

Listing

Our common stock is listed on The Nasdaq Global Select Market under the trading symbol "ALXO."

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Computershare Trust Company, N.A. The transfer agent and registrar's address is 250 Royall Street, Canton, Massachusetts 02021.

DESCRIPTION OF WARRANTS

We may issue warrants to purchase common stock or preferred stock. We may offer warrants separately or together with one or more additional warrants, common stock, preferred stock, or any combination of those securities in the form of units, as described in the applicable prospectus supplement. If we issue warrants as part of a unit, the applicable prospectus supplement will specify whether those warrants may be separated from the other securities in the unit prior to the expiration date of the warrants. The applicable prospectus supplement will also describe the following terms of any warrants, as applicable:

- the specific designation and aggregate number of, and the offering price at which we will issue, the warrants;
- the currency or currency units in which the offering price, if any, and the exercise price are payable;
- the date on which the right to exercise the warrants will begin and the date on which that right will expire or, if you may not continuously exercise the warrants throughout that period, the specific date or dates on which you may exercise the warrants;
- whether the warrants are to be sold separately or with other securities as parts of units;
- whether the warrants will be issued in definitive or global form or in any combination of these forms, although, in any case, the form of a warrant included in a unit will correspond to the form of the unit and of any security included in that unit;
- any applicable material U.S. federal income tax consequences;
- the identity of the warrant agent for the warrants and of any other depositaries, execution or paying agents, transfer agents, registrars or other agents;
- the proposed listing, if any, of the warrants or any securities purchasable upon exercise of the warrants on any securities exchange;
- the designation and terms of any equity securities purchasable upon exercise of the warrants:
- the designation, aggregate principal amount, currency and terms of any debt securities that may be purchased upon exercise of the warrants;
- if applicable, the designation and terms of the common stock or preferred stock, with which the warrants are issued and the number of warrants issued with each security;
- if applicable, the date from and after which any warrants issued as part of a unit and the related common stock, or preferred stock will be separately transferable;
- the number of shares of common stock or preferred stock purchasable upon exercise of a warrant and the price at which those shares may be purchased;
- if applicable, the minimum or maximum amount of the warrants that may be exercised at any one time;
- information with respect to book-entry procedures, if any;
- the antidilution provisions, and other provisions for changes to or adjustment in the exercise price, of the warrants, if any;
- any redemption or call provisions; and
- any additional terms of the warrants, including terms, procedures and limitations relating to the exchange or exercise of the warrants.

DESCRIPTION OF PURCHASE CONTRACTS

The following description summarizes the general features of the purchase contracts that we may offer under this prospectus. Although the features we have summarized below will generally apply to any future purchase contracts we may offer under this prospectus, we will describe the particular terms of any purchase contracts that we may offer in more detail in the applicable prospectus supplement. The specific terms of any purchase contracts may differ from the description provided below as a result of negotiations with third parties in connection with the issuance of those purchase contracts, as well as for other reasons. Because the terms of any purchase contracts we offer under a prospectus supplement may differ from the terms we describe below, you should rely solely on information in the applicable prospectus supplement if that summary is different from the summary in this prospectus.

We will incorporate by reference into the registration statement of which this prospectus is a part any purchase contract that we may offer under this prospectus before the sale of the related purchase contract. We urge you to read any applicable prospectus supplement related to specific purchase contracts being offered, as well as the complete instruments that contain the terms of the securities that are subject to those purchase contracts. Certain of those instruments, or forms of those instruments, have been filed as exhibits to the registration statement of which this prospectus is a part, and supplements to those instruments or forms may be incorporated by reference into the registration statement of which this prospectus is a part, from reports we file with the SEC.

We may issue purchase contracts, including contracts obligating holders to purchase from us, and for us to sell to holders, a specific or variable number of our securities at a future date or dates. Alternatively, the purchase contracts may obligate us to purchase from holders, and obligate holders to sell to us, a specific or varying number of our securities.

If we offer any purchase contracts, certain terms of that series of purchase contracts will be described in the applicable prospectus supplement, including, without limitation, the following:

- the price of the securities or other property subject to the purchase contracts (which may be determined by reference to a specific formula described in the purchase contracts);
- whether the purchase contracts are issued separately, or as a part of units each consisting of a purchase contract and one or more of our other securities, including U.S. Treasury securities, securing the holder's obligations under the purchase contract;
- · any requirement for us to make periodic payments to holders or vice versa, and whether the payments are unsecured or pre-funded;
- any provisions relating to any security provided for the purchase contracts;
- whether the purchase contracts obligate the holder or us to purchase or sell, or both purchase and sell, the securities subject to purchase under the purchase contract, and the nature and amount of each of those securities, or the method of determining those amounts;
- whether the purchase contracts are to be prepaid or not;
- whether the purchase contracts are to be settled by delivery, or by reference or linkage to the value, performance or level of the securities subject to purchase under the purchase contract;
- any acceleration, cancellation, termination or other provisions relating to the settlement of the purchase contracts;
- a discussion of certain U.S. federal income tax considerations applicable to the purchase contracts;
- · whether the purchase contracts will be issued in fully registered or global form; and
- any other terms of the purchase contracts and any securities subject to such purchase contracts.

DESCRIPTION OF UNITS

We may issue units comprising two or more securities described in this prospectus in any combination. For example, we might issue units consisting of a combination of common stock and warrants to purchase preferred stock. The following description sets forth certain general terms and provisions of the units that we may offer pursuant to this prospectus. The particular terms of the units and the extent, if any, to which the general terms and provisions may apply to the units so offered will be described in the applicable prospectus supplement.

Each unit will be issued so that the holder of the unit also is the holder of each security included in the unit. Thus, the unit will have the rights and obligations of a holder of each included security. Units will be issued pursuant to the terms of a unit agreement, which may provide that the securities included in the unit may not be held or transferred separately at any time or at any time before a specified date. A copy of the forms of the unit agreement and the unit certificate relating to any particular issue of units will be filed with the SEC each time we issue units, and you should read those documents for provisions that may be important to you. For more information on how you can obtain copies of the forms of the unit agreement and the related unit certificate, see the section of this prospectus captioned "Where You Can Find More Information."

The prospectus supplement relating to any particular issuance of units will describe the terms of those units, including, to the extent applicable, the following:

- the designation and terms of the units and the securities included in the units, including whether and under what circumstances those securities may be held or transferred separately;
- · any provision for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units; and
- whether the units will be issued in fully registered or global form.

PLAN OF DISTRIBUTION

We may sell the securities from time to time pursuant to underwritten public offerings, direct sales to the public, "at the market" offerings, negotiated transactions, block trades or a combination of these methods. We may sell the offered securities from time to time:

- · through underwriters or dealers;
- through agents;
- directly to one or more purchasers; or
- through a combination of any of these methods of sale.

We will identify the specific plan of distribution, including any underwriters, dealers, agents or direct purchasers and their compensation in the applicable prospectus supplement.

LEGAL MATTERS

Wilson Sonsini Goodrich & Rosati, Professional Corporation, Palo Alto, California, will pass upon certain legal matters relating to the issuance and sale of the securities offered hereby on behalf of ALX Oncology Holdings Inc. Additional legal matters may be passed upon for us or any underwriters, dealers or agents, by counsel that we will name in the applicable prospectus supplement.

EXPERTS

The consolidated financial statements of ALX Oncology Holdings Inc. as of December 31, 2021 and 2020, and for each of the years in the three-year period ended December 31, 2021, and management's assessment of the effectiveness of internal control over financial reporting as of December 31, 2021, have been incorporated by reference herein and in the registration statement in reliance upon the report of KPMG LLP, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing. The audit report covering the December 31, 2021 consolidated financial statements refers to a change to the method of accounting for leases.

WHERE YOU CAN FIND MORE INFORMATION

Because we are subject to the information and reporting requirements of the Exchange Act, we file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at http://www.sec.gov. We also maintain a website at www.alxoncology.com where these materials are available. You may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. Information contained on or accessible through our website is not a part of this prospectus and is not incorporated by reference herein, and the inclusion of our website address in this prospectus is an inactive textual reference only. This prospectus and any prospectus supplement are part of a registration statement that we filed with the SEC and do not contain all of the information in the registration statement. The full registration statement may be obtained from the SEC or us, as provided below. Forms of the indenture and other documents establishing the terms of the offered securities are or may be filed as exhibits to the registration statement. Statements in this prospectus or any prospectus supplement about these documents are summaries and each statement is qualified in all respects by reference to the document to which it refers. You should refer to the actual documents for a more complete description of the relevant matters. You may inspect a copy of the registration statement through the SEC's website, as provided above.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC's rules allow us to "incorporate by reference" information into this prospectus, which means that we can disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is deemed to be part of this prospectus, and subsequent information that we file with the SEC will automatically update and supersede that information. Any statement contained in a previously filed document incorporated by reference will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus modifies or replaces that statement.

This prospectus and any accompanying prospectus supplement incorporate by reference the documents set forth below that have previously been filed with the SEC:

- our Annual Report on Form 10-K for the year ended December 31, 2021, filed with the SEC on February 28, 2022;
- our Quarterly Report on Form 10-Q for the guarter ended March 31, 2022, filed with the SEC on May 9, 2022;
- the information specifically incorporated by reference in our Annual Report on Form 10-K for the year ended December 31, 2021, from our <u>definitive proxy statement</u> relating to our 2022 annual meeting of stockholders, filed with the SEC on April 22, 2022;
- our Current Report on Form 8-K, which was filed with the SEC on April 12, 2022; and
- the description of our common stock set forth in our registration statement on <u>Form 8-A</u>, filed with the SEC on July 13, 2020, including any amendments thereto or reports filed for the purposes of updating this description.

Any documents we file with the SEC pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of the initial registration statement of which this prospectus forms a part and prior to effectiveness of the registration statement, as well as subsequent to the effectiveness of the registration statement and prior to the termination of the offering of our securities to which this prospectus relates, will automatically be deemed to be incorporated by reference into this prospectus and to be part hereof from the date of filing those documents. We are not, however, incorporating by reference any documents or portions thereof that are not deemed "filed" with the SEC, including any information furnished pursuant to Item 2.02 or Item 7.01 of Form 8-K. Any statements in any such future filings will automatically be deemed to modify and supersede any information in any document we previously filed with the SEC that is incorporated or deemed to be incorporated herein by reference to the extent that statements in the later filed document modify or replace such earlier statements.

You can request a copy of these filings, at no cost, by writing or telephoning us at the following address or telephone number:

ALX Oncology Holdings Inc. Attn: Investor Relations 323 Allerton Avenue South San Francisco, CA 94080 650-466-7125

The information accessible through any website referred to in this prospectus or any document incorporated herein is not, and should not be deemed to be, a part of this prospectus.



Shares of Common Stock Pre-Funded Warrants to Purchase Shares of Common Stock

PROSPECTUS SUPPLEMENT

Piper Sandler Cantor

October , 2023