

PROSPECTUS SUPPLEMENT
(To Prospectus dated February 12, 2024)



Annovis Bio, Inc.

Up to 2,051,428 Shares of Common Stock

This prospectus supplement relates to the issuance and sale of up to 2,051,428 shares of our common stock that we may sell to Keystone Capital Partners, LLC (“Keystone”) from time to time, pursuant to the Common Stock Purchase Agreement, dated as of April 26, 2024 (the “Purchase Agreement”), between us and Keystone whereby Keystone has committed to purchase up to 2,017,491 shares of our common stock, and the issuance of an additional 33,937 shares of our common stock to Keystone as commitment shares under the Purchase Agreement.

The prospectus supplement and the accompanying prospectus also cover the resale of these shares by Keystone to the public. See “Keystone Transaction” for a description of the Purchase Agreement and additional information regarding Keystone. Keystone is an “underwriter” within the meaning of Section 2(a)(11) of the Securities Act of 1933, as amended, or the Securities Act.

The purchase price for the Purchase Shares will be based on a formula set forth in the Purchase Agreement depending on the type of purchase notice we submit to Keystone from time to time. We will pay the expenses incurred in connection with the issuance of the shares of our common stock from time to time. For a description of the Purchase Agreement and additional information regarding Keystone, see section entitled “The Keystone Transaction” of this prospectus supplement.

Our common stock is listed on NYSE under the symbol “ANVS” The last reported sale price of our common stock on NYSE on April 30, 2024 was \$5.57 per share.

Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties referenced under the heading “Risk Factors” beginning on page S-5 of this prospectus supplement, and under similar headings in the other documents that are incorporated by reference into this prospectus supplement.

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.

The date of this prospectus supplement is May 1, 2024

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We have not authorized any dealer, salesperson or other person to give any information or to make any representation other than those contained or incorporated by reference in this prospectus. You must not rely upon any information or representation not contained or incorporated by reference in this prospectus. This prospectus does not constitute an offer to sell or the solicitation of an offer to buy any securities other than the registered securities to which it relates, nor does this prospectus constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction. You should not assume that the information contained in this prospectus is accurate on any date subsequent to the date set forth on its front cover or that any information we have incorporated by reference is correct on any date subsequent to the date of the document incorporated by reference, even though this prospectus is delivered or securities are sold on a later date.

ABOUT THIS PROSPECTUS SUPPLEMENT

This document consists of two parts. The first part is this prospectus supplement, which describes the terms of this offering of common stock and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference into this prospectus supplement. The second part is the accompanying prospectus, which includes the documents incorporated by reference therein and provides more general information. To the extent the information contained in this prospectus supplement differs or varies from the information contained in the accompanying prospectus or the documents incorporated by reference herein or therein, you should rely on the information in this prospectus supplement.

Generally, when we refer to the prospectus, we are referring to this prospectus supplement and the accompanying prospectus combined. You should read both this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein, together with additional information described under the headings “Where You Can Find More Information” and “Incorporation of Certain Information By Reference.”

You should rely only on the information contained in or incorporated by reference in this prospectus supplement, the accompanying prospectus and in any free writing prospectus that we have authorized for use in connection with this offering. We have not authorized anyone to provide you with information that is different. We are not making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. The information appearing in this prospectus supplement, the accompanying prospectus, the documents incorporated by reference in this prospectus supplement and the accompanying prospectus, and in any free writing prospectus that we have authorized for use in connection with this offering, is accurate only as of the date of those respective documents, regardless of the time of delivery of those respective documents or sale of our common stock.

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 in this prospectus supplement or 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 have not done anything that would permit this offering or possession or distribution of this prospectus supplement, the accompanying prospectus and in any free writing prospectus that we have authorized for use in connection with this offering in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside the United States who come into possession of this prospectus supplement, the accompanying prospectus and any free writing prospectus that we have authorized for use in connection with this offering must inform themselves about, and observe any restrictions relating to, the offering of the shares of our common stock and the distribution of this prospectus supplement, the accompanying prospectus and any free writing prospectus that we have authorized for use in connection with this offering outside the United States.

Unless the context otherwise indicates, references in this prospectus supplement to “Annovis,” the “Company,” “we,” “us,” and “our” refer, collectively, to Annovis Bio, Inc., a Delaware corporation, and where appropriate, its subsidiaries.

We use various trademarks and trade names in our business, including without limitation our corporate name and logo. All other trademarks or trade names referred to in this prospectus are the property of their respective owners. Solely for convenience, the trademarks and trade names in this prospectus may be referred to without the ® and ™ symbols, but such references should not be construed as any indicator that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights certain information about us, this offering and selected information contained elsewhere in or incorporated by reference into this prospectus supplement. This summary provides an overview of selected information and does not contain all of the information you should consider before deciding whether to invest in our common stock. Therefore, you should read the entire prospectus supplement and the accompanying prospectus carefully (including the documents incorporated by reference herein and therein), especially the “Risk Factors” section and in the documents incorporated by reference and our consolidated financial statements and the related notes incorporated by reference in this prospectus supplement and the accompanying prospectus, before deciding to invest in our common stock.

Overview

We are a clinical stage, drug platform company addressing neurodegeneration, such as Alzheimer’s disease (“AD”) and Parkinson’s disease (“PD”). We are developing our lead product candidate, Buntanetap, which is designed to address AD, PD, and potentially other chronic neurodegenerative diseases. Buntanetap is a synthetically produced small molecule, orally administered, brain penetrant compound. In several studies, Buntanetap was observed to inhibit the synthesis of neurotoxic proteins — APP/A β (“APP”), tau/phospho-tau (“tau”) and α -Synuclein (“ α SYN”) — that are one of the main causes of neurodegeneration. High levels of neurotoxic proteins lead to impaired axonal transport, which is responsible for the communication between and within nerve cells. When that communication is impaired, the immune system is activated and attacks the nerve cells, eventually killing them. We have observed in our clinical studies in early AD and early PD patients and pre-clinical studies in mice and rats that Buntanetap lowered neurotoxic protein levels leading to improved axonal transport, reduced inflammation, lower nerve cell death and improved affected function.

In 2021, we completed two Phase 1/2 clinical studies: one in 14 early AD patients, and one in 54 early PD patients (together, the “AD/PD Trials”). In the AD/PD Trials, early AD patients were defined as those with a Mini Mental State Examination (MMSE) score between 19 and 28 and early PD patients as those patients at Hoehn & Yahr stages 1, 2 or 3. MMSE is a brief screening instrument used to assess cognitive function, with total scores ranging from 0 to 30 and a lower score indicating greater disease severity, while the Hoehn & Yahr scale is a medical assessment used to measure staging of the functional disability associated with PD where a higher stage indicates greater disease severity. In collaboration with the Alzheimer’s Disease Cooperative Study (“ADCS”), we also conducted a trial in 16 early AD patients (the “ADCS Trial”). In the ADCS Trial, early AD patients were defined as those patients with a MMSE score between 19 and 28. All three clinical trials were double-blind, placebo-controlled studies. We designed the studies by applying our understanding of the underlying neurodegenerative disease states, and measured both target and pathway validation in the spinal fluid of patients to determine whether patients improved following treatment. In addition to meeting their primary endpoints of safety and tolerability and secondary endpoint of pharmacokinetics of Buntanetap, our AD/PD Trials met exploratory endpoints of measures of biomarkers and improvements in cognition in AD patients, and in function in PD patients. We believe that the AD/PD Trials represent the first double-blind placebo-controlled studies that showed improvements in AD patients, as measured by ADAS-Cog, and in PD patients, as measured by UPDRS. Following completion of the AD/PD Trials, we submitted our data to the U.S. Food and Drug Administration (“FDA”) and requested direction to further pursue the development of Buntanetap in early PD patients. With the FDA’s guidance, we initiated a Phase 3 study in early PD patients in August 2022 (our “Phase 3 PD Study”). In the Phase 3 PD Study, early PD patients were defined as those at Hoehn & Yahr stages 1, 2 or 3 and OFF times of less than two hours per day. OFF time refers to when PD motor and/or non-motor symptoms occur between medication doses. We also submitted a proposed protocol for the treatment of moderate AD to the FDA, and after receiving permission to proceed, we initiated a Phase 2/3 study in mild to moderate AD patients in February 2023 (our “Phase 2/3 AD Study”). In the Phase 2/3 AD Study, mild to moderate AD patients were defined as those with a MMSE score between 14 and 24. At the completion of the ADCS Trial, the data showed that Buntanetap is a translational inhibitor in humans just like in animals, and we further observed that there was statistical improvement in cognition in early AD patients, just like in the AD/PD Trials.

Our Phase 3 PD Study and Phase 2/3 AD Study each had built in interim analyses. Our Phase 3 PD Study incorporated an interim analysis at two months, the results of which were disclosed on March 31, 2023. The

pre-planned interim analysis was conducted by our data analytics provider based on 132 patients from all cohorts collectively for which baseline and two-month data was available. As the interim analysis was conducted at two months of the six-month endpoint and only on 132 patients, it may not be indicative of the results at six months for the full patient population. Based on the results of the interim analysis, we proceeded with the Phase 3 PD Study as planned in accordance with the previously established protocol. The study was completed on December 4, 2023, and we have been organizing and cleaning data since that date. We remain blinded to the Phase 3 PD Study and we do not have safety or efficacy data from the trial, yet. We currently expect to release PD Study data during Q2 2024.

We disclosed the results of the interim analysis for our Phase 2/3 AD Study on October 23, 2023, and similar to our PD study, based on the outcome of the interim analysis we proceeded with the study as planned. The Phase 2/3 AD study was completed on February 13, 2024. On April 29, 2024, we put out a press release announcing the data from the AD study. We will report the data to the FDA and ask for an end-of-Phase II meeting for AD. We expect to discuss the AD data with the FDA in the two to three months following the release and then move on to the next Phase III study to confirm and expand these findings in an 18-month disease-modifying trial, focusing on biomarker-positive early AD patients. We further plan to present the data at the AAIC2024 and to publish it in a peer-reviewed journal.

By the end of 2026, our goal is to have conducted the required pivotal studies for Buntanetap to be able to file two new drug applications (“NDAs”) with the FDA.

We believe that we are the only company developing a drug for AD and PD that is designed to inhibit more than one neurotoxic protein and has a mechanism of action designed to restore nerve cell axonal and synaptic activity. By improving brain function, our goal is to treat memory loss and dementia associated with AD, as well as body and brain function associated with PD. Based on pre-clinical and clinical data collected to date, we believe that Buntanetap has the potential to be the first drug to interfere with the underlying mechanism of neurodegeneration, potentially enabling Buntanetap to be the only drug to improve cognition in AD and motor function in PD. The industry has encountered challenges in specifically targeting one neurotoxic protein, be it APP, tau or α SYN, indicating that doing so does not change the course of neurodegeneration. Our goal is to develop a disease modifying drug (“DMD”) for patients with neurodegeneration by leveraging our clinical and pre-clinical data to inhibit the three most relevant neurotoxic proteins. Studies have found that AD and PD are the most common neurodegenerative diseases in the U.S., and accordingly these diseases present two unmet needs of the aging population and two potentially large U.S. markets if a DMD is developed and approved.

We have never been profitable and have incurred net losses since inception. Our Accumulated deficit at December 31, 2023 was \$110,259,087. We expect to incur losses for the foreseeable future, and we expect these losses to increase as we continue our development of, and seek regulatory approvals for, our product candidates. Because of the numerous risks and uncertainties associated with product development, we are unable to predict the timing or amount of increased expenses or when, or if, we will be able to achieve or maintain profitability.

Corporate Information

We were incorporated in Delaware in 2008. Our principal executive offices are located at 101 Lindenwood Drive, Suite 225, Malvern, PA 19355 and our telephone number is (484) 875-3192. Our website address is www.annovisbio.com. The inclusion of our website address is, in each case, intended to be an inactive textual reference only and not an active hyperlink to our website. The information contained in, or that can be accessed through, our website is not part of this prospectus.

THE OFFERING

Common Stock Offered by Us	Up to 2,017,491 shares of our common stock which we may sell to Keystone under the Purchase Agreement, from time to time and at our sole discretion, and 33,937 shares of our common stock which are being issued to Keystone for no cash consideration as a fee for Keystone’s execution of the Purchase Agreement (the “Commitment Shares”). We will not receive any cash proceeds from the issuance of the Commitment Shares.
Common Stock outstanding prior to this offering	11,011,299 shares
Common Stock to be Outstanding after this Offering	13,062,727 shares, assuming the sale of 2,017,491 shares and the issuance of 33,937 Commitment Shares. The actual number of shares issued will vary depending on the sales prices in this offering, but will not, unless prior stockholder approval is obtained, be greater than 2,051,428 shares of common stock, which number of shares is equal to 19.99% of the shares of the common stock outstanding prior to the execution of the Purchase Agreement (the “Exchange Cap”), unless (i) the Company obtains stockholder approval to issue shares of common stock in excess of the Exchange Cap in accordance with applicable NYSE rules, or (ii) the price per share paid by Keystone for all of the shares of common stock purchased pursuant to the Purchase Agreement, if any, equals or exceeds the lower of (A) the official closing price of our common stock immediately preceding delivery of the purchase notice to Keystone and (B) the average of the closing sale prices of our common stock for the five (5) trading days immediately preceding the delivery of the purchase notice.
Use of Proceeds	We intend to use the net proceeds from the sale of securities in this offering for working capital and other general corporate purposes. See “Use of Proceeds.”
Risk Factors	See “Risk Factors” and other information included and incorporated by reference in this prospectus supplement and the accompanying prospectus for a discussion of factors that you should carefully consider before deciding to invest in our common stock.
NYSE Symbol	“ANVS”

The number of shares of our common stock to be outstanding immediately after this offering and, unless otherwise indicated, the information in this prospectus supplement, is based on 11,011,299 shares of our common stock outstanding as of April 30, 2024 and excludes 1,954,774 shares issuable upon the exercise of outstanding stock options.

RISK FACTORS

An investment in our securities involves a high degree of risk. Before deciding whether to invest in our securities, you should consider carefully the risks described below and discussed under the section captioned “Risk Factors” beginning on page S-4 of the accompanying prospectus, together with other information in this prospectus supplement, the accompanying prospectus, and the documents incorporated by reference in this prospectus supplement and the accompanying prospectus, including the information set forth under the caption “Risk Factors” in our annual report on [Form 10-K for the fiscal year ended December 31, 2023](#). If any of these risks actually occurs, our business, financial condition or results of operations could be seriously harmed. This could cause the trading price of our common stock to decline, resulting in a loss of all or part of your investment.

Risks Related to This Offering and Our Common Stock

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

We currently intend to use the net proceeds of this offering for working capital and general corporate purposes. We have not allocated specific amounts of the net proceeds from this offering for any specific purposes. Accordingly, our management will have broad discretion in the application of the net proceeds from this offering and could spend the proceeds in ways that do not improve our results of operations or enhance the value of our common stock. You will be relying on the judgment of our management with regard to the use of these net proceeds, and you will not have the opportunity, as part of your investment decision, to assess whether the net proceeds are being used appropriately. It is possible that the net proceeds will be invested in a way that does not yield a favorable, or any, return for us. Our failure to apply these funds effectively could have a material adverse effect on our business and cause the price of our common stock to decline.

Sales of our common stock to Keystone may cause substantial dilution to our existing stockholders and the sale of the shares of our common stock acquired by Keystone could cause the price of our common stock to decline.

This prospectus supplement relates to an aggregate amount of up to 2,051,428 shares of our common stock that we may sell to Keystone from time to time during the Investment Period. The number of shares ultimately offered for sale to Keystone under this prospectus supplement is dependent upon the number of shares we elect to sell to Keystone under the Purchase Agreement. See “The Keystone Transaction” for more information about our obligations under the Purchase Agreement.

Depending upon market liquidity at the time, sales of shares of our common stock under the Purchase Agreement may cause the trading price of our common stock to decline. After Keystone has acquired shares under the Purchase Agreement, it may sell all, some, or none of those shares. Sales to Keystone by us pursuant to the Purchase Agreement under this prospectus supplement may result in substantial dilution to the interests of other holders of our common stock. The sale of a substantial number of shares of our common stock to Keystone in this offering, or anticipation of such sales, could make it more difficult for us to sell equity or equity-related securities in the future at a time and at a price that we might otherwise wish to effect sales. However, we have the right to control the timing and amount of any sales of our shares to Keystone (other than the mandatory purchase notice described above that we are obligated to issue), and the Purchase Agreement may be terminated by us at any time at our discretion without penalty.

The extent to which we rely on Keystone as a source of funding will depend on a number of factors, including the prevailing market price of our common stock and the extent to which we are able to secure working capital from other sources. The aggregate number of shares that we can sell to Keystone under the Purchase Agreement may in no case exceed 2,051,428 shares of our common stock (which is the limit set under the Purchase Agreement to ensure that we did not exceed the Exchange Cap).

The terms of the Purchase Agreement limit the number of shares of common stock we may issue to Keystone, which may limit our ability to utilize the arrangement to enhance our cash resources.

The Purchase Agreement includes restrictions on our ability to sell shares of our common stock to Keystone, including, subject to specified limitations, (x) if a sale would cause us to issue, in the aggregate, a

number of shares greater 19.99% of our outstanding common stock prior to the execution of the Purchase Agreement, or the Exchange Cap, or (y) if a sale would cause Keystone and its affiliates to beneficially own more than 4.99% of our issued and outstanding common stock, or the Beneficial Ownership Cap. Accordingly, we cannot guarantee that we will be able to sell all 2,051,428 shares of common stock in this offering. If we cannot sell the full amount of the shares that Keystone has committed to purchase because of these limitations, we may be required to utilize more costly and time-consuming means of accessing the capital markets, which could materially adversely affect our liquidity and cash position.

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

To raise additional capital, we may in the future offer additional shares of our common stock, preferred stock or other securities convertible into or exchangeable for our common stock. We cannot assure you that we will be able to sell shares or other securities in any other offering at a price per share that is equal to or greater than the price per share paid by investors in this offering. The price per share at which we sell additional shares of our common stock or other securities convertible into or exchangeable for our common stock in future transactions may be higher or lower than the price per share in this offering.

Because we are a smaller reporting company, the requirements of being a public company, including compliance with the reporting requirements of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and the requirements of the Sarbanes-Oxley Act and the Dodd-Frank Act, may strain our resources, increase our costs and distract management, and we may be unable to comply with these requirements in a timely or cost-effective manner.

As a public company with listed equity securities, we must comply with the federal securities laws, rules and regulations, including certain corporate governance provisions of the Sarbanes-Oxley Act of 2002 (the "Sarbanes-Oxley Act") and the Dodd-Frank Act, related rules and regulations of the SEC and the NYSE, with which a private company is not required to comply. Complying with these laws, rules and regulations occupies a significant amount of the time of our Board of Directors and management and significantly increases our costs and expenses. Among other things, we must:

- maintain a system of internal control over financial reporting in compliance with the requirements of Section 404 of the Sarbanes-Oxley Act and the related rules and regulations of the SEC and the Public Company Accounting Oversight Board;
- comply with rules and regulations promulgated by the exchange;
- prepare and distribute periodic public reports in compliance with our obligations under the federal securities laws;
- maintain various internal compliance and disclosures policies, such as those relating to disclosure controls and procedures and insider trading in our Common Stock; and
- involve and retain to a greater degree outside counsel and accountants in the above activities;

Future sales of our Common Stock or exercise of our warrants, whether by us or our stockholders, could cause our stock price to decline.

If our existing stockholders sell, or indicate an intent to sell, substantial amounts of our Common Stock in the public market, the trading price of our common stock could decline significantly. Similarly, the perception in the public market that our stockholders might sell shares of our Common Stock could also depress the market price of our Common Stock. A decline in the price of shares of our Common Stock might impede our ability to raise capital through the issuance of additional shares of our Common Stock or other equity securities. In addition, the issuance and sale by us of additional shares of our Common Stock or securities convertible into or exercisable for shares of our Common Stock, or the perception that we will issue such securities, could reduce the trading price for our Common Stock as well as make future sales of equity securities by us less attractive or not feasible. The sale of shares of Common Stock issued upon the exercise of our outstanding options and warrants could further dilute the holdings of our then existing shareholders.

Securities analysts may not cover our Common Stock and this may have a negative impact on the market price of our Common Stock.

The trading market for our Common Stock will depend, in part, on the research and reports that securities or industry analysts publish about us or our business. We do not have any control over independent analysts (provided that we have engaged various non-independent analysts). We do not currently have and may never obtain research coverage by independent securities and industry analysts. If no independent securities or industry analysts commence coverage of us, the trading price for our Common Stock would be negatively impacted. If we obtain independent securities or industry analyst coverage and if one or more of the analysts who covers us downgrades our Common Stock, changes their opinion of our shares or publishes inaccurate or unfavorable research about our business, our stock price would likely decline. If one or more of these analysts ceases coverage of us or fails to publish reports on us regularly, demand for our Common Stock could decrease and we could lose visibility in the financial markets, which could cause our stock price and trading volume to decline.

The price of our Common Stock may be volatile or may decline, which may make it difficult for investors to resell shares of our Common Stock at prices they find attractive.

The trading price of our Common Stock may fluctuate widely as a result of a number of factors, many of which are outside our control. In addition, the stock market is subject to fluctuations in the share prices and trading volumes that affect the market prices of the shares of many companies. These broad market fluctuations could adversely affect the market price of our Common Stock. Among the factors that could affect our stock price are:

- results of our clinical trials, and the results of trials of our competitors or those of other companies in our market sector;
- our ability to enroll subjects in our future clinical trials;
- delays or unanticipated developments in the completion of our planned clinical trials;
- any delay in submitting an NDA and any adverse development or perceived adverse development with respect to the FDA's review of that NDA;
- our ability to obtain and maintain regulatory approval of buntanetap or any future product candidates or additional indications thereof, or limitations to specific label indications or patient populations for its use, or changes or delays in the regulatory review process;
- failure to successfully develop and commercialize buntanetap or any future product candidates;
- the degree and rate of physician and market adoption of any of our current and future product candidates;
- inability to obtain additional funding or obtaining funding on unattractive terms;
- regulatory or legal developments in the United States and other countries applicable to buntanetap or any other product candidates;
- adverse regulatory decisions;
- changes in the structure of healthcare payment systems;
- manufacturing, supply or distribution delays or shortages, including our inability to obtain adequate product supply for buntanetap or any other product candidates, or the inability to do so at acceptable prices;
- the success or failure of our efforts to identify, develop, acquire or license additional product candidates;
- introduction of new products, services or technologies by our competitors;
- failure to meet or exceed financial projections we provide to the public;
- failure to meet or exceed the estimates and projections of the investment community;

- changes in the market valuations of companies similar to ours;
- market conditions in the pharmaceutical and biotechnology sectors, and the issuance of new or changed securities analysts' reports or recommendations;
- announcements of significant acquisitions, strategic collaborations, joint ventures or capital commitments by us or our competitors;
- any changes to our relationship with any manufacturers, suppliers, collaborators or other strategic partners;
- significant lawsuits, including patent or shareholder litigation, and disputes or other developments relating to our proprietary rights, including patents, litigation matters and our ability to obtain patent protection for our technologies;
- additions or departures of key scientific or management personnel;
- sales of our common stock by us or our stockholders in the future;
- changes in our capital structure, such as future issuances of securities and the incurrence of debt;
- changes in accounting standards, policies, guidelines, interpretations or principles;
- trading volume of our Common Stock;
- actual or anticipated fluctuations in our financial condition and results of operations;
- publication of news releases by other companies in our industry, and especially direct competitors, including about adverse developments related to safety, effectiveness, accuracy and usability of their products, reputational concerns, reimbursement coverage, regulatory compliance, and product recalls;
- progression of geopolitical events (including in relation to the conflict between Russia and Ukraine); and
- the other factors described in this "Risk Factors" section, in the accompanying Prospectus or in any document incorporated by reference herein.

The stock market has experienced significant volatility recently. As a result, the market price of our Common Stock may be volatile. In addition, the trading volume in our Common Stock may fluctuate more than usual and cause significant price variations to occur. The trading price of the shares of our Common Stock and the value of our other securities will depend on many factors, which may change from time to time, including, without limitation, our financial condition, performance, creditworthiness and prospects, future sales of our equity or equity related securities, and other factors identified below in "Forward-Looking Statements."

Accordingly, the shares of our Common Stock that an investor purchases, whether in this offering or in the secondary market, may trade at a price lower than that at which they were purchased, and, similarly, the value of our other securities may decline. Current levels of market volatility are unprecedented. The capital and credit markets have been experiencing volatility and disruption for more than a year. In some cases, the markets have produced downward pressure on stock prices and credit availability for certain issuers without regard to those issuers' underlying financial strength.

A significant decline in our stock price could result in substantial losses for individual stockholders and could lead to costly and disruptive securities litigation.

There is an increased risk associated with an investment in our Common Stock.

We have not attained profitable operations since our inception and may continue to incur net losses in the future. Our recurring losses from operations, together with the other factors described herein, raise substantial doubt about our ability to continue as a going concern. As a result, our independent public accounting firm included an explanatory paragraph regarding the same in its report to our Annual Report on Form 10-K for the year ended December 31, 2023. Substantial doubt about our ability to continue as a

going concern may create negative reactions to the price of our common stock and we may have a more difficult time obtaining financing in the future as a result.

As of December 31, 2023, we had cash and cash equivalents of \$5.8 million. This amount will not meet our capital requirements over the next 12 months. Given this, we will need to raise significant additional capital in order to fund our future operations. Our future is dependent upon our ability to obtain financing or upon future profitable operations. We reserve the right to seek additional funds through public/private placements of our Common Stock and/or through debt financing. Our ability to secure additional financing is unknown and there can be no assurance that we will be able to raise sufficient additional capital on acceptable terms or at all.

Our failure to meet the New York Stock Exchange's continued listing requirements could result in a delisting of our Common Stock.

If we fail to satisfy the continued listing requirements of the New York Stock Exchange, such as the corporate governance requirements or the minimum closing bid price requirement, the New York Stock Exchange may take steps to delist our Common Stock. Such a delisting would likely have a negative effect on the price of our Common Stock and would impair our stockholders' ability to sell or purchase our Common Stock when they wish to do so. In the event of a delisting, we can provide no assurance that any action taken by us to restore compliance with listing requirements would allow our common stock to become listed again, stabilize the market price or improve the liquidity of our common stock, or prevent future non-compliance with the listing requirements of the New York Stock Exchange.

We have been subject to securities class action litigation in the past and could be subject to such litigation in the future.

In the past, securities class action litigation has often been brought against companies following a decline in the market price of their securities. This risk is especially relevant for us because biotechnology companies have experienced significant share price volatility in recent years. During the year ended December 31, 2021, two securities class action complaints were filed against us and our executive officers following disclosure of interim results from the AD/PD Trials. Both complaints were voluntarily dismissed without prejudice by the plaintiffs. If we again face such litigation in the future, it could result in substantial costs, a diversion of management's attention and resources, and damage to our reputation, which could have a material adverse effect on our business, financial condition and results of operations and prospects.

Our directors, executive officers and certain shareholders will continue to own a significant percentage of our common stock and, if they choose to act together, will be able to exert significant control over matters subject to stockholder approval.

Our directors, executive officers, and stockholders affiliated with our directors and executive officers own 25.6% of the current voting power of our outstanding Common Stock. Therefore, acting together, they have the ability to substantially influence all matters submitted to our stockholders for approval. For example, these holders may be able to control the appointment of our management, elections and removal of directors, amendments of our organizational documents, or approval of any merger, sale of assets, or other major corporate transaction. The interests of these holders may not always coincide with our corporate interests or the interests of other stockholders, and they may act in a manner with which our stockholders may not agree or that may not be in the best interests of our other stockholders. This concentration of ownership may have the effect of delaying, deferring or preventing a change in control, impeding a merger, consolidation, takeover or other business combination involving us, or discouraging a potential acquiror from making a tender offer or otherwise attempting to obtain control of our business, even if such a transaction would benefit other stockholders. So long as they continue to own a significant amount of our equity, these holders will be able to strongly influence or effectively control our decisions.

Our warrants are accounted for as a warrant liability and were recorded at fair value upon issuance with any changes in fair value each period reported in earnings, which may have an adverse effect on the market price of our securities.

We issued 1,250,000 warrants in November 2023 which are accounted for as liabilities, which means that we recorded them at fair value upon issuance with any changes in fair value each period reported in

earnings as determined by us based upon a valuation report obtained from an independent third party valuation firm. We initially recorded a warrant liability of \$13.7 million and recognized an expense amounting to \$11.8 million during the year ended December 31, 2023. The impact of future changes in fair value on earnings may also have an adverse effect on the market price of our securities, including as a result of increased volatility in our earnings due to fluctuations in the value of the warrants as well as increased costs associated with obtaining such valuations.

We are an “emerging growth company,” and the reduced reporting requirements applicable to emerging growth companies may make our common stock less attractive to investors.

We are an “emerging growth company,” as defined in the Jumpstart Our Business Startups Act (“JOBS Act”). For as long as we continue to be an emerging growth company, we may take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies, including exemption from compliance with the auditor attestation requirements of Section 404, reduced disclosure obligations regarding executive compensation and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved. We will remain an emerging growth company until the earlier of (1) the last day of the fiscal year (a) following the fifth anniversary of the closing of our initial public offering (“IPO”) on January 31, 2020, (b) in which we have total annual gross revenue of at least \$1.235 billion or (c) in which we are deemed to be a large accelerated filer, which means the market value of our common stock held by non-affiliates equals or exceeds \$700 million as of the end of our prior second fiscal quarter, and (2) the date on which we have issued more than \$1.0 billion in non-convertible debt during the prior three-year period.

In addition, under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have irrevocably elected not to avail ourselves of this exemption from new or revised accounting standards and, therefore, we will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

We cannot predict if investors will find our common stock less attractive because we may rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our share price may be more volatile.

Provisions in our restated certificate of incorporation and amended and restated bylaws and under Delaware law could make an acquisition of our company, which may be beneficial to our stockholders, more difficult and may prevent attempts by our stockholders to replace or remove our current management.

Provisions in our restated certificate of incorporation and our amended and restated bylaws that became effective upon the closing of our IPO may discourage, delay or prevent a merger, acquisition or other change in control of our company that stockholders may consider favorable, including transactions in which our stockholders might otherwise receive a premium for their shares. These provisions could also limit the price that investors might be willing to pay in the future for shares of our common stock, thereby depressing the market price of our common stock. In addition, because our board of directors is responsible for appointing the members of our management team, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors. Among other things, these provisions include those establishing advance notice bylaw provisions for proposals from stockholders for presentation at annual meetings and forum selection bylaw provisions.

Because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the General Corporation Law of the State of Delaware, which prohibits a person who owns in excess of 15% of our outstanding voting stock from merging or combining with us for a period of three years after the date of the transaction in which the person acquired in excess of 15% of our outstanding voting stock, unless the merger or combination is approved in a prescribed manner.

Furthermore, our restated certificate of incorporation that became effective upon the closing of our IPO specifies that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery

of the State of Delaware will be the sole and exclusive forum for most legal actions involving actions brought against us by stockholders. We believe this provision benefits us by providing increased consistency in the application of Delaware law by chancellors particularly experienced in resolving corporate disputes, efficient administration of cases on a more expedited schedule relative to other forums and protection against the burdens of multi-forum litigation. However, the provision may have the effect of discouraging lawsuits against our directors and officers. The enforceability of similar choice of forum provisions in other companies' certificates of incorporation has been challenged in legal proceedings, and it is possible that, in connection with any applicable action brought against us, a court could find the choice of forum provisions contained in our restated certificate of incorporation to be inapplicable or unenforceable in such action.

Our bylaws designate the Court of Chancery of the State of Delaware as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.

Our bylaws provide that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware is the exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders with respect to our company and our directors. This choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that the stockholder believes is favorable for disputes with us or our directors, which may discourage meritorious claims from being asserted against us and our directors. Alternatively, if a court were to find this provision of our charter inapplicable to, or unenforceable in respect of, one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could adversely affect our business, financial condition or results of operations. We adopted this provision because we believe it makes it less likely that we will be forced to incur the expense of defending duplicative actions in multiple forums and less likely that plaintiffs' attorneys will be able to employ such litigation to coerce us into otherwise unjustified settlements, and we believe the risk of a court declining to enforce this provision is remote, as the General Assembly of Delaware has specifically amended the Delaware General Corporation Law to authorize the adoption of such provisions.

We have not paid and do not intend to pay dividends on our Common Stock. Investors in this offering may never obtain a return on their investment.

We have not paid dividends on our Common Stock inception, and do not intend to pay any dividends on our Common Stock in the foreseeable future. We intend to reinvest earnings, if any, in the development and expansion of our business. Accordingly, you will need to rely on sales of your shares of Common Stock after price appreciation, which may never occur, in order to realize a return on your investment.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein include “forward-looking statements” 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 fact are “forward-looking statements” for purposes of this prospectus, the accompanying prospectus and the documents incorporated by reference herein and therein. In some cases, you can identify forward-looking statements by terminology such as “may,” “could,” “will,” “would,” “should,” “expect,” “plan,” “anticipate,” “believe,” “estimate,” “intend,” “predict,” “seek,” “contemplate,” “project,” “continue,” “potential,” “ongoing,” “goal,” or the negative of these terms or other comparable terminology. These forward-looking statements include, but are not limited to, statements about:

- the initiation, timing, progress, and results of our research and development programs;
- the timing or success of commercialization of our products;
- the pricing and reimbursement of our products;
- the initiation, timing, progress, and results of our preclinical and clinical studies;
- the scope of protection we can establish and maintain for intellectual property rights covering our product candidates and technology;
- estimates of our expenses, future revenues, and capital requirements;
- our need for, and ability to obtain, additional financing in the future;
- our ability to comply with regulations applicable to the manufacture, marketing, sale and distribution of our products;
- the potential benefits of strategic collaboration agreements and our ability to enter into strategic arrangements;
- developments relating to our competitors and industry;
- our failure to maintain effective internal controls; and
- our expected use of proceeds from this offering.

These statements relate to future events or to our future financial performance and involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by these forward-looking statements. Factors that may cause actual results to differ materially from current expectations include, among other things, those set forth in the section titled “Risk Factors” beginning on page S-4 of this prospectus supplement and in the accompanying prospectus and the documents incorporated by reference herein and therein. Any forward-looking statement in this prospectus, the accompanying prospectus and the documents incorporated by reference herein and therein reflects our current view with respect to future events and is subject to these and other risks, uncertainties and assumptions relating to our operations, results of operations, industry and future growth. Given these uncertainties, you should not place undue reliance on these forward-looking statements. Except as required by law, we assume no obligation to update or revise these forward-looking statements for any reason, even if new information becomes available in the future.

This prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein also contain estimates, projections and other information concerning our industry, our business and the markets for certain products, including data regarding the estimated size of those markets, their projected growth rates and the incidence of certain medical conditions. Information that is based on estimates, forecasts, projections or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances reflected in this information. Unless otherwise expressly stated, we obtained these industry, business, market and other data from reports, research surveys, studies and similar data prepared by third parties, industry, medical and general publications, government data and similar sources. In some cases, we do not expressly refer to the sources from which these data are derived.

USE OF PROCEEDS

The proceeds from this offering will vary depending on the number of shares that we direct Keystone to purchase and the purchase price per share. We may sell fewer than all of the shares offered by this prospectus supplement, in which case our offering proceeds will be less. Assuming all of the shares were sold at \$5.00 per share (which represents the floor price in the Purchase Agreement), the net proceeds would be approximately \$9.5 million.

We intend to use the net proceeds from this offering for working capital and other general corporate purposes. The amounts and timing of our use of proceeds will vary depending on a number of factors. As a result, we will retain broad discretion in the allocation of the net proceeds of this offering. In addition, while we have not entered into any agreements, commitments or understandings relating to any significant transaction as of the date of this prospectus supplement, we may use a portion of the net proceeds to pursue acquisitions, joint ventures and other strategic transactions.

Cash offering expenses will be paid by us using cash-on-hand.

DILUTION

Dilution is the amount by which the price paid by the purchasers of the shares of our common stock sold in the offering exceeds the net tangible book value per share of common stock after the offering. Net tangible book value per share is determined by subtracting our total liabilities from the total book value of our tangible assets and dividing the difference by the number of shares of our common stock deemed to be outstanding at that date. The sale of our common stock to Keystone pursuant to the Purchase Agreement will have a dilutive impact on our stockholders. In addition, the lower our stock price is at the time we exercise our right to sell shares to Keystone, the more shares of our common stock we will have to issue to Keystone pursuant to the Purchase Agreement and the greater dilution our existing stockholders will experience.

Our historical net tangible book value as of December 31, 2023 was \$(7,750,846), or \$(.74) per share.

After giving effect to the sale by us of an aggregate of 2,051,428 shares of our common stock at a price of \$5.00 per share (which represents the floor price in the Purchase Agreement), for aggregate gross proceeds of approximately \$9.5 million, net of estimated offering expenses payable by us, our as adjusted net tangible book value as of December 31, 2023 would have been \$6,164,836, or \$0.47 per share. This represents an immediate increase in as adjusted net tangible book value per share of \$1.21 to our existing stockholders and immediate dilution of \$4.53 per share to new investors purchasing common stock in this offering. The shares, if any, sold in this offering will be sold from time to time at various prices.

The following table illustrates this dilution on a per share basis to new investors:

Assumed public offering price per share	\$5.00
Historical net tangible book value per share as of December 31, 2023	\$(0.74)
Increase in net tangible book value per share attributable to new investors ⁽¹⁾	<u>1.21</u>
As adjusted net tangible book value per share after giving effect to this offering	0.47
Dilution per share to new investors	<u>\$4.53</u>

- (1) Amount shown also incorporates the impact of approximately \$4.4 million of aggregate net proceeds from our registered direct offering on March 22, 2024, our registered direct offering on March 19, 2024 and warrant exercises that occurred during the first quarter of 2024. Also incorporates the impact of the issuance of 491,366 shares issued in connection with both offerings and the warrant exercises.

The outstanding share information in the table above is based on 11,011,299 shares of our common stock outstanding as of April 30, 2024 and excludes 1,954,774 shares issuable upon the exercise of outstanding stock options.

To the extent that outstanding options or warrants are exercised, investors purchasing our common stock in this offering will 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.

THE KEYSTONE TRANSACTION

General

On April 25, 2024, we entered into the Purchase Agreement with Keystone. Pursuant to the terms of the Purchase Agreement, Keystone has agreed to purchase from us, at our discretion from time to time, up to 2,017,491 shares of common stock (the “Purchase Shares”), subject to certain limitations and conditions contained in the Purchase Agreement. We have also agreed to issue 33,937 shares of our common stock to Keystone for no cash consideration as a fee for Keystone’s execution of the Purchase Agreement (the “Commitment Shares”). We will not receive any cash proceeds from the issuance of the Commitment Shares. We have filed with the SEC this prospectus supplement to register for sale under the Securities Act the shares issued to Keystone under the Purchase Agreement.

Under the Purchase Agreement, on any business day selected by us where the closing sale price of our common stock on NYSE, is equal to or greater than \$5.00, we have the right, in our sole discretion, to present Keystone with (i) an initial fixed purchase notice (“Fixed Purchase Notice”) for an aggregate amount of Purchase Shares not to exceed the lower of 25,000 shares of our Common Stock or \$250,000 under any single notice at the applicable fixed purchase price determined in accordance with the Purchase Agreement (“Fixed Purchases”) and (ii) a volume-weighted average price (“VWAP”) purchase notice (“VWAP Purchase Notice”) for an aggregate amount of Purchase Shares not to exceed the lesser of (a) 300% of the number of Purchase Shares directed by us to be purchased pursuant to a corresponding Fixed Purchase Notice and (b) 30% of the trading volume in our Common Stock on the NYSE during the applicable purchase period, at the applicable VWAP purchase price determined in accordance with the Purchase Agreement (the “VWAP Purchases”) provided that Keystone’s aggregate committed obligation under all VWAP Purchases shall not exceed \$10,000,000 in the aggregate. The purchase price per share is subject to a floor price (the “Floor Price”) equal to 85% of the closing price on the trading day the applicable VWAP Purchase Notice is delivered to Keystone along with the Fixed Purchase Notice. Keystone may not assign or transfer its rights and obligations under the Purchase Agreement.

Under applicable NYSE rules, the aggregate number of shares that we can sell to Keystone under the Purchase Agreement may in no case equal or exceed 19.99% of the Company’s outstanding shares of Common Stock as of the date of the date of the Purchase Agreement, subject to adjustment for any reorganization, recapitalization, non-cash dividend, stock split, reverse stock split or other similar transaction (the “Exchange Cap”), unless (i) we obtain stockholder approval to issue Purchase Shares above the Exchange Cap, in which case the Exchange Cap will no longer apply or (ii) the price per share paid by Keystone for all of the shares of our common stock purchased from us pursuant to the Purchase Agreement, if any, equals or exceeds the lower of (A) the official closing price of our common stock immediately preceding delivery of the purchase notice to Keystone and (B) the average of the closing sale prices of our common stock for the five (5) business days immediately preceding the delivery of the purchase notice.. In any event, the Purchase Agreement specifically provides that we may not issue any shares of our common stock under the Purchase Agreement if such issuance would breach any applicable rules or regulations of NYSE.

The Purchase Agreement also provides that we may not issue or sell, and Keystone may not purchase or acquire, any shares of our common stock under the Purchase Agreement if those shares, when aggregated with all other shares of our common stock then beneficially owned by Keystone, would result in Keystone and its affiliates exceeding the beneficial ownership limitation, which is 4.99% of our then issued and outstanding common stock.

Purchase Price of Shares Under the Purchase Agreement

The Fixed Purchase Price per share for each purchase will be equal to the lesser of (subject to the Floor Price):

- 95% of the VWAP of our common stock during the previous five trading days prior to the purchase notice date; and
- the last closing trade price for our common stock on the NYSE on the purchase date;

The VWAP Purchase Price per share of our common stock will be equal to the lesser of (subject to the Floor Price):

- 95% the last closing trade price for our common stock on the NYSE on the VWAP purchase date; and
- The VWAP during the applicable VWAP purchase period.

The Additional VWAP Purchase Price per share of our common stock will be equal to

- 95% of the lower of (i) the VWAP for the applicable Additional VWAP Purchase Period as defined under the Purchase Agreement during the applicable Additional VWAP purchase date for such Additional VWAP Purchase, and (ii) the closing sale price of our common stock on such applicable date of Additional VWAP Purchase for such Additional VWAP Purchase.

Each Purchase has a maximum number of shares that may be purchased for each applicable purchase period:

- Fixed Purchase — may not exceed the lower of 25,000 shares or \$250,000.
- All Purchases combined — Keystone’s maximum purchase commitment in any single VWAP Purchase, together with all Additional VWAP Purchases may not exceed \$10,000,000 in the aggregate for such VWAP Purchase and Additional VWAP Purchases.
- VWAP Purchase — lesser of (i) 300% of the number of shares directed by us to be purchased Keystone pursuant to the corresponding Fixed Purchase and (ii) 30% of the trading volume in our common stock on the NYSE during the applicable VWAP Purchase Period.
- Additional VWAP Purchase — lesser of (i) 300% of the number of shares directed by us to be purchased by Keystone pursuant to the corresponding Fixed Purchase and (ii) a number of shares equal to (A) 30% multiplied by (B) the trading volume of shares of our common stock during the applicable Additional VWAP Purchase Period.

Conditions to Commencement and for Delivery of Fixed Purchase Notices

Our ability to deliver Purchase notices to Keystone under the Purchase Agreement is subject to the satisfaction, both at the time of Commencement and at the time of delivery by the Company of the applicable Purchase notice to Keystone, of certain conditions, including the following:

- the accuracy in all material respects of our representations and warranties included in the Purchase Agreement;
- the Company having performed, satisfied and complied in all material respects with all covenants, agreements and conditions required by the Purchase Agreement to be performed, satisfied or complied with by the Company;
- the registration statement to which this prospectus supplement relates remains effective under the Securities Act;
- the Commission shall not have issued any stop order suspending the effectiveness of the registration statement to which this prospectus supplement relates or prohibiting or suspending the use of this prospectus supplement;
- there shall not have occurred any event and there shall not exist any condition or state of facts, which makes any statement of a material fact made in this prospectus supplement untrue or which requires the making of any additions to or changes to the statements contained herein in order to state a material fact required by the Securities Act to be stated therein or necessary in order to make the statements then made herein not misleading;
- this prospectus supplement, in final form, shall have been filed with the SEC under the Securities Act in accordance with Rule 424(b) under the Securities Act, and all reports, schedules, registrations, forms, statements, information and other documents required to have been filed by the Company with the Commission pursuant to the reporting requirements of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), shall have been filed with the Commission;

- trading in our common stock shall not have been suspended by the Commission or the NYSE, the Company shall not have received any final and non-appealable notice that the listing or quotation of its common stock on the NYSE shall be terminated on a date certain (unless, prior to such date, the common stock is listed or quoted on any other Eligible Market, as such term is defined in the Purchase Agreement), and there shall be no suspension of, or restriction on, accepting additional deposits of the common stock, electronic trading or book-entry services by DTC with respect to the common stock;
- the Company shall have complied in all material respects with all applicable federal, state and local governmental laws, rules, regulations and ordinances in connection with the execution, delivery and performance of the Purchase Agreement and the Registration Rights Agreement;
- the absence of any statute, regulation, order, decree, writ, ruling or injunction by any court or governmental authority of competent jurisdiction which prohibits the consummation of or that would materially modify or delay any of the transactions contemplated by the Purchase Agreement or the Registration Rights Agreement;
- the absence of any action, suit or proceeding before any arbitrator or any court or governmental authority seeking to restrain, prevent or change the transactions contemplated by the Purchase Agreement or the Registration Rights Agreement, or seeking material damages in connection with such transactions;

Termination Rights

Keystone may terminate the Purchase Agreement under various circumstances including the following:

- the effectiveness of the registration statement of which this prospectus supplement forms a part lapses for any reason (including, without limitation, the issuance of a stop order), the registration statement or any required prospectus supplement and accompanying prospectus are unavailable for our sale to Keystone (or the resale by Keystone) of any or all of the securities to be issued under the Purchase Agreement, and such lapse or unavailability continues for a period of 20 consecutive business;
- suspension by our principal market of our common stock from trading for a period of three consecutive business days;
- the de-listing of our common stock from NYSE, our principal market, unless our common stock is immediately thereafter trading on the, The Nasdaq Capital Market, The Nasdaq Global Select Market, the NYSE, the NYSE Arca, the OTC Bulletin Board or the OTC Markets (or nationally recognized successor to any of the foregoing);
- the failure of our transfer agent to issue Purchase Shares to Keystone within three business days after the applicable purchase date on which Keystone is entitled to receive such Purchase Shares;
- if we breach any representation, warranty, covenant or other term or condition in the Purchase Agreement or the Registration Rights Agreement if such breach would have a material adverse effect and except, in the case of a breach of a covenant that is reasonably curable, only if such breach continues for a period of at least ten business days;
- if any person commences a proceeding against us pursuant to or within the meaning of any bankruptcy law;
- if we become insolvent, or pursuant to or within the meaning of any bankruptcy law, we (a) commence a voluntary case, (b) consent to the entry of an order for relief against an involuntary case, (c) consent to the appointment of a custodian for us or for all or substantially all of our property, or (d) make a general assignment for the benefit of our creditors or we are generally unable to pay our debts;
- if a court of competent jurisdiction enters an order or decree under any bankruptcy law that is for relief against us in any involuntary case, appoints a custodian for us or for all or substantially all of our property, or orders our liquidation;
- if at any time we are not eligible to transfer our common stock electronically as DWAC shares; or

- if at any time the Exchange Cap is reached and our stockholders have not approved the transactions contemplated by the Purchase Agreement in accordance with the applicable rules and regulation of the NYSE, any other principal market, our certificate of incorporation and our bylaws.

Keystone has the right to terminate the Purchase Agreement upon ten (10) business days' prior written notice to the Company of certain events of default described above. The Purchase Agreement will automatically terminate, however, upon the thirtieth day following the initiation of insolvency or bankruptcy proceedings by or against us. During an event of default, all of which are outside of Keystone's control, we may not direct Keystone to purchase any shares of our common stock under the Purchase Agreement.

Our Termination Rights

We have the unconditional right, at any time after the date of filing of this prospectus supplement, to terminate the Purchase Agreement for any reason and without any payment or liability to us, by delivering notice to Keystone. Such termination will become effective one business day after Keystone receives our termination notice.

No Short-Selling or Hedging by Keystone

Keystone has agreed that neither it nor any of its affiliates will engage in any direct or indirect short-selling or hedging that establishes a net short position in our common stock during any time prior to the termination of the Purchase Agreement.

Effect of Performance of the Purchase Agreement on our Stockholders

All shares registered in this offering that we issue to Keystone under the Purchase Agreement are expected to be freely tradable. The sale by Keystone of a significant amount of shares registered in this offering at any given time could cause the market price of our common stock to decline and to be highly volatile. Sales of our common stock to Keystone will depend upon market conditions and other factors to be determined by us. We may ultimately decide to sell to Keystone all, some or none of the additional shares of our common stock that may be available for us to sell pursuant to the Purchase Agreement. If and when we do sell shares to Keystone, after Keystone has acquired the shares, Keystone may resell all, some or none of those shares at any time or from time to time in its discretion. Therefore, sales to Keystone by us under the Purchase Agreement may result in substantial dilution to the interests of other holders of our common stock. In addition, if we sell a substantial number of shares to Keystone under the Purchase Agreement, or if investors expect that we will do so, the actual sales of shares or the mere existence of our arrangement with Keystone may make it more difficult for us to sell equity or equity-related securities in the future at a time and at a price that we might otherwise wish to effect such sales. However, we have the right to control the timing and amount of any additional sales of our shares to Keystone and we may terminate the Purchase Agreement at any time at our discretion without any cost to us.

Pursuant to the terms of the Purchase Agreement, we have the right, but not the obligation, to direct Keystone to purchase up to 2,017,491 shares of our common stock, in addition to the Commitment Shares being issued to Keystone on the date of the prospectus supplement. The Purchase Agreement prohibits us from issuing or selling to Keystone under the Purchase Agreement shares of our common Stock if those shares, when aggregated with all other shares of our common stock then beneficially owned by Keystone, would exceed the Beneficial Ownership Limitation or the Exchange Cap.

DESCRIPTION OF THE SECURITIES WE ARE OFFERING

The following description of the securities we are offering pursuant to this prospectus supplement does not purport to be complete and is subject to, and qualified in its entirety by, our certificate of incorporation and bylaws, which are incorporated by reference as exhibits to the registration statement of which this prospectus supplement forms a part, and by applicable law. The terms of our common stock may also be affected by Delaware law.

Common Stock

The material terms of our Common Stock are described under the heading “Description of Our Capital Stock” in the accompanying base prospectus.

Equiniti Trust Company, LLC is the transfer agent and registrar for our Common Stock. Our Common Stock is listed on the New York Stock Exchange under the symbol “ANVS.”

PLAN OF DISTRIBUTION

Pursuant to this prospectus supplement and the accompanying prospectus, we are offering up to \$2,051,428 in shares of our common stock pursuant to the Purchase Agreement.

We entered into the Purchase Agreement with Keystone on April 25, 2024. The Purchase Agreement provides that, upon the terms and subject to the conditions set forth therein, Keystone is irrevocably committed to purchase upon request an aggregate of up to 2,017,491 shares of our common stock during the Investment Period. The purchase price per share is based on a formula set forth in the Purchase Agreement. Keystone may not assign or transfer its rights and obligations under the Purchase Agreement. See “The Keystone Transaction.”

This offering will terminate on the earlier of (i) the date that all shares offered by this prospectus supplement have been sold or (ii) the expiration of the Investment Period, or on any earlier date on which we provide notice of termination to Keystone.

Keystone is an “underwriter” within the meaning of Section 2(a)(11) of the Securities Act. Keystone has informed us that it will use an unaffiliated broker-dealer to effectuate all sales, if any, of the common stock that it may purchase from us pursuant to the Purchase Agreement. Such sales will be made on The NYSE at prices and at terms then prevailing or at prices related to the then current market price. Each such unaffiliated broker-dealer will be an underwriter within the meaning of Section 2(a)(11) of the Securities Act. Keystone has informed us that each such broker-dealer will receive commissions from Keystone that will not exceed customary brokerage commissions.

We know of no existing arrangements between Keystone and any other stockholder, broker, dealer, underwriter, or agent relating to the sale or distribution of the shares offered by this prospectus supplement.

We will pay the expenses incident to the registration under the Securities Act of the offer and sale of the shares covered by this prospectus supplement to Keystone. In addition, we have paid Keystone an administrative fee upon the execution of the Purchase Agreement and will pay Keystone certain additional fees during the term of the Purchase Agreement.

We have agreed to indemnify Keystone and certain other persons against certain liabilities in connection with the offering of shares of our common stock offered hereby, including liabilities arising under the Securities Act or, if such indemnity is unavailable, to contribute amounts required to be paid in respect of such liabilities. Keystone has agreed to indemnify us against liabilities under the Securities Act that may arise from certain written information furnished to us by Keystone specifically for use in this prospectus supplement or, if such indemnity is unavailable, to contribute amounts required to be paid in respect of such liabilities.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers, and controlling persons, we have been advised that in the opinion of the SEC this indemnification is against public policy as expressed in the Securities Act and is therefore, unenforceable.

Keystone represented to us that at no time prior to the date of the Purchase Agreement has Keystone or its agents, representatives or affiliates engaged in or effected, in any manner whatsoever, directly or indirectly, any short sale (as such term is defined in Rule 200 of Regulation SHO of the Exchange Act) of our common stock or any hedging transaction that establishes a net short position in our common stock. Keystone agreed that during the term of the Purchase Agreement, it, its agents, representatives or affiliates will not enter into or effect, directly or indirectly, any of the foregoing transactions.

We have advised Keystone that it is required to comply with Regulation M promulgated under the Exchange Act, to the extent applicable to this offering. With certain exceptions, Regulation M precludes the selling stockholder, any affiliated purchasers, and any broker-dealer or other person who participates in the distribution from bidding for or purchasing, or attempting to induce any person to bid for or purchase any security which is the subject of the distribution until the entire distribution is complete. Regulation M also prohibits any bids or purchases made in order to stabilize the price of a security in connection with the distribution of that security. All of the foregoing may affect the marketability of the shares offered by this prospectus supplement.

The transfer agent for our common stock is Equity Stock Transfer, LLC.

LEGAL MATTERS

Certain legal matters with respect to the validity of the offered securities will be passed upon for us by Loeb & Loeb LLP, New York, New York.

EXPERTS

The consolidated financial statements of our Company appearing in our annual report on [Form 10-K for the fiscal year ended December 31, 2023](#) has been audited by Ernst & Young LLP and the consolidated financial statements of our Company appearing in our annual report on [Form 10-K for the fiscal year ended December 31, 2022](#) has been audited by WithumSmith+Brown, PC, independent registered public accounting firm, each as set forth in the reports thereon included therein and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such reports given on the authority of such firms as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus supplement and the accompanying prospectus form part of a registration statement on Form S-3 that we filed with the SEC. This prospectus supplement does not contain all of the information set forth in the registration statement and the exhibits to the registration statement. For further information with respect to us and the securities we are offering under this prospectus supplement, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement. Neither we nor any agent, underwriter or dealer has authorized any person to provide you with different information. We are not making an offer of these securities in any state where the offer is not permitted. You should not assume that the information in this prospectus supplement is accurate as of any date other than the date on the front page of this prospectus supplement, regardless of the time of delivery of this prospectus supplement or any sale of the securities offered by this prospectus supplement.

We file annual, quarterly and current reports, proxy statements and other information with the SEC. These periodic reports, proxy statements and other information are available on the SEC's website at www.sec.gov. Our website is located at www.Annovis.com. Information contained on our website is not incorporated by reference into this prospectus supplement and, therefore, is not part of this prospectus supplement.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to “incorporate by reference” into this prospectus supplement the information from other documents that we file with it, which means that we can disclose important information to you by referring you to those documents. The information we incorporate by reference is an important part of this prospectus supplement, and later information that we file with the SEC will automatically update and supersede some of this information. We incorporate by reference the documents listed below and any future filings we make with the SEC under Section 13(a), 13(c), 14 or 15(d) of the Exchange Act, including filings made after the date of the initial registration statement, until we sell all of the shares covered by this prospectus supplement or the sale of shares by us pursuant to this prospectus supplement is terminated. In no event, however, will any of the information that we furnish to, pursuant to Item 2.02 or Item 7.01 of any Current Report on Form 8-K (including exhibits related thereto) or other applicable SEC rules, rather than file with, the SEC be incorporated by reference or otherwise be included herein, unless such information is expressly incorporated herein by a reference in such furnished Current Report on Form 8-K or other furnished document. The documents we incorporate by reference are:

- [our Annual Report on Form 10-K for the fiscal year ended December 31, 2023 as filed with the SEC on April 3, 2024;](#)
- [the description of our capital stock contained in our Registration Statement on Form 8-A filed with the SEC on November 17, 2021 and any amendments or supplements thereto.](#)

Any statement contained in this prospectus supplement, the accompanying prospectus or in a document incorporated or deemed to be incorporated by reference into this prospectus supplement and the accompanying prospectus will be deemed to be modified or superseded for purposes of this prospectus supplement and the accompanying prospectus to the extent that a statement contained in this prospectus supplement and the accompanying prospectus or any other subsequently filed document that is deemed to be incorporated by reference into this prospectus supplement and the accompanying prospectus modifies or supersedes the statement. Any statements so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus supplement and the accompanying prospectus.

You may obtain a copy of these filings, without charge, by writing or calling us at:

Annovis Bio, Inc.
101 Lindenwood Drive,
Suite 225
Malvern, PA 19355
Attn: Investor Relations

You should rely only on the information incorporated by reference or provided in this prospectus supplement or 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 or the accompanying prospectus is accurate as of any date other than the date on the front page of those documents.

You may also access these documents, free of charge on the SEC’s website at www.sec.gov or on our website at www.annovisbio.com. Information contained on our website is not incorporated by reference into this prospectus, and you should not consider any information on, or that can be accessed from, our website as part of this prospectus supplement.

This prospectus supplement is part of a registration statement we filed with the SEC. We have incorporated exhibits into this registration statement. You should read the exhibits carefully for provisions that may be important to you.

You should rely only on the information incorporated by reference or provided in this prospectus supplement. We have not authorized anyone to provide you with different information. We are not making an offer of these securities in any state where the offer is not permitted. You should not assume that the information in this prospectus supplement or in the documents incorporated by reference is accurate as of any date other than the date on the front of this prospectus supplement or those documents.

PROSPECTUS



\$250,000,000
Common Stock
Preferred Stock
Debt Securities
Warrants
Units

We may offer and sell from time to time shares of common stock, shares of preferred stock, debt securities, warrants, or any combination of those securities, either individually or in units, up to an aggregate initial offering price of \$250,000,000, in one or more transactions under this prospectus. We may also offer common stock or preferred stock upon conversion of debt securities, common stock upon conversion of preferred stock, or common stock, preferred stock, or debt securities upon the exercise of warrants. The securities may be offered in amounts, at prices and on terms to be determined based on market conditions at the time of sale and set forth in an accompanying prospectus supplement.

This prospectus provides you with a general description of the securities that we may offer. Each time we offer securities, we will provide you with a prospectus supplement that describes specific information about the particular securities being offered and may add, update or change information contained or incorporated by reference in this prospectus. You should read both this prospectus and the applicable prospectus supplement, together with the additional information that is incorporated by reference into this prospectus and the applicable prospectus supplement, before you invest in any of our securities.

The securities may be sold by us to or through underwriters or dealers, directly to purchasers or through agents designated from time to time, or through a combination of these methods. For additional information on the methods of sale, you should refer to the section entitled “Plan of Distribution” in this prospectus and the comparable section of any applicable prospectus supplement. If any underwriters are involved in the sale of the securities with respect to which this prospectus is being delivered, the names of such underwriters and any applicable discounts or commissions and options will be set forth in the applicable prospectus supplement.

Our common stock is listed on the NYSE under the ticker symbol “ANVS.” On January 30, 2024, the last reported sale price per share of our common stock on the NYSE was \$10.75 per share. We have not yet determined whether the other securities that may be offered by this prospectus will be listed on any exchange, interdealer quotation system or over-the-counter market. If we decide to seek the listing of any such securities upon issuance, the prospectus supplement relating to those securities will disclose the exchange, quotation system or market on which those securities will be listed.

INVESTING IN OUR SECURITIES INVOLVES A HIGH DEGREE OF RISK. RISKS ASSOCIATED WITH AN INVESTMENT IN OUR SECURITIES WILL BE DESCRIBED IN THE APPLICABLE PROSPECTUS SUPPLEMENT AND CERTAIN OF OUR FILINGS WITH THE SECURITIES AND EXCHANGE COMMISSION INCORPORATED BY REFERENCE INTO THIS PROSPECTUS, AS DESCRIBED UNDER “RISK FACTORS” ON PAGE 5.

You should read this prospectus and any applicable prospectus supplement together with additional information described under the heading “Where You Can Find Additional Information” before you make your investment decision.

Neither the Securities and Exchange Commission 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.

Prospectus dated February 12, 2024.

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ABOUT THIS PROSPECTUS

As used in this prospectus, unless the context otherwise requires, the terms “Annovis,” the “Company,” “we,” “us,” and “our” refer to Annovis Bio, Inc.

This prospectus is a part of a registration statement that we filed with the Securities and Exchange Commission, (the “SEC”), using a “shelf” registration process. Under this shelf registration process, we may offer to sell any of the securities, or any combination of the securities, described in this prospectus, in each case, in one or more offerings, up to an aggregate dollar amount of \$250,000,000.

This prospectus provides you with a general description of the securities that we may offer. Each time securities are sold under this registration statement, we will provide an accompanying prospectus supplement that will contain specific information about the terms of those securities and the terms of that offering. The accompanying prospectus supplement may also add, update or change information contained in this prospectus. If there is any inconsistency between the information in this prospectus and any accompanying prospectus supplement, you should rely on the information in the accompanying prospectus supplement. You should read both this prospectus and any accompanying prospectus supplement, including all documents incorporated by reference herein and therein, together with the additional information described under “Where You Can Find Additional Information” below.

The information contained in this prospectus is not complete and may be changed. You should rely only on the information provided in or incorporated by reference in this prospectus or in any accompanying prospectus supplement, or documents to which we otherwise refer you. We have not authorized anyone else to provide you with different information.

We have not authorized any dealer, agent or other person to give any information or to make any representation other than those contained or incorporated by reference in this prospectus and any accompanying prospectus supplement. You must not rely upon any information or representation not contained or incorporated by reference in this prospectus or an accompanying prospectus supplement. This prospectus and the accompanying prospectus supplement, if any, do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the registered securities to which they relate, nor do this prospectus and any accompanying prospectus supplement, if any, constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction. You should not assume that the information contained in this prospectus and any accompanying prospectus supplement is accurate on any date subsequent to the date set forth on the front of such document or that any information we have incorporated by reference is correct on any date subsequent to the date of the document incorporated by reference, even though this prospectus and any accompanying prospectus supplement is delivered, or securities are sold on a later date.

FORWARD-LOOKING STATEMENTS

This prospectus, including documents incorporated by reference, any applicable prospectus supplement and any related free writing prospectus, contain forward-looking statements, as defined in Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. In some cases, you can identify forward-looking statements by the words “anticipate,” “believe,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “might,” “objective,” “ongoing,” “plan,” “predict,” “project,” “potential,” “should,” “will,” or “would,” and or the negative of these terms, or other comparable terminology intended to identify statements about the future. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from the information expressed or implied by these forward-looking statements. Although we believe that we have a reasonable basis for each forward-looking statement contained in this prospectus, we caution you that these statements are based on a combination of facts and factors currently known by us and our expectations of the future, about which we cannot be certain.

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

- our business strategies;
- the timing of regulatory submissions;
- our ability to obtain and maintain regulatory approval of our existing product candidates and any other product candidates we may develop, and the labeling under any approval we may obtain;
- risks relating to the timing and costs of clinical trials and the timing and costs of other expenses;
- risks related to market acceptance of products;
- risks associated with our reliance on third-party organizations;
- our competitive position;
- assumptions regarding the size of the available market, product pricing and timing of commercialization of our product candidates;
- our intellectual property position and our ability to maintain and protect our intellectual property rights;
- our results of operations, financial condition, liquidity, prospects, and growth strategies;
- our cash needs and financing plans;
- the industry in which we operate; and
- the trends that may affect the industry or us.

We cannot guarantee that the results and other expectations expressed, anticipated or implied in any forward-looking statement will be realized. The risks set forth under Item 1A of our Form 10-K for the year ended December 31, 2022, as revised or supplemented by our Quarterly Reports on Form 10-Q and other documents we file with the SEC, describe material risks to our business, and you should read and interpret any forward-looking statements together with these risks. A variety of factors, including these risks, could cause our actual results and other expectations to differ materially from the anticipated results or other expectations expressed, anticipated or implied in our forward-looking statements. Should known or unknown risks materialize, or should underlying assumptions prove inaccurate, actual results could differ materially from past results and those anticipated, estimated or projected in the forward-looking statements. You should bear this in mind as you consider any forward-looking statements.

You should read this prospectus, including documents incorporated by reference, any applicable prospectus supplement and any related free writing prospectus completely and with the understanding that our actual future results may be materially different from what we expect. The forward-looking statements contained in this prospectus are made as of the date of this prospectus and we do not assume any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

THE COMPANY

Overview

We are a clinical stage, drug platform company addressing neurodegeneration, such as Alzheimer's disease ("AD") and Parkinson's disease ("PD"). We are developing our lead product candidate, buntanetap, which is designed to address AD, PD and other chronic neurodegenerative diseases. Buntanetap is a synthetically produced small molecule, orally administered, brain penetrant compound. In several studies, buntanetap was observed to inhibit the synthesis of neurotoxic proteins-APP/A β ("APP"), tau/phospho-tau ("tau") and α -Synuclein (" α SYN")-that are the main causes of neurodegeneration. High levels of neurotoxic proteins lead to impaired axonal transport, which is responsible for the communication between and within nerve cells. When that communication is impaired, the immune system is activated and attacks the nerve cells, eventually killing them. We have observed in our clinical studies in early AD and early PD patients and pre-clinical studies in mice and rats that buntanetap lowered neurotoxic protein levels leading to improved axonal transport, reduced inflammation, lower nerve cell death and improved affected function.

In 2021, we completed two Phase 1/2 clinical studies: one in 14 early AD patients, and one in 54 early PD patients (together, the "AD/PD Trials"). In the AD/PD Trials, early AD patients were defined as those with a Mini Mental State Examination (MMSE) score between 19 and 28 and early PD patients as those patients at Hoehn & Yahr stages 1, 2 or 3. MMSE is a brief screening instrument used to assess cognitive function, with total scores ranging from 0 to 30 and a lower score indicating greater disease severity, while the Hoehn & Yahr scale is a medical assessment used to measure staging of the functional disability associated with PD where a higher stage indicates greater disease severity. In collaboration with the Alzheimer's Disease Cooperative Study ("ADCS"), we also conducted a trial in 16 early AD patients (the "ADCS Trial"). In the ADCS Trial, early AD patients were defined as those patients with a MMSE score between 19 and 28. All three clinical trials were double-blind, placebo-controlled studies. We designed the studies by applying our understanding of the underlying neurodegenerative disease states, and measured efficacy as well as both target and pathway engagement in the spinal fluid of patients to determine whether patients improvement following treatment correlated with the CSF biomarkers. In addition to meeting their primary endpoints of safety and tolerability and secondary endpoint of pharmacokinetics, our AD/PD Trials met exploratory endpoints of measures of biomarkers and improvements in cognition in AD patients, and in function in PD patients. We believe that the AD/PD Trials represent the first double-blind placebo-controlled studies that showed improvements in AD patients, as measured by ADAS-Cog, and in PD patients, as measured by UPDRS. Following completion of the AD/PD Trials, we submitted our data to the U.S. Food and Drug Administration ("FDA") and requested direction to further pursue the development of buntanetap in early PD patients. With the FDA's guidance, we initiated a Phase 3 study in early PD patients in August 2022 (our "Phase 3 PD Study"). In the Phase 3 PD Study, early PD patients were defined as those at Hoehn & Yahr stages 1, 2 or 3, and OFF times of less than two hours per day. OFF time refers to when PD motor and/or non-motor symptoms occur between medication doses. We also submitted a proposed protocol for the treatment of moderate AD to the FDA, and after receiving permission to proceed, we initiated a Phase 2/3 study in mild to moderate AD patients in February 2023 (our "Phase 2/3 AD Study"). In the Phase 2/3 AD Study, mild to moderate AD patients were defined as those with a MMSE score between 14 and 24. At the completion of the ADCS Trial, the data showed that buntanetap is a translational inhibitor in humans just like in animals, and we further observed that there was statistical improvement in cognition in early AD patients, just like in the AD/PD Trials.

Our Phase 3 PD Study and Phase 2/3 AD Study each have built in interim analyses. Our Phase 3 PD Study incorporated an interim analysis at two months, the results of which were disclosed on March 31, 2023. The pre-planned interim analysis was conducted by our data analytics provider based on 132 patients from all cohorts collectively for which baseline and two-month data was available. As the interim analysis was conducted at two months of the six-month endpoint and only on 132 patients, it may not be indicative of the results at six months for the full patient population because as the trial progresses, clinical outcomes may materially change as patient enrollment continues. Based on the results of the interim analysis, we proceeded with the Phase 3 PD Study as planned in accordance with the previously established protocol. The data safety monitoring board (DSMB) also conducted an interim safety analysis and reported that buntanetap was generally well-tolerated and the study should proceed as planned. We remain blinded to the Phase 3 PD Study and we do not have safety or efficacy data from the trial.

The pre-planned interim analysis for AD was based on 107 patients having completed six weeks of treatment. Based on the results of the interim analysis, which we disclosed on October 12, 2023, we are proceeding with the Phase 2/3 AD study as planned without the need to add additional patients. The data safety monitoring board (DSMB) also conducted an interim safety analysis and reported that buntanetap was generally well-tolerated and the study should proceed as planned.

We plan to consult with the FDA following completion of both studies, to obtain feedback on our additional AD and PD studies, including conducting an open label extension study following the completion of the initial trials. Using the data from the Phase 3 PD Study, we intend to design an 18-month long disease-modifying Phase 3 study in the same early PD patients. In addition, we intend to conduct a short 6-month study in advanced PD patients during the second half of the 18-month disease modifying Phase 3 study, at which time we will define the advanced PD patient population for the purposes of such study. Similarly, using the data from the Phase 2/3 AD Study interim analysis, we intend to design an 18-month disease modifying Phase 3 study in the same early AD patient population. In addition, we intend to conduct a short 6-month study in advanced AD patients during the second half of the 18-month disease modifying Phase 3 study, at which time we will define the advanced AD patient population for the purposes of such study. We intend to announce the final data analyses from our Phase 3 PD Study and Phase 2/3 AD Study during the first half of 2024.

By the end of 2026, our goal is to have conducted the required pivotal studies for buntanetap to be able to file two new drug applications (“NDAs”) with the FDA.

We believe that we are the only company developing a drug for AD and PD that is designed to inhibit more than one neurotoxic protein, and has a mechanism of action designed to restore nerve cell axonal and synaptic activity. By improving brain function, our goal is to treat memory loss and dementia associated with AD as well as body and brain function associated with PD. Based on pre-clinical and clinical data collected to date, we believe that buntanetap has the potential to be the first drug to interfere with the underlying mechanism of neurodegeneration, potentially enabling buntanetap to be the only drug to improve cognition in AD and motor function in PD. The industry has encountered challenges in specifically targeting one neurotoxic protein, be it APP, tau or α SYN, indicating that doing so does not change the course of neurodegeneration. Our goal is to develop a disease modifying drug (“DMD”) for patients with neurodegeneration by leveraging our clinical and pre-clinical data to inhibit the three most relevant neurotoxic proteins. Studies have found that AD and PD are the most common neurodegenerative diseases in the U.S., and accordingly these diseases present two unmet needs of the aging population and two potentially large U.S. markets if a DMD is developed and approved.

We have never been profitable and have incurred net losses since inception. Our accumulated deficit at September 30, 2023 was \$88,045,693. We expect to incur losses for the foreseeable future, and we expect these losses to increase as we continue our development of, and seek regulatory approvals for, our product candidates. Because of the numerous risks and uncertainties associated with product development, we are unable to predict the timing or amount of increased expenses or when, or if, we will be able to achieve or maintain profitability.

Corporate Information

We were incorporated under the laws of the State of Delaware in 2008. Our principal executive offices are located at 101 Lindenwood Drive, Suite 225, Malvern, PA 19355 . Our telephone number is 484-875-3192. Our website address is www.annovisbio.com. The information contained in, or accessible through, our website does not constitute a part of this prospectus.

RISK FACTORS

Investing in any securities offered pursuant to this prospectus and the applicable prospectus supplement involves risk. The prospectus supplement applicable to each offering of our securities will contain a discussion of the risks applicable to an investment in any such securities. Prior to making a decision about investing in any securities offered, you should carefully consider the specific factors discussed under the heading “Risk Factors” in the applicable prospectus supplement, together with all of the other information contained or incorporated by reference in the prospectus supplement or appearing or incorporated by reference in this prospectus. You should also consider the risks, uncertainties and assumptions discussed under the heading “Risk Factors” in our most recent Annual Report on Form 10-K and any subsequent Quarterly Reports on Form 10-Q and other documents that we file with the SEC, which are incorporated herein by reference as described in this prospectus under the heading “Where You Can Find Additional Information”. The risks and uncertainties we have described in such documents are not the only risks that we face. Additional risks and uncertainties not presently known to us may also affect our operations.

USE OF PROCEEDS

Except as otherwise provided in the applicable prospectus supplement relating to a specific offering, we intend to use the net proceeds from the sale of securities by us under this prospectus and any applicable prospectus supplement for general corporate purposes, which may include working capital, capital expenditures, research and development expenditures, clinical trial expenditures, acquisitions of new technologies, products or businesses, and investments.

GENERAL DESCRIPTION OF OUR SECURITIES

We may offer and sell, at any time and from time to time:

- shares of our common stock;
- shares of our preferred stock;
- various series of debt securities;
- warrants to purchase common shares;
- units consisting of a combination of the foregoing securities; or
- any combination of these securities.

This prospectus contains summary descriptions of the common stock, preferred stock, debt securities, warrants, and units that we may offer and sell from time to time. When particular securities are offered by us, a supplement to this prospectus will describe the terms of the securities and the extent to which these general descriptions may apply. These summary descriptions and any summary descriptions in the applicable prospectus supplement are not complete descriptions of the terms and conditions of each security and are qualified in their entirety by reference to our amended and restated certificate of incorporation and our amended and restated bylaws which are incorporated by reference in the registration statement of which this prospectus is a part. Please refer to “Where You Can Find Additional Information” below for directions on obtaining these documents. If any particular terms of a security described in the applicable prospectus supplement differ from any of the terms described in this prospectus, then the terms described in this prospectus will be deemed superseded by the terms set forth in that prospectus supplement.

DESCRIPTION OF OUR CAPITAL STOCK

Authorized and Outstanding Shares

Our authorized share capital consists of 72,000,000 shares of capital stock, each with a par value of \$0.0001 per share. Of these shares, 70,000,000 shall be common stock and 2,000,000 shall be preferred stock. As of January 30, 2024, there were 10,579,933 shares of common stock outstanding and no shares of preferred stock outstanding.

Common Stock

Voting

The holders of our common stock are entitled to one vote for each share of common stock held on all matters submitted to a vote of stockholders. There is no cumulative voting. An election of directors by our stockholders shall be determined by a plurality of the votes cast by stockholders entitled to vote in the election. Subject to the supermajority votes for some matters, other matters shall be decided by the affirmative vote of our stockholders having a majority in voting power of the votes cast by the stockholders present or represented and voting on such matter.

Dividends

Subject to the rights of holders of all classes of our stock outstanding having rights that are senior to or equivalent to holders of common stock, the holders of the common stock are entitled to receive proportionately any dividends when and as declared by our board of directors.

Liquidation

In the event of our liquidation, dissolution or winding up, the holders of common stock are entitled to receive on a pro rata basis our net assets available for distribution to stockholders after the payment of all debts and other liabilities, subject to the rights of holders of all classes of our stock outstanding having rights that are senior to or equivalent to holders of common stock.

Other

Holders of common stock have no preemptive, subscription, redemption or conversion rights.

All of our outstanding shares of common stock are fully paid and nonassessable, and any shares of common stock to be issued upon an offering pursuant to this prospectus and the related prospectus supplement will be fully paid and nonassessable upon issuance.

Preferred Stock

Under the terms of our amended and restated certificate of incorporation, our board of directors is authorized to direct us to issue shares of preferred stock in one or more series without stockholder approval. Our board of directors has the discretion to determine the rights, preferences, privileges and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences, of each series of preferred stock.

We will fix the designations, powers, preferences and rights of the preferred stock of each series, as well as the qualifications, limitations or restrictions thereon, in the certificate of designation relating to that series. The applicable prospectus supplement will contain the terms of and other information relating to the preferred stock which will include, as applicable:

- the title and stated value;
- the number of shares we are offering;
- the liquidation preference per share;

- the purchase price; the dividend rate, period and payment date and method of calculation for dividends;
- whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate;
- the procedures for any auction and remarketing, if any;
- the provisions for a sinking fund, if any;
- the provisions for redemption or repurchase, if applicable, and any restrictions on our ability to exercise those redemption and repurchase rights;
- any listing of the preferred stock on any securities exchange or market;
- whether the preferred stock will be convertible into our common stock, and, if applicable, the conversion price, or how it will be calculated, and the conversion period;
- voting rights, if any, of the preferred stock;
- preemptive rights, if any;
- restrictions on transfer, sale or other assignment, if any;
- whether interests in the preferred stock will be represented by depositary shares;
- a discussion of any material United States federal income tax considerations applicable to the preferred stock;
- the relative ranking and preferences of the preferred stock as to dividend rights and rights if we liquidate, dissolve or wind up our affairs;
- any limitations on the issuance of any class or series of preferred stock ranking senior to or on a parity with the series of preferred stock as to dividend rights and rights if we liquidate, dissolve or wind up our affairs; and
- any other specific terms, preferences, rights or limitations of, or restrictions on, the preferred stock.

Our board of directors may authorize the issuance of preferred stock with voting, conversion or other rights that could adversely affect the voting power or other rights of the holders of our common stock. Preferred stock could be issued quickly with terms designed to delay or prevent a change in control of our company or make removal of management more difficult. Additionally, the issuance of preferred stock may have the effect of decreasing the market price of our common stock.

Anti-Takeover Effects of Delaware Law and Our Certificate of Incorporation and Bylaws

Some provisions of Delaware law, our amended and restated certificate of incorporation and our amended and restated bylaws could make the following transactions more difficult: an acquisition of us by means of a tender offer; an acquisition of us by means of a proxy contest or otherwise; or the removal of our incumbent officers and directors. It is possible that these provisions could make it more difficult to accomplish or could deter transactions that stockholders may otherwise consider to be in their best interest or in our best interests, including transactions which provide for payment of a premium over the market price for our shares.

These provisions, summarized below, are intended to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with our board of directors. We believe that the benefits of the increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us outweigh the disadvantages of discouraging these proposals because negotiation of these proposals could result in an improvement of their terms.

Authorized but Unissued Shares

Our authorized but unissued shares of common stock and preferred stock are available for future issuance without stockholder approval. These additional shares may be utilized for a variety of corporate

purposes, including future public offerings to raise additional capital and corporate acquisitions. The existence of authorized but unissued shares of common stock and preferred stock could render more difficult or discourage an attempt to obtain control of a majority of our common stock by means of a proxy contest, tender offer, merger or otherwise.

Stockholder Meetings

Any action to be taken by our stockholders must be effected at a duly called annual or special meeting of stockholders and not be taken by written consent.

Requirements for Advance Notification of Stockholder Nominations and Proposals

Stockholders seeking to present proposals before a meeting of stockholders or to nominate candidates for election as directors at a meeting of stockholders must provide advance notice in writing, and also specify requirements as to the form and content of a stockholder's notice.

Delaware Anti-Takeover Statute

We are subject to Section 203 of the General Corporation Law of the State of Delaware, which prohibits persons deemed to be "interested stockholders" from engaging in a "business combination" with a publicly held Delaware corporation for three years following the date these persons become interested stockholders unless the business combination is, or the transaction in which the person became an interested stockholder was, approved in a prescribed manner or another prescribed exception applies. Generally, an "interested stockholder" is a person who, together with affiliates and associates, owns, or within three years prior to the determination of interested stockholder status did own, 15% or more of a corporation's voting stock. Generally, a "business combination" includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. The existence of this provision may have an anti-takeover effect with respect to transactions not approved in advance by the board of directors.

Choice of Forum

The Court of Chancery of the State of Delaware is the exclusive forum in which we and our directors may be sued by our stockholders, to the fullest extent permitted by law, for:

- any derivative action or proceeding brought on our behalf;
- any action asserting a breach of fiduciary duty;
- any action asserting a claim against us arising pursuant to the Delaware General Corporation Law, our amended and restated certificate of incorporation, or our amended and restated bylaws; or
- or any action asserting a claim against us that is governed by the internal affairs doctrine.

Our amended and restated bylaws will not apply to suits brought to enforce a duty or liability created by the Securities Act or the Exchange Act, or any other claim for which federal courts have exclusive jurisdiction.

These choice of forum provisions may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or any of our directors, officers, or other employees, which may discourage lawsuits with respect to such claims. Alternatively, if a court were to find either choice of forum provision contained in our amended and restated bylaws to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could harm our business, results of operations, and financial condition.

Advance Notice Requirements

Our bylaws establish an advance notice procedure for stockholder proposals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to the board of directors. Stockholders at an annual meeting will only be able to consider proposals or nominations specified in the notice of meeting or brought before the meeting by or at the direction of the board of

directors or by a stockholder who was a stockholder of record on the record date for the meeting, who is entitled to vote at the meeting and who has given our Secretary timely written notice, in proper form, of the stockholder's intention to bring that business before the meeting. Although our bylaws do not give the board of directors the power to approve or disapprove stockholder nominations of candidates or proposals regarding other business to be conducted at a special or annual meeting, our 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 us.

Stock Listing

Our common stock is listed on the NYSE under the symbol "ANVS."

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Equiniti Trust Company LLC.

DESCRIPTION OF DEBT SECURITIES

We may issue debt securities from time to time, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt. While the terms we have summarized below will apply generally to any debt securities that we may offer under this prospectus, we will describe the particular terms of any debt securities that we may offer in more detail in the applicable prospectus supplement. The terms of any debt securities offered under a prospectus supplement may differ from the terms described below. Unless the context requires otherwise, whenever we refer to the indenture, we also are referring to any supplemental indentures that specify the terms of a particular series of debt securities.

We will issue the debt securities under the indenture that we will enter into with the trustee who will be named in the indenture. The indenture will be qualified under the Trust Indenture Act of 1939, as amended (the “Trust Indenture Act”). We have filed the form of indenture as an exhibit to the registration statement of which this prospectus is a part, and supplemental indentures and forms of debt securities containing the terms of the debt securities being offered will be filed as exhibits to the registration statement of which this prospectus is a part or will be incorporated by reference from reports that we file with the SEC.

The following summary of material provisions of the debt securities and the indenture is subject to, and qualified in its entirety by reference to, all of the provisions of the indenture applicable to a particular series of debt securities. We urge you to read the applicable prospectus supplement and any related free writing prospectus related to the debt securities that we may offer under this prospectus, as well as the complete indenture that contains the terms of the debt securities.

General

The indenture will not limit the amount of debt securities that we may issue. It provides that we may issue debt securities up to the principal amount that we may authorize and may be in any currency or currency unit that we may designate. Except for the limitations on consolidation, merger and sale of all or substantially all of our assets contained in the indenture, the terms of the indenture do not contain any covenants or other provisions designed to give holders of any debt securities protection against changes in our operations, financial condition or transactions involving us.

We may issue the debt securities issued under the indenture as “discount securities,” which means they may be sold at a discount below their stated principal amount. These debt securities, as well as other debt securities that are not issued at a discount, may be issued with “original issue discount,” or OID, for U.S. federal income tax purposes because of interest payment and other characteristics or terms of the debt securities. Material U.S. federal income tax considerations applicable to debt securities issued with OID will be described in more detail in any applicable prospectus supplement.

We will describe in the applicable prospectus supplement the terms of the series of debt securities being offered, including:

- the title of the series of debt securities;
- any limit upon the aggregate principal amount that may be issued;
- the maturity date or dates;
- the form of the debt securities of the series;
- the applicability of any guarantees;
- whether or not the debt securities will be secured or unsecured, and the terms of any secured debt;
- whether the debt securities rank as senior debt, senior subordinated debt, subordinated debt or any combination thereof, and the terms of any subordination;
- if the price (expressed as a percentage of the aggregate principal amount thereof) at which such debt securities will be issued is a price other than the principal amount thereof, the portion of the principal amount thereof payable upon declaration of acceleration of the maturity thereof, or if applicable, the portion of the principal amount of such debt securities that is convertible into another security or the method by which any such portion shall be determined;

- the interest rate or rates, which may be fixed or variable, or the method for determining the rate and the date interest will begin to accrue, the dates interest will be payable and the regular record dates for interest payment dates or the method for determining such dates;
- our right, if any, to defer payment of interest and the maximum length of any such deferral period;
- if applicable, the date or dates after which, or the period or periods during which, and the price or prices at which, we may, at our option, redeem the series of debt securities pursuant to any optional or provisional redemption provisions and the terms of those redemption provisions;
- the date or dates, if any, on which, and the price or prices at which we are obligated, pursuant to any mandatory sinking fund or analogous fund provisions or otherwise, to redeem, or at the holder's option to purchase, the series of debt securities and the currency or currency unit in which the debt securities are payable;
- the denominations in which we will issue the series of debt securities, if other than denominations of \$1,000 and any integral multiple thereof;
- any and all terms, if applicable, relating to any auction or remarketing of the debt securities of that series and any security for our obligations with respect to such debt securities and any other terms which may be advisable in connection with the marketing of debt securities of that series;
- any and all terms, if applicable, relating to any auction or remarketing of the debt securities of that series and any security for our obligations with respect to such debt securities and any other terms which may be advisable in connection with the marketing of debt securities of that series;
- any and all terms, if applicable, relating to any auction or remarketing of the debt securities of that series and any security for our obligations with respect to such debt securities and any other terms which may be advisable in connection with the marketing of debt securities of that series;
- whether the debt securities of the series shall be issued in whole or in part in the form of a global security or securities; the terms and conditions, if any, upon which such global security or securities may be exchanged in whole or in part for other individual securities; and the depository for such global security or securities;
- if applicable, the provisions relating to conversion or exchange of any debt securities of the series and the terms and conditions upon which such debt securities will be so convertible or exchangeable, including the conversion or exchange price, as applicable, or how it will be calculated and may be adjusted, any mandatory or optional (at our option or the holders' option) conversion or exchange features, the applicable conversion or exchange period and the manner of settlement for any conversion or exchange;
- if other than the full principal amount thereof, the portion of the principal amount of debt securities of the series which shall be payable upon declaration of acceleration of the maturity thereof;
- additions to or changes in the covenants applicable to the particular debt securities being issued, including, among others, the consolidation, merger or sale covenant;
- additions to or changes in the events of default with respect to the securities and any change in the right of the trustee or the holders to declare the principal, premium, if any, and interest, if any, with respect to such securities to be due and payable;
- additions to or changes in or deletions of the provisions relating to covenant defeasance and legal defeasance;
- additions to or changes in the provisions relating to satisfaction and discharge of the indenture;
- additions to or changes in the provisions relating to the modification of the indenture both with and without the consent of holders of debt securities issued under the indenture;
- the currency of payment of debt securities if other than U.S. dollars and the manner of determining the equivalent amount in U.S. dollars;
- whether interest will be payable in cash or additional debt securities at our or the holders' option and the terms and conditions upon which the election may be made;

- the terms and conditions, if any, upon which we will pay amounts in addition to the stated interest, premium, if any and principal amounts of the debt securities of the series to any holder that is not a “United States person” for federal tax purposes;
- any restrictions on transfer, sale or assignment of the debt securities of the series; and
- any other specific terms, preferences, rights or limitations of, or restrictions on, the debt securities, any other additions or changes in the provisions of the indenture, and any terms that may be required by us or advisable under applicable laws or regulations.

Conversion or Exchange Rights

We will set forth in the applicable prospectus supplement the terms on which a series of debt securities may be convertible into or exchangeable for our common stock or our other securities. We will include provisions as to settlement upon conversion or exchange and whether conversion or exchange is mandatory, at the option of the holder or at our option. We may include provisions pursuant to which the number of shares of our common stock or our other securities that the holders of the series of debt securities receive would be subject to adjustment.

Consolidation, Merger or Sale

Unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, the indenture will not contain any covenant that restricts our ability to merge or consolidate, or sell, convey, transfer or otherwise dispose of our assets as an entirety or substantially as an entirety. However, any successor to or acquirer of such assets (other than a subsidiary of ours) must assume all of our obligations under the indenture or the debt securities, as appropriate.

Events of Default under the Indenture

Unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, the following are events of default under the indenture with respect to any series of debt securities that we may issue:

- if we fail to pay any installment of interest on any series of debt securities, as and when the same shall become due and payable, and such default continues for a period of 90 days; provided, however, that a valid extension of an interest payment period by us in accordance with the terms of any indenture supplemental thereto shall not constitute a default in the payment of interest for this purpose;
- if we fail to pay the principal of, or premium, if any, on any series of debt securities as and when the same shall become due and payable whether at maturity, upon redemption, by declaration or otherwise, or in any payment required by any sinking or analogous fund established with respect to such series; provided, however, that a valid extension of the maturity of such debt securities in accordance with the terms of any indenture supplemental thereto shall not constitute a default in the payment of principal or premium, if any;
- if we fail to observe or perform any other covenant or agreement contained in the debt securities or the indenture, other than a covenant specifically relating to another series of debt securities, and our failure continues for 90 days after we receive written notice of such failure, requiring the same to be remedied and stating that such is a notice of default thereunder, from the trustee or holders of at least 25% in aggregate principal amount of the outstanding debt securities of the applicable series; and
- if specified events of bankruptcy, insolvency or reorganization occur.

If an event of default with respect to debt securities of any series occurs and is continuing, other than an event of default specified in the last bullet point above, the trustee or the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series, by notice to us in writing, and to the trustee if notice is given by such holders, may declare the unpaid principal of, premium, if any, and accrued interest, if any, due and payable immediately. If an event of default specified in the last bullet

point above occurs with respect to us, the principal amount of and accrued interest, if any, of each issue of debt securities then outstanding shall be due and payable without any notice or other action on the part of the trustee or any holder.

The holders of a majority in principal amount of the outstanding debt securities of an affected series may waive any default or event of default with respect to the series and its consequences, except defaults or events of default regarding payment of principal, premium, if any, or interest, unless we have cured the default or event of default in accordance with the indenture. Any waiver shall cure the default or event of default.

Subject to the terms of the indenture, if an event of default under an indenture shall occur and be continuing, the trustee will be under no obligation to exercise any of its rights or powers under such indenture at the request or direction of any of the holders of the applicable series of debt securities, unless such holders have offered the trustee reasonable indemnity. The holders of a majority in principal amount of the outstanding debt securities of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the trustee, or exercising any trust or power conferred on the trustee, with respect to the debt securities of that series, provided that:

- the direction so given by the holder is not in conflict with any law or the applicable indenture; and
- subject to its duties under the Trust Indenture Act, the trustee need not take any action that might involve it in personal liability or might be unduly prejudicial to the holders not involved in the proceeding.

A holder of the debt securities of any series will have the right to institute a proceeding under the indenture or to appoint a receiver or trustee, or to seek other remedies only if:

- the holder has given written notice to the trustee of a continuing event of default with respect to that series;
- the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series have made written request,
- such holders have offered to the trustee indemnity satisfactory to it against the costs, expenses and liabilities to be incurred by the trustee in compliance with the request; and
- the trustee does not institute the proceeding, and does not receive from the holders of a majority in aggregate principal amount of the outstanding debt securities of that series other conflicting directions within 90 days after the notice, request and offer.

These limitations do not apply to a suit instituted by a holder of debt securities if we default in the payment of the principal, premium, if any, or interest on, the debt securities.

We will periodically file statements with the trustee regarding our compliance with specified covenants in the indenture.

Modification of Indenture; Waiver

We and the trustee may change an indenture without the consent of any holders with respect to specific matters:

- to cure any ambiguity, defect or inconsistency in the indenture or in the debt securities of any series;
- to comply with the provisions described above under “Description of Debt Securities — Consolidation, Merger or Sale;”
- to provide for uncertificated debt securities in addition to or in place of certificated debt securities;
- to add to our covenants, restrictions, conditions or provisions such new covenants, restrictions, conditions or provisions for the benefit of the holders of all or any series of debt securities, to make the occurrence, or the occurrence and the continuance, of a default in any such additional covenants, restrictions, conditions or provisions an event of default or to surrender any right or power conferred upon us in the indenture;

- to add to, delete from or revise the conditions, limitations, and restrictions on the authorized amount, terms, or purposes of issue, authentication and delivery of debt securities, as set forth in the indenture;
- to make any change that does not adversely affect the interests of any holder of debt securities of any series in any material respect;
- to provide for the issuance of and establish the form and terms and conditions of the debt securities of any series as provided above under “Description of Debt Securities — General” to establish the form of any certifications required to be furnished pursuant to the terms of the indenture or any series of debt securities, or to add to the rights of the holders of any series of debt securities;
- to evidence and provide for the acceptance of appointment under any indenture by a successor trustee; or
- to comply with any requirements of the SEC in connection with the qualification of any indenture under the Trust Indenture Act.

In addition, under the indenture, the rights of holders of a series of debt securities may be changed by us and the trustee with the written consent of the holders of at least a majority in aggregate principal amount of the outstanding debt securities of each series that is affected. However, unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, we and the trustee may make the following changes only with the consent of each holder of any outstanding debt securities affected:

- extending the fixed maturity of any debt securities of any series;
- reducing the principal amount, reducing the rate of or extending the time of payment of interest, or reducing any premium payable upon the redemption of any series of any debt securities; or
- reducing the percentage of debt securities, the holders of which are required to consent to any amendment, supplement, modification or waiver.

Discharge

The indenture provides that we can elect to be discharged from our obligations with respect to one or more series of debt securities, except for specified obligations, including obligations to:

- provide for payment;
- register the transfer or exchange of debt securities of the series;
- replace stolen, lost or mutilated debt securities of the series;
- pay principal of and premium and interest on any debt securities of the series;
- maintain paying agencies
- hold monies for payment in trust;
- recover excess money held by the trustee;
- compensate and indemnify the trustee; and
- appoint any successor trustee.

In order to exercise our rights to be discharged, we must deposit with the trustee money or government obligations sufficient to pay all the principal of, any premium, if any, and interest on, the debt securities of the series on the dates payments are due.

Form, Exchange and Transfer

We will issue the debt securities of each series only in fully registered form without coupons and, unless we provide otherwise in the applicable prospectus supplement, in denominations of \$1,000 and any integral multiple thereof. The indenture provides that we may issue debt securities of a series in temporary or permanent global form and as book-entry securities that will be deposited with, or on behalf of, The

Depository Trust Company, or DTC, or another depository named by us and identified in the applicable prospectus supplement with respect to that series. To the extent the debt securities of a series are issued in global form and as book-entry, a description of terms relating such securities will be set forth in the applicable prospectus supplement.

At the option of the holder, subject to the terms of the indenture and the limitations applicable to global securities described in the applicable prospectus supplement, the holder of the debt securities of any series can exchange the debt securities for other debt securities of the same series, in any authorized denomination and of like tenor and aggregate principal amount.

Subject to the terms of the indenture and the limitations applicable to global securities set forth in the applicable prospectus supplement, holders of the debt securities may present the debt securities for exchange or for registration of transfer, duly endorsed or with the form of transfer endorsed thereon duly executed if so required by us or the security registrar, at the office of the security registrar or at the office of any transfer agent designated by us for this purpose. Unless otherwise provided in the debt securities that the holder presents for transfer or exchange, we will impose no service charge for any registration of transfer or exchange, but we may require payment of any taxes or other governmental charges.

We will name in the applicable prospectus supplement the security registrar, and any transfer agent in addition to the security registrar, that we initially designate for any debt securities. We may at any time designate additional transfer agents or rescind the designation of any transfer agent or approve a change in the office through which any transfer agent acts, except that we will be required to maintain a transfer agent in each place of payment for the debt securities of each series.

If we elect to redeem the debt securities of any series, we will not be required to:

- issue, register the transfer of, or exchange any debt securities of that series during a period beginning at the opening of business 15 days before the day of mailing of a notice of redemption of any debt securities that may be selected for redemption and ending at the close of business on the day of the mailing; or
- register the transfer of or exchange any debt securities so selected for redemption, in whole or in part, except the unredeemed portion of any debt securities we are redeeming in part.

Information Concerning the Trustee

The trustee, other than during the occurrence and continuance of an event of default under an indenture, undertakes to perform only those duties as are specifically set forth in the applicable indenture. Upon an event of default under an indenture, the trustee must use the same degree of care as a prudent person would exercise or use in the conduct of his or her own affairs. Subject to this provision, the trustee is under no obligation to exercise any of the powers given it by the indenture at the request of any holder of debt securities unless it is offered reasonable security and indemnity against the costs, expenses and liabilities that it might incur.

Payment and Paying Agents

Unless we otherwise indicate in the applicable prospectus supplement, we will make payment of the interest on any debt securities on any interest payment date to the person in whose name the debt securities, or one or more predecessor securities, are registered at the close of business on the regular record date for the interest.

We will pay principal of and any premium and interest on the debt securities of a particular series at the office of the paying agents designated by us, except that unless we otherwise indicate in the applicable prospectus supplement, we will make interest payments by check that we will mail to the holder or by wire transfer to certain holders. Unless we otherwise indicate in the applicable prospectus supplement, we will designate the corporate trust office of the trustee as our sole paying agent for payments with respect to debt securities of each series. We will name in the applicable prospectus supplement any other paying agents that we initially designate for the debt securities of a particular series. We will maintain a paying agent in each place of payment for the debt securities of a particular series.

All money we pay to a paying agent or the trustee for the payment of the principal of or any premium or interest on any debt securities that remains unclaimed at the end of two years after such principal, premium or interest has become due and payable will be repaid to us, and the holder of the debt security thereafter may look only to us for payment thereof.

Governing Law

The indenture and the debt securities will be governed by and construed in accordance with the internal laws of the State of New York, except to the extent that the Trust Indenture Act is applicable.

DESCRIPTION OF OUR WARRANTS

We may issue warrants to purchase our common stock, preferred stock and/or debt securities in one or more series. We may issue warrants independently or together with common stock, preferred stock or debt securities, and the warrants may be attached to or separate from these securities.

The terms of each series of warrants will be contained in the applicable warrant agreements. The applicable prospectus supplement for the warrants will contain the terms of and other information relating to the warrants which will include, as applicable:

- the offering price and aggregate number of warrants offered;
- the currency in which the offering price, if any, and the exercise price are payable;
- the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security or each principal amount of such security;
- the date on and after which the warrants and the related securities will be separately transferable;
- in the case of warrants to purchase common stock or preferred stock, the exercise price and the number of shares of common stock or preferred stock, as applicable, to be received upon exercise of the warrants;
- in the case of warrants to purchase debt securities, the principal amount of debt securities purchasable upon exercise of one warrant and the price at, and currency in which, this principal amount of debt securities may be purchased upon such exercise;
- the date on which the right to exercise the warrants will begin and the date on which that right will expire or, if the warrants may not be continuously exercised throughout that period, the specific date or dates on which the warrants may be exercised;
- a discussion of any material United States federal income tax considerations related to the holding or exercise of the warrants;
- the identity of the warrant agent for the warrants, if any, and of any other depositaries, execution or paying agents, transfer agents, registrars or other agents;
- any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants;
- the designation and terms of the securities issuable upon exercise of the warrants;
- the minimum or maximum amount of the warrants that may be exercised at any one time;
- the anti-dilution provisions of the warrants, if any;
- the rights to redeem or call the warrants, if any;
- the effect of any merger, consolidation, sale or other disposition of our business on the warrant agreement and the warrants; and
- any other specific terms, preferences, rights and limitations of or restrictions on the warrants.

Before the exercise of their warrants, holders of warrants will not have any of the rights of holders of the securities issuable upon exercise. Holders of warrants to purchase common stock or preferred stock will not be entitled to vote, consent, receive dividends, receive notice as stockholders with respect to any meeting of stockholders for the election of our directors, receive payments upon our liquidation, dissolution or winding up, or to exercise any rights whatsoever as our stockholders. In the case of warrants to purchase debt securities, holders of warrants will not have the right to receive payments of principal of, or premium, if any, or interest on, the debt securities purchasable upon exercise or to enforce covenants in the applicable indenture.

Transfer Agent and Registrar

The transfer agent and registrar for any warrants will be set forth in the applicable prospectus supplement.

DESCRIPTION OF OUR UNITS

The following description, together with the additional information we include in any applicable prospectus supplement, summarizes the material terms and provisions of the units that we may offer under this prospectus. Units may be offered independently or together with common stock, preferred stock or warrants offered by any prospectus supplement, and may be attached to or separate from those securities. While the terms we have summarized below will generally apply to any future units that we may offer under this prospectus, we will describe the particular terms of any series of units that we may offer in more detail in the applicable prospectus supplement. The terms of any units offered under an applicable prospectus supplement may differ from the terms described below.

We will incorporate by reference into the registration statement of which this prospectus forms a part the form of unit agreement, including a form of unit certificate, if any, that describes the terms of the series of units we are offering before the issuance of the related series of units. The following summaries of material provisions of the units, and the unit agreements, are subject to, and qualified in their entirety by reference to, all the provisions of the unit agreement applicable to a particular series of units. We urge you to read the applicable prospectus supplements related to the units that we sell under this prospectus, as well as the complete unit agreements that contain the terms of the units.

We may issue units comprised of one or more of the securities described in this prospectus in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement, if any, under which a unit is issued may provide that the securities comprising the unit may not be held or transferred separately, at any time or at any time before a specified date.

The particular terms and provisions of units offered by an applicable prospectus supplement, and the extent to which the general terms and provisions described below may apply thereto, will be described in the applicable prospectus supplement filed in respect of such units. This description will include, where applicable:

- the designation and aggregate number of units offered;
- the price at which the units will be offered;
- the rights and obligations of the unit agent, if any;
- the currency or currencies in which the units are denominated;
- any provisions of the governing unit agreement that differ from those described below;
- the terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;
- the number of securities that may be purchased upon exercise of each unit and the price at which the currency or currencies in which that amount of securities may be purchased upon exercise of each unit;
- any provisions for the issuance, payment, settlement, transfer, adjustment or exchange of the units or of the securities comprising the units; and
- any other material terms of the units.

We reserve the right to set forth in an applicable prospectus supplement specific terms of the units that are not within the options and parameters set forth in this prospectus. In addition, to the extent that any particular terms of the units described in an applicable prospectus supplement differ from any of the terms described in this prospectus, the description of such terms set forth in this prospectus shall be deemed to have been superseded by the description of the differing terms set forth in such prospectus supplement with respect to such units.

PLAN OF DISTRIBUTION

We may sell the securities, from time to time, to or through underwriters or dealers, through agents or remarketing firms, or directly to one or more purchasers pursuant to:

- underwritten public offerings;
- negotiated transactions;
- block trades;
- “At the Market Offerings,” within the meaning of Rule 415(a)(4) of the Securities Act of 1933, as amended, or the Securities Act, into an existing trading market, at prevailing market prices; or
- through a combination of these methods.

We may sell the securities to or through one or more underwriters or dealers (acting as principal or agent), through agents, or directly to one or more purchasers.

We may distribute securities from time to time in one or more transactions:

- at a fixed price or prices, which may be changed;
- at market prices prevailing at the time of sale;
- at prices related to such prevailing market prices; or
- at negotiated prices.

A prospectus supplement or supplements (and any related free writing prospectus that we may authorize to be provided to you) will describe the terms of the offering of the securities, including, to the extent applicable:

- the name or names of the underwriters, dealers or agents, if any;
- if the securities are to be offered through the selling efforts of brokers or dealers, the plan of distribution and the terms of any agreement, arrangement, or understanding entered into with broker(s) or dealer(s) prior to the effective date of the registration statement, and, if known, the identity of any broker(s) or dealer(s) who will participate in the offering and the amount to be offered through each;
- the purchase price of the securities or other consideration therefor, and the proceeds, if any, we will receive from the sale;
- if any of the securities being registered are to be offered otherwise than for cash, the general purposes of the distribution, the basis upon which the securities are to be offered, the amount of compensation and other expenses of distribution, and by whom they are to be borne;
- any delayed delivery arrangements;
- any over-allotment or other options under which underwriters may purchase additional securities from us;
- any agency fees or underwriting discounts and other items constituting agents’ or underwriters’ compensation;
- any public offering price;
- any discounts, commissions or concessions allowed or reallocated or paid to dealers;
- the identity and relationships of any finders, if applicable; and
- any securities exchange or market on which the securities may be listed.

In compliance with the guidelines of FINRA, the maximum compensation to the underwriters or dealers in connection with the sale by the Company of its securities pursuant to this prospectus and the accompanying supplement to this prospectus may not exceed 8% of the aggregate offering price of the securities as set forth on the cover page of any prospectus supplement.

Only underwriters named in the prospectus supplement will be underwriters of the securities offered by the prospectus supplement.

If underwriters are used in the sale, they will acquire the securities for their own account and may resell the securities from time to time in one or more transactions at a fixed public offering price or at varying prices determined at the time of sale. The obligations of the underwriters to purchase the securities will be subject to the conditions set forth in the applicable underwriting agreement. We may offer the securities to the public through underwriting syndicates represented by managing underwriters or by underwriters without a syndicate. Unless otherwise indicated in the prospectus supplement, subject to certain conditions, the underwriters will be obligated to purchase all of the securities offered by the prospectus supplement, other than securities covered by any underwriter's option. Any public offering price and any discounts or concessions allowed or reallocated or paid to dealers may change from time to time. We may use underwriters, dealers or agents with whom we have a material relationship. We will describe in the prospectus supplement, naming the underwriter, dealer or agent, the nature of any such relationship.

We may use a remarketing firm to offer the securities in connection with a remarketing arrangement upon their purchase. Remarketing firms will act as principals for their own account or as agents for us. These remarketing firms will offer or sell the securities pursuant to the terms of the securities. A prospectus supplement will identify any remarketing firm and the terms of its agreement, if any, with us and will describe the remarketing firm's compensation. Remarketing firms may be deemed to be underwriters in connection the securities they remarket.

If we offer and sell securities through a dealer, we or an underwriter will sell the securities to the dealer, as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale. The name of the dealer and the terms of the transaction will be set forth in the applicable prospectus supplement.

We may sell securities directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of securities and we will describe any commissions payable to the agent in the prospectus supplement. Unless the prospectus supplement states otherwise, the agent will act on a best-efforts basis for the period of its appointment.

Dealers and agents participating in the distribution of the securities may be deemed to be underwriters, and compensation received by them on resale of the securities may be deemed to be underwriting discounts. If such dealers or agents were deemed to be underwriters, they may be subject to statutory liabilities under the Securities Act.

We may sell securities directly to one or more purchasers without using underwriters or agents. Underwriters, dealers and agents that participate in the distribution of the securities may be underwriters as defined in the Securities Act, and any discounts or commissions they receive from us and any profit on their resale of the securities may be treated as underwriting discounts and commissions under the Securities Act.

We may authorize agents or underwriters to solicit offers by certain types of institutional investors to purchase securities from us at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. We will describe the conditions to these contracts and the commissions we must pay for solicitation of these contracts in the prospectus supplement.

We may provide agents, underwriters and dealers with indemnification against civil liabilities, including liabilities under the Securities Act, or contribution with respect to payments that the agents, underwriters or dealers may make with respect to these liabilities. Agents, underwriters and dealers, or their respective affiliates, may engage in transactions with, or perform services for, us in the ordinary course of business.

The securities we offer may be new issues of securities and may have no established trading market. The securities may or may not be listed on a securities exchange. Underwriters may make a market in these securities but will not be obligated to do so and may discontinue any market making at any time without notice. We can make no assurance as to the liquidity of, or the existence of trading markets for, any of the securities.

Any underwriter may engage in over-allotment, stabilizing transactions, short-covering transactions and penalty bids in accordance with Regulation M under the Securities Exchange Act of 1934, as amended, or the Exchange Act. Over-allotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum price. Syndicate-covering or other short-covering transactions involve purchases of the securities, either through exercise of the over-allotment option or in the open market after the distribution is completed, to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a stabilizing or covering transaction to cover short positions. Those activities may cause the price of the securities to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of the activities at any time.

Any underwriters that are qualified market makers on the NYSE may engage in passive market making transactions in the common stock on the NYSE in accordance with Regulation M under the Exchange Act, during the business day prior to the pricing of the offering, before the commencement of offers or sales of the common stock. Passive market makers must comply with applicable volume and price limitations and must be identified as passive market makers. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for such security; if all independent bids are lowered below the passive market maker's bid, however, the passive market maker's bid must then be lowered when certain purchase limits are exceeded. Passive market making may stabilize the market price of the securities at a level above that which might otherwise prevail in the open market and, if commenced, may be discontinued at any time.

LEGAL MATTERS

Unless otherwise specified in a prospectus supplement, certain legal matters relating to the securities will be passed upon for us by Loeb & Loeb LLP. As appropriate, legal counsel representing the underwriters, dealers or agents will be named in the accompanying prospectus supplement and may opine to certain legal matters.

EXPERTS

The financial statements of Annovis Bio, Inc. as of December 31, 2022 and 2021 and for the years then ended have been incorporated by reference herein in reliance upon the report (which report includes an explanatory paragraph about the existence of substantial doubt concerning our ability to continue as a going concern) of WithumSmith+Brown, PC, independent registered public accounting firm, incorporated by reference herein, upon the authority of said firm as experts in accounting and auditing.

WHERE YOU CAN FIND ADDITIONAL INFORMATION; INCORPORATION BY REFERENCE

Available Information

We file annual, quarterly and current reports, proxy statements and other information with the SEC. The SEC maintains an Internet website at <http://www.sec.gov> that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. Our reports on Forms 10-K, 10-Q and 8-K, and amendments to those reports, are also available for download, free of charge, as soon as reasonably practicable after these reports are filed with, or furnished to, the SEC, at our website at www.annovisbio.com. Information contained on or accessible through our website is not a part of this prospectus or any prospectus supplement, and the inclusion of our website address in this prospectus is an inactive textual reference only.

Incorporation by Reference

The SEC allows us to “incorporate by reference” into this prospectus the information in other documents that we file with it. This means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be a part of this prospectus, and information in documents that we file later with the SEC will automatically update and supersede information contained in documents filed earlier with the SEC or contained in this prospectus.

We incorporate by reference in this prospectus the documents listed below and any future filings that we may make with the SEC under Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act in this prospectus, between the date of this prospectus and the termination of the offering of the securities described in this prospectus. We are not, however, incorporating by reference any documents, information or portions thereof deemed to have been furnished and not filed, including any information that we disclose under Items 2.02 or 7.01 of any Current Report on Form 8-K or related exhibits furnished pursuant to Item 9.01 of Form 8-K.

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 fiscal year ended December 31, 2022 as filed with the SEC on March 31, 2023](#);
- our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2023, June 30, 2023 and September 30, 2023, filed with the SEC on [May 10, 2023](#), [August 14, 2023](#) and [November 8, 2023](#), respectively;
- our Current Reports on Form 8-K as filed with the SEC on [January 6, 2023](#), [February 13, 2023](#), [March 6, 2023](#), [March 31, 2023](#), [April 3, 2023](#), [April 4, 2023](#), [May 30, 2023](#), [June 16, 2023](#), [October 13, 2023](#), [October 30, 2023](#) and [November 1, 2023](#) (except information included pursuant to Items 2.02 or 7.01 and exhibits related to such items);

- the information specifically incorporated by reference into our [Annual Report on Form 10-K for the year ended December 31, 2022](#) from our [Definitive Proxy Statement filed with the SEC on April 28, 2023](#) (other than the portions thereof that are furnished and not filed); and
- [the description of our capital stock contained in our Registration Statement on Form 8-A filed with the SEC on November 17, 2021 and any amendments or supplements thereto.](#)

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: Annovis Bio, Inc., 101 Lindenwood Drive, Suite 225, Malvern, PA 19355. In addition, copies of any or all of the documents incorporated herein by reference may be accessed at our website at www.annovisbio.com. The information on such website is not incorporated by reference and is not a part of this prospectus.



ANNOVIS BIO, INC.

2,051,428 Shares of Common Stock

PROSPECTUS SUPPLEMENT

MAY 1, 2024
