Filed pursuant to Rule 424(b)(4) Registration No. 333-274520

PROSPECTUS



7,600,000 Shares of Common Stock Pre-Funded Warrants to Purchase up to 2,000,000 Shares of Common Stock Common Warrants to Purchase up to 9,600,000 Shares of Common Stock

2,000,000 Shares of Common Stock Underlying such Pre-Funded Warrants 9,600,000 Shares of Common Stock Underlying such Common Warrants

We are offering on a reasonable best efforts basis 7,600,000 shares of our common stock, par value \$0.0001 per share (the "common stock"), together with warrants (each, a "common warrant") to purchase up to 7,600,000 shares of our common stock, based on a public offering price of \$1.00 per share and accompanying common warrant. Each common warrant will be exercisable for one share of our common stock and have an exercise price of \$1.00 per share. The common warrants will be exercisable immediately and will expire five years from the date of issuance. The shares of common stock and common warrants will be issued separately and will be immediately separable upon issuance but will be purchased together in this offering. This prospectus also relates to the shares of common stock issuable upon exercise of the common warrants sold in this offering.

We are also offering pre-funded warrants (the "pre-funded warrants" and together with the common warrants, the "warrants") to purchase up to 2,000,000 shares of common stock, together with common warrants to purchase up to 2,000,000 shares of common stock, to those investors whose purchase of shares of common stock in this offering would result in the purchaser, together with its affiliates and certain related parties, beneficially owning more than 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding common stock immediately following the consummation of this offering, in lieu of shares of common stock that would result in beneficial ownership in excess of 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding common stock. Each pre-funded warrant has an exercise price of \$0.0001 per share. The combined purchase price per pre-funded warrant and accompanying common warrant is equal to \$0.9999, which is equal to the combined purchase price per share of common stock and accompanying common warrant less \$0.0001. Each pre-funded warrant will be exercisable immediately upon issuance and will expire when exercised in full. The pre-funded warrants and common warrants will be issued separately and will be immediately separable upon issuance but will be purchased together in this offering. This prospectus also relates to the shares of common stock issuable upon exercise of the pre-funded warrants sold in this offering.

We refer to the common stock and warrants to be sold in this offering collectively as the "securities."

The securities are expected to be issued in a single closing and the combined public offering price per share of common stock or pre-funded warrant and accompanying common warrant will be fixed for the duration of this offering. We will deliver all securities to be issued in connection with this offering delivery versus payment or receipt versus payment, as the case may be, upon receipt of investor funds received by us.

Our common stock is listed on the Nasdaq Capital Market under the symbol "VCNX." On September 28, 2023, the last reported sale price of our common stock on Nasdaq was \$1.51 per share. There is no established public trading market for the warrants and we do not expect a market to develop. In addition, we do not intend to apply for a listing of the warrants on any national securities exchange or other trading system.

We have engaged A.G.P./Alliance Global Partners to act as our exclusive placement agent (the "placement agent") in connection with this offering. The placement agent has agreed to use its reasonable best efforts to arrange for the sale of the securities offered by this prospectus. The placement agent is not purchasing or selling any of the securities we are offering and the placement agent is not required to arrange the purchase or sale of any specific number of securities or dollar amount. We have agreed to compensate the placement agent as set forth in the table below, which assumes that we sell all of the securities offered by this prospectus. There is no arrangement for funds to be received in escrow, trust or similar arrangement. There is no minimum offering requirement as a condition of closing of this offering. We may sell fewer than all of the securities offered hereby, which may significantly reduce the amount of proceeds received by us. This offering will end no later than October 31, 2023 except that the shares of common stock underlying the warrants will be offered on a continuous basis pursuant to Rule 415 under the Securities Act of 1933, as amended (the "Securities Act").

Investing in our common stock involves a high degree of risk. See "<u>Risk Factors</u>" beginning on page 5 of this prospectus and under similar headings in the documents incorporated by reference into this prospectus.

	Per Share and Common Warrant		Per Pre-Funded Warrant and Common Warrant		Total	
Offering price	\$	1.00	\$	0.9999	\$9,599,800	
Placement agent fees ⁽¹⁾	\$	0.07	\$	0.07	\$ 497,000(3)	
Proceeds, before expenses, to us ⁽²⁾	\$	0.93	\$	0.9299	\$9,102,800	

- (1) We have agreed to pay the placement agent a cash fee equal to 7.0% of the aggregate proceeds of this offering and to reimburse the placement agent for certain of its offering-related expenses. See "Plan of Distribution" beginning on page 21 of this prospectus for a description of the compensation to be received by the placement agent.
- (2) The amount of the proceeds to us presented in this table does not give effect to any exercise of the warrants.
- (3) Our Chief Executive Officer and an entity affiliated with the Chairman of our Board of Directors have committed to purchase an aggregate of 3,500,000 shares of common stock and common warrants to purchase up to 3,500,000 shares of common stock in this offering at the same price and on the same terms as the other purchasers in this offering, except that the placement agent will receive 2.0% of the aggregate proceeds of such sales, and will not be paid for non-accountable fees and expenses with respect to such sales.

Neither the Securities and Exchange Commission (the "SEC") nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

Delivery of the shares and warrants is expected to be made on or about October 2, 2023, subject to satisfaction of customary closing conditions.

Sole Placement Agent

A.G.P.

The date of this prospectus is September 28, 2023

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You should carefully read this prospectus, any documents that we incorporate by reference in this prospectus and the information below under the captions "Incorporation By Reference" and "Where You Can Find More Information" before making an investment decision. You should rely only on the information contained or incorporated by reference in this prospectus. We have not authorized anyone to provide you with information other than the information that we have provided or incorporated by reference in this prospectus and your reliance on any unauthorized information or representation is at your own risk. This prospectus is not an offer to sell these securities, and it is not soliciting an offer to buy these securities, in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus, or in any document incorporated by reference herein, is accurate only as of the date of this prospectus and that any information we have incorporated by reference is accurate only as of the document incorporated by reference. Our business, financial condition, results of operations, and prospects may have changed since those dates. References in this prospectus to the terms "Vaccinex," "the Company," "we," "our," and "us," or other similar terms, mean Vaccinex, Inc. and our subsidiaries, unless we state otherwise or the context indicates otherwise.

This prospectus and the documents incorporated by reference herein contain certain market data and industry statistics and forecasts based on studies and clinical trials sponsored by Vaccinex or third parties, 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 verified any of this data. Further, many of these statements involve risks and uncertainties and are subject to change based on various factors, including those discussed or referenced under the caption "Risk Factors" in this prospectus and under similar captions in the documents that are incorporated by reference herein. Accordingly, investors should not place undue reliance on this information.

We effected a 1-for-15 reverse stock split of our issued and outstanding shares of common stock (the "Reverse Stock Split") on September 25, 2023. All historical share and per share amounts reflected throughout this prospectus have been adjusted to reflect the Reverse Stock Split.

PROSPECTUS SUMMARY

This summary highlights information contained in other parts of this prospectus and in the documents we incorporate by reference. It does not contain all of the information that you should consider before investing in our securities and it is qualified by, and should be read in conjunction with, the more detailed information appearing elsewhere in this prospectus and the documents incorporated by reference herein. You should read the following summary together with the more detailed information regarding our Company and the securities being sold in this offering, including "Risk Factors" and other information incorporated by reference herein.

Company Overview

We are a clinical-stage biotechnology company engaged in the discovery and development of targeted biotherapeutics to treat serious diseases and conditions with unmet medical needs, including neurodegenerative diseases, cancer, and autoimmune disorders. We believe we are the leader in the field of semaphorin 4D ("SEMA4D"), biology and that we are currently the only company targeting SEMA4D as a potential treatment for neurodegenerative diseases, cancer, and autoimmune disorders. SEMA4D is an extracellular signaling molecule that regulates the migration of immune and inflammatory cells to sites of injury, cancer, or infection. We are leveraging our SEMA4D antibody platform and our extensive knowledge of SEMA4D biology to develop our lead product candidate, pepinemab, an antibody that we believe utilizes novel mechanisms of action. We are focused on developing pepinemab for the treatment of Alzheimer's disease, Huntington's disease, head and neck cancer, and pancreatic cancer. Additionally, third-party investigators are studying pepinemab in clinical trials in breast cancer, as well as in "window of opportunity" studies in other indications, including head and neck cancer and melanoma.

We have developed multiple proprietary platform technologies and are developing product candidates to address serious diseases or conditions that have a substantial impact on day-to-day functioning and for which treatment is not addressed adequately by available therapies. We employ our proprietary platform technologies, including through our work with our academic collaborators, to identify potential product candidates for sustained expansion of our internal product pipeline, and to facilitate strategic development and commercial partnerships. Our lead platform technologies include our SEMA4D antibody platform and our ActivMAb® antibody discovery platform. Our lead product candidate pepinemab is currently in clinical development for the treatment of Alzheimer's disease and head and neck, pancreatic, and breast cancer through our efforts or through investigator-sponsored trials. Our additional product candidate VX5 is in an earlier stage of development and was selected using our ActivMAb platform. We believe our multiple platform technologies position us well for continued pipeline expansion and partnership opportunities going forward.

Our current research and development activities primarily relate to clinical development in the following indications:

- **Huntington's Disease**. We evaluated pepinemab for the treatment of Huntington's disease in our Phase 2 SIGNAL trial. Topline data for this trial, consisting of 265 subjects, was reported in late September 2020. Although the study did not meet its prespecified primary endpoints, it provided important new information, including evidence of cognitive benefit and a reduction in brain atrophy and increase in brain metabolic activity in patients with manifest disease symptoms. An improved trial design would focus on patients with early signs of cognitive or functional deficits because they appeared to derive the greatest treatment benefit. We are evaluating our development strategy in terms of business opportunities and other near-term clinical activities. In August 2023, we received written responses from the U.S. Food and Drug Administration to questions we posed related to potential endpoints for a Phase 3 trial of pepinemab in Huntington's disease. We believe these responses provide the necessary guidance for trial design.
- Cancer Studies. We and others have shown that SEMA4D, the target of pepinemab, is highly expressed in head and neck cancer where it impedes recruitment and activation of dendritic cells and cytotoxic T cells that can attack the tumor while also inducing differentiation of myeloid derived suppressor cells that inhibit tumoricidal immune activity. Head and neck cancer is, therefore, a cancer in which we believe immunotherapy with pepinemab in combination with a checkpoint inhibitor such as KEYTRUDA® (pembrolizumab) could have a significant therapeutic impact. We have entered into a collaboration with Merck Sharp & Dohme, which is supplying KEYTRUDA, for first-line treatment of up to 65 head and neck cancer patients in a Phase 1b/2 trial. Interim trial data indicate an approximate doubling of objective response rate and progression free survival relative to historical results with checkpoint monotherapy in patients with hard-to-treat tumors that express low levels of PD-L1. Biopsy data suggest treatment-induced formation of lymphoid structures in tumors that are known to be associated with improved outcomes in head and neck cancer. In a similar arrangement, we are collaborating with Merck KgaA (EMD Serono in the U.S.), which is supplying Bavencio® (avelumab), another checkpoint inhibitor, for evaluation in a Phase 1b/2 trial in combination with pepinemab in pancreatic cancer. Pepinemab is also being evaluated by third parties in investigator-sponsored trials for breast cancer, and in multiple "window of opportunity" studies in additional cancer indications.
- **Alzheimer's Disease.** In April 2023, we reached our enrollment target of 40 participants for the Phase 1b/2 SIGNAL-AD study evaluating pepinemab as a potential treatment for people with mild dementia due to Alzheimer's disease. SIGNAL-AD topline data is expected in mid-2024, after all the participants have received 12 months of treatment.

Our Corporate Information

We were incorporated under the laws of the State of Delaware in April 2001. Our principal executive offices are located at 1895 Mount Hope Avenue, Rochester, New York 14620, and our telephone number is (585) 271-2700. Our website address is www.vaccinex.com. Our website and the information contained on or accessible through our website are not incorporated by reference in, and are not considered part of, this prospectus, and any reference to our website is intended to be an inactive textual reference only. You should not rely on any such information in making your decision to purchase our common stock.

Implications of Being an Emerging Growth Company and a Smaller Reporting Company

We are an "emerging growth company," as defined in the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act"). Section 107(b) of the JOBS Act provides that an emerging growth company can leverage the extended transition period, provided in Section 102(b) of the JOBS Act, for complying with new or revised accounting standards. Thus, an emerging growth company can delay the adoption of new or revised accounting standards that have different effective dates for public and private companies until those standards apply to private companies. We have elected to use this extended transition period and, as a result, our condensed consolidated financial statements may not be comparable to companies that comply with public company effective dates of such accounting standards.

We will no longer be an "emerging growth company" after December 30, 2023 and will be unable to take advantage of the exemptions from various requirements applicable to public companies including those discussed above.

We are also a "smaller reporting company" and will remain a smaller reporting company while we have determined that either (i) the market value of our stock held by non-affiliates was less than \$250 million as of the last business day of our most recently completed second fiscal quarter or (ii) our annual revenue was less than \$100 million during our most recently completed fiscal year and the market value of our stock held by non-affiliates was less than \$700 million as of the last business day of our most recently completed second fiscal quarter. If we are a smaller reporting company at the time we cease to be an emerging growth company, we may continue to rely on exemptions from certain disclosure requirements that are available to smaller reporting companies, including many of the same exemptions from disclosure obligations that are available to emerging growth companies, such as reduced disclosure obligations regarding executive compensation. We may take advantage of one or more of these reporting exemptions until we are no longer a smaller reporting company.

The Offering

Issuer Vaccinex, Inc.

Common stock offered by

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7,600,000 shares of common stock based on a combined public offering price of \$1.00 per share of common stock and accompanying common warrant.

Pre-funded warrants

We are also offering pre-funded warrants to purchase up to 2,000,000 shares of common stock in lieu of shares of common stock to any purchaser whose purchase of shares of common stock in this offering would otherwise result in such purchaser, together with its affiliates and certain related parties, beneficially owning more than 4.99% (or, at the purchaser's election, 9.99%) of our outstanding common stock immediately following the consummation of this offering. Each pre-funded warrant will have an exercise price of \$0.0001 per share, will be immediately exercisable, and will not expire prior to exercise. This prospectus also relates to the offering of the shares of common stock issuable upon exercise of the pre-funded warrants.

Common warrants

We are also offering common warrants to purchase up to 9,600,000 shares of common stock. Each common warrant will have an exercise price of \$1.00 per share, will be exercisable immediately, and will expire five years from the date of issuance. This prospectus also relates to the offering of the shares of common stock issuable upon exercise of the common warrants.

Common stock to be outstanding following the offering

12,458,402 shares (assuming no exercise of any of the warrants issued in this offering).

Use of proceeds

We estimate the net proceeds to us from this offering, after deducting placement agent fees and estimated offering expenses payable by us, will be approximately \$8.7 million, based on a public offering price of \$1.00 per share of common stock and accompanying common warrant, and assuming no exercise of any of the warrants. However, this is a reasonable best efforts offering with no minimum number of securities or amount of proceeds as a condition to closing, and we may not sell all or any of these securities offered pursuant to this prospectus; as a result, we may receive significantly less in net proceeds.

We intend to use the net proceeds to fund the ongoing development and clinical trials of our lead drug candidate, pepinemab, in cancer and neurodegenerative disease, and for working capital and other general corporate purposes. See "Use of Proceeds" on page 10 of this prospectus for more information.

Reasonable best efforts

offering

We have agreed to offer and sell the securities offered hereby to the purchasers through the placement agent. The placement agent is not required to buy or sell any specific number or dollar amount of the securities offered hereby, but will use its reasonable best efforts to solicit offers to purchase the securities offered by this prospectus. See "Plan of Distribution" on page 21 of this prospectus.

Risk factors

Investing in our common stock involves a high degree of risk. You should read information contained and incorporated by reference in the "Risk Factors" section beginning on page 5 of this prospectus and the similarly entitled sections in the documents incorporated by reference into this prospectus.

Nasdaq Capital Market symbol

Our common stock is listed on The Nasdaq Capital Market under the symbol "VCNX." We do not intend to list the warrants on any securities exchange or nationally recognized trading system.

Outstanding Shares

The number of shares of our common stock to be outstanding after this offering is based on 4,377,892 shares of common stock outstanding as of June 30, 2023 and excludes:

- 209,339 shares of common stock issued in a private placement on August 22, 2023;
- 248,931 shares of common stock issued in a private placement on September 22, 2023;
- 22,240 shares of common stock issued under our Open Market Sales Agreement with Jefferies LLC (the "Open Market Sales Agreement") after June 30, 2023 and through September 22, 2023;
- 206,043 shares of common stock issuable upon the exercise of stock options outstanding as of June 30, 2023 at a weighted-average exercise price of \$32.25 per share; and
- 4,925 shares of common sock available for issuance pursuant to future grants under our 2018 Omnibus Incentive Plan as of June 30, 2023.

Unless we specifically state otherwise, all information in this prospectus reflects the Reverse Stock Split and no exercise of stock options or warrants.

Our Chief Executive Officer and an entity affiliated with the Chairman of our Board of Directors have committed to purchase an aggregate of 3,500,000 shares of common stock and common warrants to purchase up to 3,500,000 shares of common stock in this offering at the same price and on the same terms as the other purchasers in this offering, except that the placement agent will receive a cash transaction fee equal to 2.0% of the aggregate gross cash proceeds to us from such sales, and will not receive non-accountable fees and expenses with respect to such sales.

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider and evaluate the risks described below together with all of the information contained in this prospectus and in the documents incorporated by reference in this prospectus before you decide to purchase our common stock. In particular, you should carefully consider and evaluate the risks and uncertainties described in "Part I – Item 1A. Risk Factors" of our most recent Annual Report on Form 10-K, as updated by our subsequent Quarterly Reports on Form 10-Q and the additional risks and uncertainties set forth or incorporated by reference herein. Additional risks and uncertainties that we are unaware of or that we believe are not material at this time could also materially adversely affect our business, financial condition, or results of operations. Any of these risks and uncertainties could materially and adversely affect our business, results of operations, and financial condition, which in turn could materially and adversely affect the trading price or value of our common stock. As a result, you could lose all or part of your investment.

This prospectus also contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including the risks faced by us described below and elsewhere in this prospectus. See "Special Note Regarding Forward-Looking Statements" for information relating to these forward-looking statements.

Risks Related to this Offering

This is a reasonable best efforts offering, with no minimum amount of securities required to be sold, and we may sell fewer than all of the securities offered hereby.

The placement agent has agreed to use its reasonable best efforts to solicit offers to purchase the securities in this offering. The placement agent has no obligation to buy any of the securities from us or to arrange for the purchase or sale of any specific number or dollar amount of the securities. There is no required minimum number of securities that must be sold as a condition to completion of this offering. As there is no minimum offering amount required as a condition to the closing of this offering, the actual offering amount, aggregate placement agent fees and proceeds to us are not presently determinable and may be substantially less than the maximum amounts set forth above. We may sell fewer than all of the securities offered hereby, which may significantly reduce the amount of proceeds received by us, and investors in this offering will not receive a refund in the event that we do not sell all of the securities offered by us in this offering. The success of this offering will impact our ability to use the proceeds to execute our business plans. We may have insufficient capital to implement our business plans, potentially resulting in greater operating losses unless we are able to raise the required capital from alternative sources. There is no assurance that alternative capital, if needed, would be available on terms acceptable to us, or at all.

We will need to raise additional funding to fund our working capital needs or consummate potential future acquisitions. Additional financing may not be available on acceptable terms, or at all. Failure to obtain additional capital may force us to limit or terminate our operations.

Even if we sell all securities offered hereby, the expected net proceeds of this offering may not be sufficient for us to fund the working capital needs of our business. We will continue to seek funds through equity or debt financings, collaborative or other arrangements, or through other sources of financing. Additional funding may not be available to us on acceptable terms, or at all. Any failure to raise capital as and when needed would have a material adverse impact on our financial condition and on our ability to pursue our business plans and strategies.

Management will have broad discretion as to the use of the proceeds from this offering and we may not use the proceeds effectively.

Our management will have broad discretion with respect to the use of proceeds of this offering, including for any of the purposes described in the section entitled "Use of Proceeds" beginning on page 10 of this prospectus. You will be relying on the judgment of our management regarding the application of the proceeds of this offering. The results and effectiveness of the use of proceeds are uncertain, and we could spend the proceeds in ways that you do not agree with or that do not improve our results of operations or enhance the value of our common stock. Our failure to apply these funds effectively could harm our business and cause the price of our common stock to decline.

This offering may cause the trading price of our common stock to decrease.

The price per share, together with the number of shares of common stock we issue if this offering is completed, may result in an immediate decrease in the market price of our common stock. This decrease may continue after the completion of this offering.

You will experience immediate and substantial dilution in the book value per share of the common stock you purchase.

You will incur immediate and substantial dilution as a result of this offering. After giving effect to the sale by us of securities offered in this offering at a public offering price of \$1.00 per share of common stock and common warrant, and after deducting placement agent fees and estimated offering expenses payable by us, investors in this offering can expect an immediate dilution of approximately \$0.23 per share, representing the difference between our as adjusted net tangible book value per share after giving effect to this offering and the public offering price per share. See "Dilution" on page 14 for a more detailed discussion of the dilution you may incur in connection with this offering.

You may experience future dilution as a result of future equity offerings.

In order to raise additional capital, we may in the future offer additional shares of our common stock or other securities exercisable for, convertible into, or exchangeable for our common stock that could result in further dilution to investors purchasing securities in this offering or result in downward pressure on the price of our common stock. For example, we have conducted numerous private placements of our common stock and are party to the Open Market Sales Agreement, pursuant to which we may offer and sell shares of our common stock through Jefferies, as sales agent, from time to time, in one or more "at the market offerings." We may sell shares of our common stock or other securities in any other offering, including in a private placement or pursuant to the Open Market Sales Agreement, at prices that are higher or lower than the prices paid by investors in this offering, and investors purchasing shares of common stock or other securities in the future could have rights superior to existing stockholders.

The trading price of our common stock may continue to be volatile, which could cause you to lose part or all of your investment.

The trading price of our common stock has been highly volatile and could continue to be subject to wide fluctuations in response to various factors, some of which are beyond our control. In addition, the stock market in general, and the market for biopharmaceutical companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of particular companies. As a result of this volatility, our securities could experience rapid and substantial decreases in price, and you may be able to sell securities you purchase in this offering only at a substantial loss to the price at which you purchased the securities in this offering. Many factors may have a material adverse effect on the market price of our securities, including, but not limited to:

- the commencement, enrollment, delay. or results of our ongoing or future clinical trials, or changes in the development status of our product candidates;
- our decision to initiate, not to initiate, or to terminate a clinical trial;
- unanticipated serious safety concerns related to the use of our product candidates;
- regulatory actions, including failure to receive regulatory approval, with respect to our product candidates or our competitors' products or product candidates;
- the success of competitive products or technologies;
- announcements by us or our competitors of significant acquisitions, strategic collaborations, joint ventures, collaborations, capital commitments, significant development milestones, or product approvals;
- our failure to obtain new commercial partners;
- significant lawsuits, including without limitation patent or stockholder litigation;
- actual or anticipated fluctuations in our cash position or operating results;
- · changes in financial estimates or recommendations by securities analysts;
- · fluctuations in the valuation or financial results of companies perceived by investors to be comparable to us;
- inconsistent trading volume levels of our shares;
- announcement or expectation of additional financing efforts;
- sales of shares by us, our executive officers or directors or our stockholders generally;
- fluctuations and market conditions in the U.S. equity markets generally and in the biotechnology sector;
- · general economic, political and social conditions; and
- · other events or factors, many of which are beyond our control, or unrelated to our operating performance or prospects.

In recent years, the stock market in general has experienced significant price and volume fluctuations that have often been unrelated or disproportionate to changes in the operating performance of the companies whose stock is experiencing those price and volume fluctuations. Broad market and industry factors may seriously affect the market price of our common stock, regardless of actual operating performance. These fluctuations may be even more pronounced in the trading markets for our common stock shortly following this offering.

There is no public market for the warrants.

There is no established public trading market for the warrants, and we do not expect a market to develop. In addition, we do not intend to apply to list the warrants on any national securities exchange or other nationally recognized trading system, including Nasdaq. Without an active market, the liquidity of the warrants will be limited.

Holders of our warrants will have no rights as common stockholders until they acquire our common stock.

Until holders of warrants acquire shares of our common stock upon exercise thereof, holders of warrants will have no rights with respect to the shares of our common stock underlying such warrants. Upon exercise of the warrants, the holders will be entitled to exercise the rights of a common stockholder only as to matters for which the record date occurs after the exercise date.

The warrants are speculative in nature.

The warrants do not confer any rights of ownership of our shares of common stock on their holders, such as voting rights or the right to receive dividends, but rather merely represent the right to acquire shares of common stock at a fixed price. Specifically, commencing on the initial exercise date, holders of the common warrants may acquire shares of common stock issuable upon exercise of such warrants at an exercise price of \$1.00 per share of common stock and holders of the pre-funded warrants may acquire shares of common stock issuable upon exercise of such warrants at an exercise price of \$0.0001 per share of common stock. There can be no assurance that the market value of the common warrants and pre-funded warrants will equal or exceed their public offering price. In the event the market price per our shares of common stock does not exceed the exercise price of the common warrants during the period when the common warrants are exercisable, the common warrants may not have any value.

Management will have broad discretion as to the use of the net proceeds from this offering, and we may not use the proceeds effectively.

Our management will have broad discretion as to the application of the net proceeds and could use them for purposes other than those contemplated at the time of this offering. Our stockholders may not agree with the manner in which our management chooses to allocate and spend the net proceeds. Moreover, our management may use the net proceeds for corporate purposes that may not increase our results of operations or the market value of our common stock. Our failure to apply these funds effectively could have a material adverse effect on our business, delay the development and approval of our product candidates and cause the price of our common stock to decline.

We have never paid dividends on our capital stock, and we do not anticipate paying dividends in the foreseeable future.

We have never paid dividends on any of our capital stock and currently intend to retain any future earnings to fund the growth of our business. We may also enter into credit agreements or other borrowing arrangements in the future that will restrict our ability to declare or pay cash dividends on our common stock. Any determination to pay dividends in the future will be at the discretion of our board of directors and will depend on our financial condition, operating results, capital requirements, general business conditions and other factors that our board of directors may deem relevant. As a result, capital appreciation, if any, of the securities will be the sole source of gain, if any, for the foreseeable future.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), which statements involve substantial risks and uncertainties. All statements, other than statements of historical fact, included in this prospectus or the documents incorporated herein by reference, including statements regarding our future results of operations and financial position, our business strategy and plans, and our objectives for future operations, are forward-looking statements. The words "may," "will," "should," "expects," "plans," "anticipates," "believes," "estimates," "predicts," "potential," "intends," "continue," and similar expressions that convey uncertainty of future events or outcomes are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

The forward-looking statements in this prospectus include, among other things, statements about:

- our ability to continue as a going concern;
- our ability to regain compliance with the Nasdaq listing requirements;
- our ability to service our outstanding debt obligations;
- our estimates regarding our expenses, future revenues, anticipated capital requirements and our needs for additional financing;
- the implementation of our business model and strategic plans for our business and technology;
- the timing and success of the commencement, progress and receipt of data from any of our preclinical and clinical trials;
- interim and preliminary data and our expectations for later clinical trials based on such data;
- our expectations regarding the potential safety, efficacy, or clinical utility of our product candidates;
- the expected results of any clinical trial and the impact on the likelihood or timing of any regulatory approval;
- · the difficulties in obtaining and maintaining regulatory approval of our product candidates;
- the rate and degree of market acceptance of any of our product candidates;
- the success of competing therapies and products that are or become available;
- regulatory developments in the United States and foreign countries;
- current and future legislation regarding the healthcare system;
- the scope of protection we establish and maintain for intellectual property rights covering our technology;
- developments relating to our competitors and our industry;
- our ability to recruit or retain key scientific or management personnel or to retain our executive officers;
- the performance of third parties, including collaborators, contract research organizations and third-party manufacturers;
- · the development of our commercialization capabilities, including the need to develop or obtain additional capabilities; and
- our use of the proceeds from the offering.

These statements are only current predictions and are subject to known and unknown risks, uncertainties, and other factors that may cause our or our industry's actual results, levels of activity, performance, or achievements to be materially different from those anticipated by the forward-looking statements. We discuss many of these risks in greater detail in the risk factors under the section entitled "Risk Factors" and elsewhere in this prospectus, as well as in our most recent Annual Report on Form 10-K, our subsequent Quarterly Reports on Form 10-Q, and other filings we make with the SEC pursuant to Section 13(a), 13(c), 14, or 15(d) of the Exchange Act. You should not rely upon forward-looking statements as predictions of future events. Some of the factors that could cause actual results to differ materially from the anticipated results or other expectations expressed, anticipated or implied in our forward-looking statements include risks related to:

- our history of net losses and anticipated net losses for the foreseeable future;
- our lack of product revenue and that we may never achieve or maintain profitability;
- our need for additional capital to finance our operations to continue as a going concern;

- the uncertain development pathway for evaluating our lead product candidate, pepinemab, for the treatment of Huntington's Disease;
- our dependence on the success of pepinemab;
- our product candidates are in preclinical development or early stages of clinical development;
- delays and disruptions in progressing and completing the development of our product candidates;
- the lengthy, time-consuming, and unpredictable FDA regulatory process;
- the expensive, time consuming, and difficult to design and implement nature of preclinical studies and clinical trials, and their uncertain outcome;
- · our dependence in key personnel;
- · our dependence on third-party collaborators;
- our inability to obtain, maintain, and protect our intellectual property rights;
- substantial competition that may result in others discovering, developing, or commercializing products before or more successfully than us;
- · our non-compliance with the Nasdaq continued listing standards; and
- other factors detailed under the section entitled "Risk Factors" and elsewhere in this prospectus and in the documents incorporated herein by reference.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance, or achievements. Except as required by law, after the date of this prospectus, we are under no duty to update or revise any of the forward-looking statements, whether as a result of new information, future events, or otherwise.

USE OF PROCEEDS

We estimate that the net proceeds from our issuance and sale of the securities in this offering, after deducting placement agent's fees and estimated offering expenses payable by us, based on a combined public offering price per share and accompanying common warrant of \$1.00, and excluding the proceeds, if any, from the exercise of any warrants, will be approximately \$8.7 million.

We intend to use the net proceeds from this offering to fund the ongoing development and clinical trials of our lead drug candidate, pepinemab, in cancer and neurodegenerative disease, and for working capital and other general corporate purposes. This expected use of net proceeds from this offering represents our intentions based upon our current plans and business conditions, which could change in the future as our plans and business conditions evolve. As of the date of this prospectus, we cannot predict with certainty all the uses for the net proceeds to be received upon the completion of this offering or the amounts we will spend on the uses set forth above. Our management will have broad discretion in the application of the net proceeds from this offering and could use them for purposes other than those contemplated at the time of this offering. Our stockholders may not agree with the manner in which our management chooses to allocate and spend the net proceeds. Moreover, our management may use the net proceeds for corporate purposes that may not result in our being profitable or increase our market value.

Pending our use of the net proceeds from this offering, we intend to invest the net proceeds in a variety of capital preservation investments, including short-term, investment-grade, interest-bearing instruments and U.S. government securities.

DIVIDEND POLICY

We have never declared or paid cash dividends on our common stock. We currently intend to retain all available funds and any future earnings, if any, to fund the development of our business, and we do not intend to declare or pay any cash dividends in the foreseeable future. As a result, you will likely need to sell your shares of common stock to realize a return on your investment, and you may not be able to sell your shares at or above the price you paid for them. Any future determination related to dividend policy will be made at the discretion of our board of directors and will depend upon, among other factors, our results of operations, financial condition, capital requirements, contractual restrictions, business prospects and other factors our board of directors may deem relevant. Our future ability to pay cash dividends on our common stock may be limited by the terms of any future debt or preferred securities.

CAPITALIZATION

The following table sets forth our cash and cash equivalents and capitalization as of June 30, 2023:

- on an actual basis;
- on a proforma basis to give effect to the issuances of 209,339 shares of common stock issued in a private placement on August 22, 2023, 248,931 shares of common stock issued in a private placement on September 22, 2023, and 22,240 shares of common stock issued under the Open Market Sales Agreement after June 30, 2023 and through September 22, 2023, and the receipt of net proceeds of \$1.3 million in the aggregate therefrom;
- on a pro forma as adjusted basis to give further effect to the issuance and sale of shares of our common stock in this offering at public
 offering price of \$1.00 per share, after deducting the placement agent fees and estimated offering expenses payable by us, and no exercise
 of warrants.

You should read this table in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and related notes incorporated by reference into this prospectus.

	Actual	Pro Forma	Pro Forma As Adjusted
		(in thousands)	
Cash and cash equivalents	\$ 1,908	\$ 3,225	\$ 11,972
Stockholders' equity:			
Common stock, par value \$0.0001 per share: 100,000,000 shares authorized as of June 30, 2023;			
4,377,892 shares issued and outstanding as of June 30, 2023; 4,858,402 shares issued and			
outstanding pro forma; 12,458,402 shares issued and outstanding pro forma as adjusted	7	7	7
Additional paid-in capital	331,279	332,596	341,343
Treasury stock, at cost; 56 shares of common stock as of June 30, 2023	(11)	(11)	(11)
Accumulated deficit	(331,698)	(331,698)	(331,698)
Total stockholders' equity	(423)	894	9,641
Total capitalization	\$ (423)	\$ 894	\$ 9,641

The number of shares of our common stock to be outstanding after this offering excludes:

- 206,043 shares of common stock issuable upon the exercise of stock options outstanding as of June 30, 2023 at a weighted-average exercise price of \$32.25 per share; and
- 4,925 shares of common stock available for issuance pursuant to future grants under our 2018 Omnibus Incentive Plan as of June 30, 2023.

DILUTION

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

Our historical net tangible book value as of June 30, 2023 was \$(0.4) million, or \$(0.10) per share of our common stock. Historical net tangible book value per share represents the amount of our total tangible assets less total liabilities, divided by the number of shares of our common stock outstanding as of June 30, 2023.

Our proforma net tangible book value as of June 30, 2023 was \$0.9 million, or \$0.18 per share of our common stock. Proforma net tangible book value per share represents total tangible assets less total liabilities, divided by the number of shares of our common stock outstanding as of June 30, 2023, after giving effect to the issuances of 209,339 shares of common stock issued in a private placement on August 22, 2023, 248,931 shares of common stock issued in a private placement on September 22, 2023, and 22,240 shares of common stock issued under the Open Market Sales Agreement after June 30, 2023 and through September 22, 2023, and the receipt of net proceeds of \$1.3 million in the aggregate therefrom.

After giving further effect to the issuance and sale of 7,600,000 shares of common stock and common warrants in this offering at a combined public offering price of \$1.00 per share and accompanying common warrant, and 2,000,000 pre-funded warrants and common warrants at a combined public offering price of \$0.9999 per pre-funded warrant and accompanying common warrant, and after deducting the placement agent fees and estimated offering expenses payable by us, and assuming no exercise of warrants, our pro forma as adjusted net tangible book value as of June 30, 2023 would have been \$9.6 million, or \$0.77 per share. This represents an immediate increase in net tangible book value per share of \$0.59 to existing stockholders, compared to the pro forma net tangible book value per share, and immediate dilution of \$0.23 per share to investors purchasing securities in this offering. Dilution per share to investors is determined by subtracting pro forma as adjusted net tangible book value per share after this offering from the public offering price per share paid by investors in this offering. The following table illustrates this dilution on a per share basis:

Public offering price per share and accompanying common warrant		\$1.00
Historical net tangible book value per share	\$ (0.10)	
Increase per share attributable to pro forma adjustments	0.28	
Pro forma net tangible book value per share at June 30, 2023	\$ 0.18	
Increase in pro forma net tangible book value per share attributable to new investors		0.59
Pro forma as adjusted net tangible book value per share after this offering		\$0.77
Dilution per share to new investors purchasing shares in this offering		\$0.77 \$0.23

Assuming the pre-funded warrants are immediately and fully exercised, this would result in an as adjusted net tangible book value after giving effect to this offering and warrant exercise of \$9.6 million, or \$0.67 per share of common stock, which represents dilution per share to new investors purchasing shares in this offering of \$0.33.

The number of shares of our common stock to be outstanding after this offering is based on 4,377,892 shares of our common stock outstanding as of June 30, 2023 and excludes:

- 206,043 shares of common stock issuable upon the exercise of stock options outstanding as of June 30, 2023 at a weighted-average exercise price of \$32.25 per share; and
- 4,925 shares of common stock available for issuance pursuant to future grants under our 2018 Omnibus Incentive Plan as of June 30, 2023.

The discussion and table above assume no exercise of the warrants. To the extent that the warrants are exercised, you may experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

DESCRIPTION OF CAPITAL STOCK

The following is a brief description of our common stock, par value \$0.0001 per share. This description is qualified by reference to our amended and restated certificate of incorporation and our amended and restated bylaws.

Our certificate of incorporation authorizes us to issue 110,000,000 shares of capital stock, divided into two classes:

- 100,000,000 shares of common stock; and
- 10,000,000 shares of preferred stock, par value \$0.001 per share (the "preferred stock").

Common Stock

Each holder of common stock is entitled to one vote for each share on all matters submitted to a vote of the stockholders. The affirmative vote of holders of at least 66% of the voting power of all of the then outstanding shares of capital stock, voting as a single class, is required to amend certain provisions of our amended and restated certificate of incorporation, including provisions relating to amending our amended and restated bylaws, the classified board, the size of our board, removal of directors, director liability, vacancies on our board, special meetings, stockholder notices, actions by written consent and exclusive jurisdiction.

Directors are elected by a plurality vote of the shares represented in person or by proxy. All other actions by stockholders will be approved by a majority of votes cast except as otherwise required by law.

The holders of common stock are entitled to receive dividends ratably when, as and if declared by the board of directors out of funds legally available therefor. In the event of our liquidation, dissolution or winding up, the holders of common stock are entitled to share equally and ratably in all assets remaining available for distribution after payment of liabilities and after provision is made for each class of stock, if any, having preference over the common stock. Holders of common stock have no preemptive, subscription, redemption, sinking fund, or conversion rights. The outstanding shares of common stock are validly issued, fully paid and non-assessable.

Effects on our Common Stock if We Issue Preferred Stock

Our board of directors has authority, without further action by the stockholders, to issue up to 10,000,000 shares of preferred stock in one or more series. Our board of directors has the authority to determine the terms of each series of preferred stock, within the limits of the certificate of incorporation and the laws of the state of Delaware. These terms include the number of shares in a series, dividend rights, liquidation preferences, terms of redemption, conversion rights and voting rights.

The issuance of any preferred stock may negatively affect the holders of our common stock. These possible negative effects include diluting the voting power of shares of our common stock and affecting the market price of our common stock.

Anti-Takeover Effects of Provisions of our Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws

Our amended and restated certificate of incorporation and amended and restated bylaws include a number of provisions that may deter or impede hostile takeovers or changes of control or management. These provisions include:

• Issuance of undesignated preferred stock. Our board of directors has the authority, without further action by the stockholders, to issue up to 10,000,000 shares of undesignated preferred stock with rights and preferences, including voting rights, designated from time to time by our board of directors. The existence of authorized but unissued shares of preferred stock enables our board of directors to make it more difficult or to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise.

- Classified board. Our amended and restated certificate of incorporation provides for a classified board of directors consisting of three
 classes of directors, with staggered three-year terms. Only one class of directors is elected at each annual meeting of our stockholders, with
 the other classes continuing for the remainder of their respective three-year terms. This provision may have the effect of delaying a change
 in control of our board.
- Board of directors vacancies. Our amended and restated certificate of incorporation and amended and restated bylaws authorize only our board of directors to fill vacant directorships, unless our board of directors determines by resolution that any such vacancies shall be filled by stockholders. In addition, the number of directors constituting our board of directors may be set only by resolution adopted by a majority vote of our entire board of directors. These provisions prevent a stockholder from increasing the size of our board of directors and gaining control of our board of directors by filling the resulting vacancies with its own nominees.
- Stockholder action; special meetings of stockholders. Our amended and restated certificate of incorporation provides that our stockholders may not take action by written consent but may only take action at annual or special meetings of our stockholders. Stockholders will not be permitted to cumulate their votes for the election of directors. Our amended and restated certificate of incorporation further provides that only the chairman of our board of directors or a majority of our board of directors may call special meetings of our stockholders.
- Advance notice requirements for stockholder proposals and director nominations. Our amended and restated bylaws provide advance notice procedures for stockholders seeking to bring business before our annual meeting of stockholders, or to nominate candidates for election as directors at our annual meeting of stockholders. Our amended and restated bylaws also specify certain requirements as to the form and content of a stockholder's notice. These provisions may make it more difficult for our stockholders to bring matters before our annual meeting of stockholders or to nominate directors at annual meetings of stockholders.

We designed these provisions to enhance the likelihood of continued stability in the composition of our board of directors and its policies, to discourage certain types of transactions that may involve an actual or threatened acquisition of us, and to reduce our vulnerability to an unsolicited acquisition proposal. We also designed these provisions to discourage certain tactics that may be used in proxy fights. However, these provisions could have the effect of discouraging others from making tender offers for our shares and, as a consequence, they may also reduce fluctuations in the market price of our shares that could result from actual or rumored takeover attempts.

Choice of Forum

Our amended and restated certificate of incorporation provides that the Court of Chancery of the State of Delaware is the exclusive forum for any derivative action or proceeding brought on our behalf, any action asserting a breach of fiduciary duty owed by any current or former director, officer, employee or agent to us or our stockholders, any action asserting a claim against us arising pursuant to the Delaware General Corporation Law or our amended and restated certificate of incorporation or amended and restated bylaws, any action to interpret, apply, enforce or determine the validity of 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.

DESCRIPTION OF SECURITIES WE ARE OFFERING

We are offering 7,600,000 shares of common stock together with common warrants to purchase up to 7,600,000 shares of common stock. The shares of common stock and the accompanying common warrants can only be purchased together in this offering but will be issued separately and will be immediately separable upon issuance. We are also offering to purchasers whose purchase of shares in this offering would otherwise result in the purchaser, together with its affiliates and certain related parties, beneficially owning more than 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding common stock immediately following the consummation of this offering, in lieu of shares that otherwise would result in such purchaser's beneficial ownership exceeding 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding common stock, 2,000,000 pre-funded warrants together with common warrants to purchase up to 2,000,000 shares of common stock. For each pre-funded warrant we sell, the number of shares we are offering will be decreased on a one-for-one basis.

We are also registering the shares of common stock issuable from time to time upon exercise of the warrants offered hereby.

Common Stock

The material terms and provisions of our common stock and each other class of our securities that qualifies or limits our common stock are described in the section entitled "Description of Capital Stock" beginning on page 16 of this prospectus.

Pre-Funded Warrants

The following summary of certain terms and provisions of the pre-funded warrants that are being offered hereby is not complete and is subject to, and qualified in its entirety by, the provisions of the pre-funded warrants, the form of which is filed as an exhibit to the registration statement of which this prospectus forms a part. Prospective investors should carefully review the terms and provisions of the form of pre-funded warrant for a complete description of the terms and conditions of the pre-funded warrants.

Duration and Exercise Price

Each pre-funded warrant offered hereby will have an initial exercise price per share equal to \$0.0001 per share. The pre-funded warrants will be immediately exercisable and may be exercised at any time until the pre-funded warrants are exercised in full. The exercise price and number of shares of common stock issuable upon exercise is subject to appropriate adjustment in the event of stock dividends, stock splits, reorganizations or similar events affecting our common stock and the exercise price. The pre-funded warrants will be issued separately from the common stock and may be transferred separately immediately thereafter.

Exercisability

The pre-funded warrants will be exercisable, at the option of each holder, in whole or in part, by delivering a duly executed exercise notice accompanied by payment in full for the number of shares of our common stock purchased upon such exercise (except in the case of a cashless exercise as discussed below). Except as agreed with individual holders of pre-funded warrants, a holder (together with its affiliates) may not exercise any portion of the pre-funded warrant to the extent that the holder would own more than 4.99% of the outstanding common stock immediately after exercise (the "Beneficial Ownership Limitation"), except that upon at least 61 days' prior notice from the holder to us, the holder may increase the Beneficial Ownership Limitation to a percentage not to exceed 9.99%. 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 exercise price.

Cashless Exercise

If, at the time a holder exercises its pre-funded warrants, a registration statement registering the issuance of the shares of common stock underlying the pre-funded warrants under the Securities Act is not then effective or available for the issuance of such shares, then in lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of shares of common stock determined according to a formula set forth in the pre-funded warrants.

Fundamental Transaction

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 more than 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.

Transferability

Subject to applicable laws, a pre-funded warrant may be transferred at the option of the holder upon surrender of the pre-funded warrant together with the appropriate instruments of transfer and funds sufficient to pay any transfer taxes payable upon such transfer.

Exchange Listing

We do not intend to list the pre-funded warrants on any securities exchange or nationally recognized trading system.

Rights as a Stockholder

Except as otherwise provided in the pre-funded warrants or by virtue of such holder's ownership of shares of our common stock, the holders of the pre-funded warrants do not have the rights or privileges of holders of our common stock, including any voting rights, until they exercise their pre-funded warrants.

Common Warrants

The following summary of certain terms and provisions of the common warrants that are being offered hereby is not complete and is subject to, and qualified in its entirety by, the provisions of the common warrants, the form of which is filed as an exhibit to the registration statement of which this prospectus forms a part. Prospective investors should carefully review the terms and provisions of the form of common warrant for a complete description of the terms and conditions of the common warrants.

Duration and Exercise Price

Each common warrant offered hereby will have an initial exercise price per share equal to \$1.00 per share. The common warrants will be exercisable immediately and will expire five years from the date of issuance. The exercise price and number of shares of common stock issuable upon exercise is subject to appropriate adjustment in the event of stock dividends, stock splits, reorganizations or similar events affecting our common stock and the exercise price. The common warrants will be issued separately from the common stock and may be transferred separately immediately thereafter.

Exercisability

The common warrants will be exercisable, at the option of each holder, in whole or in part, by delivering a duly executed exercise notice accompanied by payment in full for the number of shares of our common stock purchased upon such exercise (except in the case of a cashless exercise as discussed below). Except as agreed with individual holders of common warrants, a holder (together with its affiliates) may not exercise any portion of the common warrant to the extent that the holder would own more than 4.99% of the outstanding common stock immediately after exercise, except that upon at least 61 days' prior notice from the holder to us, the holder may increase the Beneficial Ownership Limitation to a percentage not to exceed 9.99%. No fractional shares of common stock will be issued in connection with the exercise of a common warrant. In lieu of fractional shares, we will pay the holder an amount in cash equal to the fractional amount multiplied by the exercise price.

Cashless Exercise

If, at the time a holder exercises its common warrants, a registration statement registering the issuance of the shares of common stock underlying the common warrants under the Securities Act is not then effective or available, then in lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of shares of common stock determined according to a formula set forth in the common warrants.

Fundamental Transaction

In the event of a fundamental transaction, as described in the common 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 more than 50% of the voting power represented by our outstanding common stock, the holders of the common warrants will be entitled to receive upon exercise of the common warrants the kind and amount of securities, cash or other property that the holders would have received had they exercised the common warrants immediately prior to such fundamental transaction.

Transferability

Subject to applicable laws, a common warrant may be transferred at the option of the holder upon surrender of the common warrant together with the appropriate instruments of transfer and funds sufficient to pay any transfer taxes payable upon such transfer.

Exchange Listing

We do not intend to list the common warrants on any securities exchange or nationally recognized trading system.

Rights as a Stockholder

Except as otherwise provided in the common warrants or by virtue of such holder's ownership of shares of our common stock, the holders of the common warrants do not have the rights or privileges of holders of our common stock, including any voting rights, until they exercise their common warrants.

Call Option

We have the option to "call" the exercise of any or all of a holder's common warrants, from time to time, by giving a call notice to the holder within 30 days after the public announcement by the Company of an increase, in pepinemab-treated patients relative to placebo-treated patients, with statistical significance having a p-value of less than or equal to 0.05, in the change of the FDG-PET standard uptake value ratio for brain metabolism between baseline and month 18 as assessed by [18F]fluorodeoxyglucose (FDG)-PET in the resting state following administration of 40 mg/kg pepinemab or placebo, as applicable, as described in the protocol for our SIGNAL-AD study, provided at the time of the notice the holder of the common warrant is not in possession of any material non-public information that was provided by use or any of our officers, directors, employees, agents, or affiliates. During the call period, the holder may exercise the common warrant and purchase the called shares of common stock underlying the common warrant. If the holder fails to timely exercise the common warrant for a number of shares of common stock equal to the number of called shares during the call period, our sole remedy will be to cancel an amount of called shares of common stock underlying the common warrant equal to such shortfall, with the common warrant no longer being exercisable with respect to such shares. The call period is a period of 20 trading days following the date on which the holder receives the call notice.

PLAN OF DISTRIBUTION

A.G.P./Alliance Global Partners has agreed to act as our placement agent in connection with this offering subject to the terms and conditions of the placement agent agreement dated September 28, 2023. The placement agent is not purchasing or selling any of the securities offered by this prospectus, nor is it required to arrange the purchase or sale of any specific number or dollar amount of securities, but has agreed to use its reasonable best efforts to arrange for the sale of all of the securities offered hereby. We will enter into a securities purchase agreement (the "purchase agreement") directly with the investors who purchase our securities in this offering, at the investors' option. Investors who do not enter into the purchase agreement shall rely solely on this prospectus in connection with the purchase of our securities in this offering.

We will deliver the securities being issued to each investor upon receipt of such investor's funds for the purchase of the securities offered pursuant to this prospectus and we will deliver all securities to be issued in connection with this offering delivery versus payment (DVP)/receipt versus payment (RVP) upon receipt of investor funds received by us. We expect to deliver the securities being offered pursuant to this prospectus on or about October 2, 2023.

We have agreed to indemnify the placement agent against specified liabilities, including liabilities under the Securities Act, and to contribute to payments the placement agent may be required to make in respect thereof.

Placement Agent Fees, Commissions and Expenses

This offering is being conducted on a reasonable best efforts basis and the placement agent has no obligation to buy any of the securities from us or to arrange for the purchase or sale of any specific number or dollar amount of securities. Upon the closing of this offering, we will pay the placement agent a cash transaction fee equal to 7.0% of the aggregate gross cash proceeds to us from the sale of the securities in the offering. In addition, we will reimburse the placement agent for up to \$75,000 for the placement agent's legal fees and up to 1.0% of the aggregate gross proceeds of the offering for certain reasonable non-accountable fees and expenses. Our Chief Executive Officer and an entity affiliated with the Chairman of our Board of Directors have committed to purchase an aggregate of 3,500,000 shares of common stock and common warrants to purchase up to 3,500,000 shares of common stock in this offering at the same price and on the same terms as the other purchasers in this offering, except that the placement agent will receive a cash transaction fee equal to 2.0% of the aggregate gross cash proceeds to us from such sales, and will not receive non-accountable fees and expenses with respect to such sales.

The following table shows the public offering price, placement agent fees and proceeds, before expenses, to us, assuming the sale of all the shares of common stock we are offering and no exercise of any warrants.

	Per Share and	d Accompanying	Per Pre-Fu	nded Warrant and Accompanying	
	Commo	n Warrant		Common Warrant	Total
Public offering price	\$	1.00	\$	0.9999	\$9,599,800
Placement agent fees	\$	0.07	\$	0.07	\$ 497,000
Proceeds, before expenses, to us	\$	0.93	\$	0.9299	\$9,102,800

We estimate that the total expenses of the offering payable by us, excluding the total placement agent fees, will be approximately \$220,000.

Lock-Up Agreements

Our directors and executive officers and certain beneficial owners of 5% or more of our outstanding common stock have entered into lock-up agreements. Under these agreements, these individuals have agreed, subject to specified exceptions, not to sell or transfer any shares of common stock or securities convertible into, or exchangeable or exercisable for, our shares of common stock during a period ending 60 days after the closing of this offering, without first obtaining the written consent of the placement agent. Specifically, these individuals have agreed, in part, not to:

- sell, offer, contract or grant any option to sell (including any short sale), pledge, transfer, establish an open "put equivalent position" within the meaning of Rule 16a-l(h) under the Securities Exchange Act of 1934, as amended;
- enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of
 our securities, whether any such transaction is to be settled by delivery of our shares of common stock, in cash or otherwise;
- · make any demand for or exercise any right with respect to the registration of any of our securities;

- · publicly disclose the intention to make any offer, sale, pledge or disposition, or to enter into any transaction, swap, hedge;
- or other arrangement relating to any of our securities.

Notwithstanding these limitations, these shares of common stock may be transferred under limited circumstances, including, without limitation, by gift, will or intestate succession.

In addition, we have agreed that, subject to certain exceptions, we will not (i) conduct any issuances of our common stock for a period of 90 days following closing of this offering or (ii) enter into a variable rate transaction (as defined in the purchase agreement) for a period of 180 days following closing of this offering.

Regulation M

The placement agent may be deemed to be an underwriter within the meaning of Section 2(a)(11) of the Securities Act, and any commissions received by it and any profit realized on the resale of the shares sold by it while acting as principal might be deemed to be underwriting discounts or commissions under the Securities Act. As an underwriter, the placement agent would be required to comply with the requirements of the Securities Act and the Exchange Act, including, without limitation, Rule 415(a)(4) under the Securities Act and Rule 10b-5 and Regulation M under the Exchange Act. These rules and regulations may limit the timing of purchases and sales of shares by the placement agent acting as principal. Under these rules and regulations, the placement agent.

- may not engage in any stabilization activity in connection with our securities; and
- may not bid for or purchase any of our securities or attempt to induce any person to purchase any of our securities, other than as permitted under the Exchange Act, until it has completed its participation in the distribution.

Listing

Our common stock is listed on The Nasdaq Capital Market under the symbol "VCNX." There is no established public market for the warrants, and we do not expect a market to develop. In addition, we do not intend to apply for listing of the warrants on any national securities exchange.

Discretionary Accounts

The placement agent does not intend to confirm sales of the securities offered hereby to any accounts over which they have discretionary authority.

Other Relationships

The placement agent and certain of its affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. The placement agent and certain of its affiliates may in the future perform various commercial and investment banking and financial advisory services for us and our affiliates, for which they will receive customary fees and expenses.

In the ordinary course of their various business activities, the placement agent and certain of its affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers, and such investment and securities activities may involve securities and/or instruments issued by us and our affiliates. If the placement agent or its affiliates have a lending relationship with us, they routinely hedge their credit exposure to us consistent with their customary risk management policies. The placement agent and its affiliates may hedge such exposure by entering into transactions that consist of either the purchase of credit default swaps or the creation of short positions in our securities or the securities of our affiliates, including potentially the common stock offered hereby. Any such short positions could adversely affect future trading prices of the common stock offered hereby. The placement agent and certain of its affiliates may also communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

LEGAL MATTERS

The validity of the securities offered hereby is being passed upon for us by Hogan Lovells US LLP, Baltimore, Maryland. Thompson Hine LLP, New York, New York, is acting as counsel for the placement agent in connection with this offering.

EXPERTS

The financial statements of Vaccinex, Inc. (the "Company") as of December 31, 2022 and 2021, and for each of the two years in the period ended December 31, 2022, incorporated by reference in this prospectus have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report (which report expresses an unqualified opinion and includes an explanatory paragraph describing conditions that raise substantial doubt about our ability to continue as a going concern). Such financial statements are incorporated by reference in reliance upon the report of such firm given their authority as experts in accounting and auditing.

INCORPORATION BY REFERENCE

The SEC allows 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 SEC file number for each of the documents incorporated by reference in this prospectus is 001-38624. The documents incorporated by reference into this prospectus contain important information that you should read about us.

The following documents are incorporated by reference into this document:

- our Annual Report on Form 10-K for the year ended December 31, 2022, filed with the SEC on March 31, 2023;
- our Quarterly Report on Form 10-Q for the fiscal quarters ended March 31, 2023 and June 30, 2023, filed with the SEC on May 15, 2023 and August 14, 2023;
- our Current Reports on Form 8-K (other than portions thereof furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits accompanying such reports that relate to such items) filed with the SEC on March 23, 2023, April 3, 2023, May 12, 2023, May 19, 2023, May 30, 2023, August 22, 2023, September 13, 2023, September 22, 2023, and September 22, 2023; and
- the description of our capital stock included under the caption "Description of Capital Stock" contained in our Registration Statement on Form 8-A filed with the SEC on <u>August 8, 2018</u>, including any amendments or reports filed for the purpose of updating such description, including <u>Exhibit 4.1</u> to our Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on March 9, 2020.

All reports and other documents we subsequently file pursuant to Section 13(a), 13(c), 14, or 15(d) of the Exchange Act prior to the time that all of the securities offered by this prospectus are sold or the earlier termination of this offering (including all such reports or documents filed after the date of the initial registration statement of which this prospectus forms a part and prior to the effectiveness of the registration statement) will also be incorporated by reference into this prospectus and deemed to be part of this prospectus from the date of the filing of such reports and documents. We are not, however, incorporating by reference any documents or portions thereof, whether specifically listed above or filed in the future, that are not deemed "filed" with the SEC, including any information furnished pursuant to Items 2.02 or 7.01 of Form 8-K or related exhibits furnished pursuant to Item 9.01 of Form 8-K.

Any statement contained herein or in a document incorporated or deemed to be incorporated by reference into this document will be deemed to be modified or superseded for purposes of the document to the extent that a statement contained in this document or any other subsequently filed document that is deemed to be incorporated by reference into this document modifies or supersedes the statement.

You may request, orally or in writing, a copy of any or all of the documents incorporated herein by reference. These documents will be provided to you at no cost by contacting us in writing at Vaccinex, Inc., Attn: Corporate Secretary, 1895 Mount Hope Avenue, Rochester, New York 14620 or by telephone at (585) 271-2700. In addition, copies of any or all of the documents incorporated herein by reference may be accessed at our website at www.vaccinex.com.

WHERE YOU CAN FIND MORE INFORMATION

We are a reporting company and file annual, quarterly, and current reports, proxy and information statements, and other information with the SEC. This prospectus is part of a registration statement that we have filed with the SEC relating to the securities to be offered under this prospectus.

The SEC maintains an internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC, where you may read and copy the registration statement, as well as our reports, proxy and information statements, and other information. The address of the SEC's web site is www.sec.gov.

Our Internet address is *www.vaccinex.com*. There we make available free of charge, on or through the investor relations section of our website, annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after we electronically file such material with the SEC.



7,600,000 Shares of Common Stock Pre-Funded Warrants to Purchase up to 2,000,000 Shares of Common Stock Common Warrants to Purchase up to 9,600,000 Shares of Common Stock

2,000,000 Shares of Common Stock Underlying such Pre-Funded Warrants
9,600,000 Shares of Common Stock Underlying such Common Warrants

PROSPECTUS

Sole Placement Agent

A.G.P.

September 28, 2023