

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

FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

LeonaBio, Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of incorporation or organization)

45-3368487
(I.R.S. Employer Identification Number)

18706 North Creek Parkway, Suite 104
Bothell, Washington 98011
(425) 620-8501
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Mark Litton, Ph.D.
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Approximate date of commencement of proposed sale to the public: From time to time after the effective date of the registration statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box: ☐

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box: ☒

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. ☐

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐
Non-accelerated filer ☒

Accelerated filer ☐
Smaller reporting company ☒
Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of Securities Act. ☐

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. The securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Subject to Completion, dated January 20, 2026

PROSPECTUS



LeonaBio, Inc.

58,464,567 Shares of Common Stock Offered by the Selling Stockholders

This prospectus relates to the disposition, from time to time, by the selling stockholders identified in this prospectus under the section titled “Selling Stockholders” of up to 58,464,567 shares of our common stock, including shares issuable upon the exercise of pre-funded warrants and warrants to purchase our common stock and/or pre-funded warrants.

The selling stockholders identified herein may from time to time offer or sell shares of our common stock. See the section titled “Plan of Distribution” for a description of how the selling stockholders may dispose of the shares covered by this prospectus. We do not know when or in what amount the selling stockholders may offer the shares for sale. To the extent that any selling stockholders resell any securities, the selling stockholders may be required to provide you with this prospectus and a prospectus supplement identifying and containing specific information about the selling stockholders and the amount and terms of the securities being offered. You should read this prospectus and any applicable prospectus supplement before you invest.

We will not receive any proceeds from the sale of our common stock by the selling stockholders. We will receive proceeds from the cash exercise of the pre-funded warrants which, if exercised for cash with respect to all of the 8,816,684 shares of common stock underlying such warrants at the exercise price per share of \$0.001, would result in gross proceeds to us of approximately \$8,816. We will also receive proceeds from the cash exercise of certain warrants eligible for cash exercise which, if exercised for cash with respect to all of the 23,031,494 shares of common stock underlying such warrants at the exercise price of \$6.35, would result in gross proceeds to us of approximately \$146,249,987. We have agreed to pay certain expenses related to the registration of the offer and sale of the shares of common stock pursuant to the registration statement of which this prospectus forms a part. The selling stockholders will bear all commissions and discounts, if any, attributable to the sale of the shares.

The securities may be sold directly to you, through agents or through underwriters and dealers. If agents, underwriters or dealers are used to sell the securities, we will name them and describe their compensation in a prospectus supplement. The price to the public of those securities will also be set forth in a prospectus supplement.

Our common stock is listed on The Nasdaq Capital Market under the symbol “LONA.” On January 16, 2026, the last reported closing sale price of our common stock on The Nasdaq Capital Market was \$6.10 per share.

Investing in our securities involves risks. Please carefully read the information under the headings “Risk Factors” of this prospectus and “Item 1A – Risk Factors” of our most recent report on Form 10-K or 10-Q that is incorporated by reference in this prospectus before you invest in our securities.

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

The date of this prospectus is _____, 2026.

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ABOUT THIS PROSPECTUS

This prospectus is 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, the selling stockholders may from time to time sell the securities described in this prospectus in one or more offerings.

This prospectus provides you with a general description of the securities that may be offered. We may provide one or more prospectus supplements that will contain specific information about the terms of an offering by the selling stockholders. A prospectus supplement may also add, update or change information contained in this prospectus. Before you invest in our securities, you should read both this prospectus and any applicable prospectus supplement together with the additional information described in the sections titled “Where You Can Find More Information” and “Incorporation by Reference.”

We have not authorized anyone to provide you with information that is different from that contained, or incorporated by reference, in this prospectus, any applicable prospectus supplement or in any related free writing prospectus. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus and any applicable prospectus supplement or any related free writing prospectus do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the securities described in the applicable prospectus supplement or an offer to sell or the solicitation of an offer to buy such securities in any circumstances in which such offer or solicitation is unlawful. You should assume that the information appearing in this prospectus, any prospectus supplement, the documents incorporated by reference and any related free writing prospectus is accurate only as of their respective dates. Our business, financial condition, results of operations and prospects may have changed materially since those dates.

For investors outside the United States, neither we nor the selling stockholders have done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons who come into possession of this prospectus and any free writing prospectus related to this offering in jurisdictions outside the United States are required to inform themselves about and to observe any restrictions as to this offering and the distribution of this prospectus and any such free writing prospectus applicable to that jurisdiction.

PROSPECTUS SUMMARY

This summary highlights selected information that is presented in greater detail elsewhere, or incorporated by reference, in this prospectus. It does not contain all of the information that may be important to you and your investment decision. Before investing in our securities, you should carefully read this entire prospectus, including the matters set forth in the section titled “Risk Factors” and the financial statements and related notes and other information that we incorporate by reference herein, including our Annual Report on Form 10-K and our Quarterly Reports on Form 10-Q. Unless the context indicates otherwise, references in this prospectus to “LeonaBio, Inc.,” “we,” “our” and “us” refer, collectively, to LeonaBio, Inc., a Delaware corporation, and its subsidiaries taken as a whole.

Company Overview

We are a clinical-stage biopharmaceutical company dedicated to the development of novel therapeutics for high unmet medical needs, including treatment-resistant metastatic breast cancer and amyotrophic lateral sclerosis (“ALS”), with the goal of improving patients’ lives. Our lead drug candidates, lasofoxifene and ATH-1105, are novel, small molecule therapies with the potential to address devastating diseases where current treatment options are limited or ineffective. With a strong commitment to scientific excellence and patient-centered innovation, we aim to advance meaningful new therapies that are designed to treat patients with treatment-resistant metastatic breast cancer and ALS. Our other product candidates include ATH-1020, fosgonimeton and new early compounds to address neurodegenerative diseases.

Corporate Information

We were incorporated in Washington as a corporation in March 2011 under the name M3 Biotechnology, Inc. In October 2015, we converted to a Delaware corporation and subsequently changed our name to “Athira Pharma, Inc.” In January 2026, we changed our name to “LeonaBio, Inc.” Our principal executive office is located at 18706 North Creek Parkway, Suite 104, Bothell Washington 98011. Our telephone number is (425) 620-8501. Our website is www.leonabio.com. Information contained in, or that can be accessed through, our website is not a part of, and is not incorporated into, this report, and the inclusion of our website address in this report is an inactive textual reference only.

The Securities That May Be Offered

The selling stockholders named in this prospectus may offer and sell up to 58,464,567 shares of our common stock, including shares issuable upon the exercise of pre-funded warrants and warrants to purchase our common stock and/or pre-funded warrants. Our common stock is listed on The Nasdaq Capital Market under the symbol “LONA.” We will not receive any proceeds from sales by the selling stockholders of any of the shares of common stock covered by this prospectus. We will receive proceeds from any cash exercise of pre-funded warrants or warrants to purchase the shares included in the shares that are being offered by the selling stockholders hereunder. See the section titled “Use of Proceeds.”

Throughout this prospectus, when we refer to the shares of our common stock, the offer and sale of which are being registered on behalf of the selling stockholders, we are referring to the shares of common stock that have been issued to or are issuable upon the exercise of pre-funded warrants or warrants to the stockholders listed in the section titled “Selling Stockholders,” pursuant to the applicable securities purchase agreement described below. When we refer to the selling stockholders in this prospectus, we are referring to the investors in our December 2025 private placement (the “PIPE Purchasers”) and, as applicable, any donees, pledgees, transferees or other successors-in-interest selling shares received after the date of this prospectus from the PIPE Purchasers as a gift, pledge or other non-sale related transfer.

December 2025 Private Placement

On December 18, 2025, we entered into a securities purchase agreement (the “PIPE SPA”) for a private placement with the PIPE Purchasers, one of which is affiliated with a member of our board of directors. Pursuant to such agreement, the PIPE Purchasers received an aggregate of (1) 5,356,547 shares of our common stock (the “PIPE Initial Shares”), (2) pre-funded warrants to purchase 8,816,684 shares of our common stock (the “PIPE Pre-Funded Warrants”), (3) warrants to purchase 23,031,494 shares of our common stock and/or pre-funded warrants (the “PIPE Series A Common Warrants”) and (4) warrants to purchase 21,259,842 shares of our common stock and/or pre-funded warrants (the “PIPE Series B Common Warrants”) and, together with the PIPE Pre-Funded Warrants and the PIPE Series A Common Warrants, the “PIPE Warrants”). The purchase price for each PIPE Initial Share was \$6.350 and the purchase price for each PIPE Pre-Funded Warrant was \$6.349, for an aggregate purchase price of approximately \$90 million. The closing of the purchase and sale of the PIPE Initial Shares and the PIPE Warrants occurred on December 23, 2025.

The PIPE Pre-Funded Warrants are immediately exercisable at an exercise price of \$0.001 per share, subject to adjustments as provided therein and the restrictions discussed below. The PIPE Series A Common Warrants are exercisable at an exercise price of \$6.35 per share, subject to adjustments as provided therein and the restrictions discussed below, after the earlier of (1) the latest of (a) June 30, 2026, (b) the date on which the Company publicly announces, by means of a widely disseminated press release or a Current Report on Form 8-K, the enrollment of the 500th subject or the last subject, whichever is earlier, in the ELAINE-3 Trial; provided that the total enrollment will be no less than 500 subjects unless the study's Data Safety Monitoring Board recommends stopping enrollment at an earlier time or unless the FDA permits a different number for subject enrollment in a protocol amendment and (c) the date on which the FDA approves or issues a complete response letter to Eli Lilly & Co.'s marketing application, including a supplement to a new drug application, for imlunestrant in combination with abemaciclib in breast cancer, and (2) October 31, 2026 (the "PIPE Series A Common Warrant Initial Exercise Date" and such exercise limitation, the "PIPE Series A Common Warrant Exercise Limitation"). The PIPE Series A Common Warrants will remain exercisable until the 30th day following the PIPE Series A Common Warrant Initial Exercise Date (the "PIPE Series A Common Warrant Termination Date"), except that if the PIPE Series A Common Warrant Initial Exercise Date has not occurred by December 23, 2030, then December 23, 2030 will be the PIPE Series A Common Warrant Termination Date. The PIPE Series B Common Warrants are exercisable at an exercise price of \$7.62 per share payable on a cashless net exercise basis, subject to adjustments as provided therein and the restrictions discussed below, after the later of (1) June 30, 2026 and (2) the date of the completion of the public readout of topline results of the ELAINE-3 Trial (the later of (1) and (2), the "PIPE Series B Common Warrant Initial Exercise Date" and such exercise limitation, the "PIPE Series B Common Warrant Exercise Limitation"). The PIPE Series B Common Warrants will remain exercisable until the 30th day following the PIPE Series B Common Warrant Initial Exercise Date (the "PIPE Series B Common Warrant Termination Date"), except that if the PIPE Series B Common Warrant Initial Exercise Date has not occurred by December 23, 2030, then December 23, 2030 will be the PIPE Series B Common Warrant Termination Date.

None of the PIPE Pre-Funded Warrants, the PIPE Series A Common Warrants or the PIPE Series B Common Warrants can be exercised if, immediately prior to or following such exercise, the applicable PIPE Purchaser, together with its affiliates and any other persons whose beneficial ownership of shares of our common stock would be aggregated with the PIPE Purchaser for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), would beneficially own more than 4.99%, 9.99% or 19.99%, at the election of the PIPE Purchaser (in each case, the "PIPE Maximum Percentage") of the total number of issued and outstanding shares of our common stock following such exercise. If, upon exercise of the PIPE Series A Common Warrants or PIPE Series B Common Warrants, a PIPE Purchaser would exceed a PIPE Purchaser's respective PIPE Maximum Percentage, then the PIPE Series A Common Warrants and PIPE Series B Common Warrants may be exercised for pre-funded warrants to purchase shares of our common stock, which pre-funded warrants will have terms substantially the same as the PIPE Pre-Funded Warrants. A PIPE Purchaser's respective PIPE Maximum Percentage may be increased or decreased by a PIPE Purchaser with 61 days' written notice to us; provided, however, that such percentage may in no event exceed (1) 19.99% prior to a vote of our stockholders approving the removal of such exercise limitation or (2) with respect to certain PIPE Purchasers, 4.99%.

We also entered into a registration rights agreement with the PIPE Purchasers requiring us to register the resale of the Shares and the shares issuable upon exercise of the PIPE Warrants.

Pursuant to the terms of the PIPE SPA, for so long as funds affiliated with each of Commodore Capital LP ("Commodore") and TCG Crossover Management LLC ("TCGX"), respectively, beneficially own 5% or more in the aggregate of the issued and outstanding common stock of the Company (including any shares of common stock issuable upon the exercise of any outstanding PIPE Warrants whose initial exercise date has occurred, without otherwise giving effect to any limitations on exercise of the PIPE Warrants), each of Commodore and TCGX will be entitled to designate one member of our board of directors, and the Company will take all actions reasonably necessary to have such designee promptly appointed to the board, including, but not limited to, increasing the size of the board to accommodate the appointment of such designee, subject to specified conditions. In addition, the Company has agreed to use its reasonable best efforts to cause the resignation of two (2) current members of the board by the six (6) month anniversary of December 23, 2025.

The securities may be sold to or through underwriters, dealers or agents or directly to purchasers or as otherwise set forth in the section titled "Plan of Distribution." Each prospectus supplement will set forth the names of any underwriters, dealers, agents or other entities involved in the sale of securities described in that prospectus supplement and any applicable fee, commission or discount arrangements with them.

September 2026 Reverse Stock Split

We effected a reverse stock split on September 17, 2025 of the outstanding shares of our common stock at a ratio of 10-for-1 pursuant to a Certificate of Amendment to our Amended and Restated Certificate of Incorporation filed with the Secretary of State of the State of Delaware (the "Reverse Stock Split"). The Reverse Stock Split reduced the total number of authorized shares of our common stock from 900,000,000 to 90,000,000 and the total number of authorized shares of our capital stock from 1,000,000,000 to 190,000,000. The Reverse Stock Split did not change the par value of our common stock.

The Reverse Stock Split was reflected on the Nasdaq Capital Market beginning with the opening of trading on September 18, 2025.

RISK FACTORS

An investment in our securities involves a high degree of risk. Before you invest you should carefully consider the risks and uncertainties described in Exhibit 99.3 (the “Risk Factors”) to Amendment No. 1 to our Current Report on [Form 8-K](#) filed with the SEC on December 18, 2025 (the “December 2025 Form 8-K”), which are incorporated by reference in this prospectus, together with all of the other information contained in this prospectus and the documents incorporated by reference herein. If any of these risks actually occur, our business, operating results and financial condition could be materially and adversely impacted, the market price of our common stock could decline and you could lose all or part of your investment. Additional risks and uncertainties not presently known or which we consider immaterial as of the date hereof may also have an adverse effect on our business. The Risk Factors are not guarantees that no such conditions exist as of the date of this prospectus and should not be interpreted as an affirmative statement that such risks or conditions have not materialized, in whole or in part. The risks and uncertainties we have described are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our operations.

FORWARD-LOOKING STATEMENTS

This prospectus, each prospectus supplement and the information incorporated by reference in this prospectus and each prospectus supplement contain certain 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 Exchange Act. Forward-looking statements are based on Company management’s beliefs and assumptions and on information currently available to management. The statements in this prospectus, each prospectus supplement and the information incorporated by reference in this prospectus and each prospectus supplement that are not purely historical are forward-looking statements. In some cases, you can identify forward-looking statements by such words as “anticipate,” “believe,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “ongoing,” “plan,” “possible,” “potential,” “predict,” “on track,” “project,” “should,” “target,” “will,” “would” or the negative of these terms or words of similar import, although not all forward-looking statements contain these words. You should read these statements carefully because they discuss future expectations, contain projections of future results of operations or financial condition, or state other “forward-looking” information. These statements relate to our future plans, objectives, expectations, intentions and financial performance and the assumptions that underlie these statements, and are based on current expectations that involve risks and uncertainties, such as our plans, projections, objectives, expectations and intentions. These forward-looking statements include, but are not limited to, statements about:

- our expectation that our existing cash, cash equivalents, and investments as of September 30, 2025 when combined with the proceeds we received in the December 2025 private placement will be sufficient to fund our planned operations until 2028 (excluding any cash received from the potential exercise of the PIPE Warrants);
- our financial performance;
- our ability to obtain funding for our operations, including funding necessary to develop and commercialize our drug candidates and funding necessary for the payment of future milestone and other payments that may be earned by our collaboration partners;
- the ability of our nonclinical studies and clinical trials to demonstrate safety and efficacy of our drug candidates;
- the success, cost and timing of our development activities, nonclinical studies and clinical trials;
- the potential of our Phase 2 ATH-1105 clinical trial and any subsequent clinical trials to show the beneficial characteristics, safety and efficacy of ATH-1105;
- our potential to complete the Phase 3 ELAINE-3 clinical trial for lasofoxifene and any subsequent clinical trials to show the clinical benefits of lasofoxifene;
- the rate and degree of market acceptance of our drug candidates;
- the potential learnings from our ongoing clinical trials and their ability to inform and improve future clinical development plans;
- the timing and focus of our future clinical trials, and the reporting of data from those trials;
- anticipated milestone timelines, such as the timing of data releases, and our ability to meet such timelines;
- our plans relating to commercializing our drug candidates, if approved;
- our plans and ability to establish sales, marketing and distribution infrastructure to commercialize any drug candidates for which we obtain approval;
- our ability to attract and retain key managerial, scientific and clinical personnel and the expected contributions of such personnel to us;
- our ability to contract with third-party suppliers and manufacturers and their ability to perform adequately;
- the potential for lasofoxifene to be a new standard of care in the genetically defined patient group;
- the accuracy of our estimates regarding expenses, future revenue, capital requirements and needs for additional financing;
- the pricing and reimbursement of our drug candidates, if approved;

- our reliance on third parties to conduct clinical trials of our drug candidates, and for the manufacture of our drug candidates for nonclinical studies and clinical trials;
- the success of competing therapies that are or may become available;
- the beneficial characteristics, safety and efficacy of our drug candidates;
- regulatory developments in the United States and other jurisdictions;
- our ability to obtain and maintain regulatory approval of its drug candidates in the United States and other jurisdictions, and any related restrictions, limitations or warnings in the label of any approved drug candidate;
- future agreements with third parties in connection with the commercialization of our drug candidates;
- our plans, capacity and capability relating to the further development and manufacturing of our drug candidates, including additional indications for which we may pursue regulatory approval;
- our plans and ability to obtain or protect intellectual property rights, including extensions of existing patent terms where available;
- the scope of protection we are able to establish and maintain for intellectual property rights covering our drug candidates and technology;
- the outcome of legal proceedings which may in the future be instituted against us and certain of our directors and officers;
- the actions by activist stockholders, which have in the past been, and may in the future be, disruptive and could cause uncertainty about the strategic direction of our business;
- the size and growth potential of the markets for our drug candidates, if approved for commercial use, and our ability to serve those markets;
- the potential benefits of any strategic collaborations, partnerships, or other transactions we may enter into;
- our expectations regarding the time during which we will be an emerging growth company under the JOBS Act; and
- the anticipated benefits of our recent rebranding.

These forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from those anticipated in the forward-looking statements. Factors that might cause such a difference include, but are not limited to, those discussed in the Risk Factors and elsewhere in the December 2025 Form 8-K. These statements, like all statements in this report, speak only as of their date and we undertake no obligation to update or revise these statements in light of future developments. Our ability to advance the development of our product candidates is subject to risks and uncertainties, including: (1) unexpected costs, charges or expenses resulting from any transactions; (2) potential adverse reactions or changes to business relationships resulting from the announcement or completion of any transactions; and (3) risks associated with the possible failure to realize certain anticipated benefits of any transactions, including with respect to future financial and operating results. The Risk Factors are not guarantees that no such conditions exist as of the date of this prospectus and should not be interpreted as an affirmative statement that such risks or conditions have not materialized, in whole or in part.

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

USE OF PROCEEDS

We will not receive any of the proceeds from the sale of our securities by the selling stockholders.

We will receive proceeds from the cash exercise of the pre-funded warrants which, if exercised for cash with respect to all of the 8,816,684 shares of common stock underlying such pre-funded warrants at the exercise price per share of \$0.001, would result in gross proceeds to us of approximately \$8,816. There can be no assurance that any of the pre-funded warrants will be exercised by the selling stockholders or that they will exercise the pre-funded warrants for cash instead of using the cashless exercise feature. We will also receive proceeds from the cash exercise of certain warrants eligible for cash exercise which, if exercised for cash with respect to all of the 23,031,494 shares of common stock underlying such warrants at the exercise price of \$6.35, would result in gross proceeds to us of approximately \$146,249,987.

We intend to use the net proceeds, if any, from the cash exercise of the pre-funded warrants and the warrants for working capital purposes and to advance lasofoxifene and the drug candidates in our existing pipeline.

DILUTION

The common stock to be sold by the selling stockholders upon exercise of the PIPE Warrants is common stock that is issuable upon such exercise. To the extent the common stock underlying the PIPE Warrants is issued, there will be dilution to the ownership interests of our existing stockholders.

SELLING STOCKHOLDERS

This prospectus relates to the possible resale by certain of our stockholders, who we refer to in this prospectus as the “selling stockholders,” of up to 58,464,567 shares of our common stock, including shares issuable upon the exercise of pre-funded warrants and warrants to purchase our common stock and/or pre-funded warrants that were issued and outstanding prior to the original date of filing of the registration statement of which this prospectus forms a part. The following table provides the names of the selling stockholders and the number of shares of our common stock offered by such selling stockholders under this prospectus. The selling stockholders listed below have previously been granted registration rights with respect to the shares offered hereby pursuant to that Registration Rights Agreement dated as of December 23, 2025, by and between us and the selling stockholders. The shares offered by this prospectus may be offered from time to time by the selling stockholders listed below. The selling stockholders are not obligated to sell any of their shares offered by this prospectus, and reserve the right to accept or reject, in whole or in part, any proposed sale of shares. The selling stockholders listed below may also offer and sell less than the number of shares indicated. The selling stockholders are not making any representation that any shares covered by this prospectus will or will not be offered for sale.

The number of shares and percentages of beneficial ownership set forth below are based on 9,335,913 shares of our common stock outstanding as of December 31, 2025. Beneficial ownership is determined under the SEC rules and regulations and generally includes voting or investment power over securities.

Except as noted in “Part III. Item 13 — Certain Relationships and Related Transactions, and Director Independence” in our Annual Report on Form 10-K filed with the SEC on February 27, 2025, which is incorporated by reference in this prospectus, none of the selling stockholders has, or within the past three years has had, any position, office or other material relationship with us or any of our predecessors or affiliates.

We have prepared the table below based on information given to us by, or on behalf of, the selling stockholders.

	Beneficial Ownership Before This Offering			Shares Offered Hereby Issuable Upon Exercise of PIPE Pre- Funded Warrants (4)	Shares Offered Hereby Issuable Upon Exercise of PIPE Series A Common Warrants(5)	Shares Offered Hereby Issuable Upon Exercise of PIPE Series B Common Warrants(6)	Beneficial Ownership After This Offering	
	Number of Shares Owned (2)	Percentage of Outstanding Shares (2)	Shares Offered Hereby (3)				Number of Shares Owned	Percentage of Outstanding Shares
Selling Stockholder (1)								
9vc SPV I, Limited Partnership (7)	157,480	1.69%	157,480	—	255,905	236,220	—	*%
ADAR1 Partners, LP (8)	340,552	3.65%	340,552	—	553,397	510,828	—	*%
CDK Associates, LLC (9)	438,943	4.70%	429,197	271,528	1,138,678	1,051,087	—	*%
Commodore Capital Master LP (10)	465,938	4.99%	464,398	2,685,209	5,118,111	4,724,410	—	*%
Growth Equity Opportunities 18 VGE, LLC (11)	465,938	4.99%	464,398	1,110,406	2,559,056	2,362,206	—	*%
Kalehua Capital Partners LP (12)	393,701	4.22%	393,701	—	639,764	590,551	—	*%
Ligand Pharmaceuticals Incorporated (13)	157,480	1.69%	157,480	—	255,905	236,220	—	*%
Nemean Asset Management, LLC (14)	365,026	3.91%	236,220	—	383,857	354,330	128,806	3.3%
Perceptive Life Sciences Master Fund, Ltd. (15)	1,536,687	16.45%	989,270	1,372,935	3,838,583	3,543,307	540,296	13.7%
Perceptive Xontogeny Venture Fund II, LP (15)	331,292	3.55%	329,756	457,645	1,279,526	1,181,101	—	*%
Spearhead Insurance Solutions IDF, LLC – Series ADAR1 (8)	53,149	*%	53,149	—	86,367	79,723	—	*%
Spruce Street Aggregator L.P. (16)	466,378	4.99%	456,022	216,782	1,093,306	1,009,206	—	*%
Spruce Street Entities (17)	393,701	4.22%	393,701	—	639,763	590,551	—	*%
TCG Crossover Fund II, L.P. (18)	232,969	2.495%	232,199	1,342,605	2,559,056	2,362,206	—	*%
TCG Crossover Fund III, L.P. (18)	232,969	2.495%	232,199	1,342,604	2,559,054	2,362,204	—	*%
Third Street Holdings, LLC (9)	27,435	*%	26,825	16,970	71,166	65,692	—	*%
Total:	6,025,649	64.88%	5,356,547	8,816,684	23,031,494	21,259,842	669,102	16.9%

(*) Less than one percent.

- (1) This table and the information in the notes below are based upon information supplied by the selling stockholders and shares of our common stock outstanding as of December 31, 2025. Equity securities exercisable within 60 days of December 31, 2025 are deemed outstanding for the purposes of listing the number of shares owned by that person and for computing the percentage of shares owned by that person, but are not deemed outstanding for purposes of computing the percentage of shares owned by any other person. This table assumes the sale of all shares of common stock registered pursuant to this prospectus, although the selling stockholder is under no obligation known to us to sell any shares of common stock at this time.
- (2) The PIPE Warrants held by the selling stockholders are subject to beneficial ownership limitations such that the PIPE Warrants may not be exercised if, immediately prior to or following such exercise, the applicable selling stockholder, together with its affiliates and any other persons whose beneficial ownership of shares of our common stock would be aggregated with the selling stockholder for purposes of Section 13(d) of the Exchange Act, would beneficially own more than such selling stockholder's PIPE Maximum Percentage of the total number of issued and outstanding shares of our common stock following such exercise (the "Beneficial Ownership Limitation"). If, upon exercise of the PIPE Series A Common Warrants or PIPE Series B Common Warrants, a selling stockholder would exceed a selling stockholder's PIPE Maximum Percentage, then the PIPE Series A Common Warrants and the PIPE Series B Common Warrants may be exercised for pre-funded warrants to purchase shares of our common stock, which pre-funded warrants will have terms substantially the same as the PIPE Pre-Funded Warrants. The PIPE Maximum Percentage in each of the PIPE Warrants held by (i) each of 9vc, the ADAR1 Entities, the Blackstone Entities, Commodore, GEO 18 VGE, Kalehua, Ligand, Nemean, Aggregator and the TCGX Entities (each as defined below) is 4.99%, (ii) the Spruce Street Entities (as defined below) is 9.99% and (iii) the Perceptive Entities (as defined below) is 19.99%. The PIPE Series A Common Warrants and the PIPE Series B Common Warrants are also subject to the PIPE Series A Common Warrant Exercise Limitation and the PIPE Series B Common Warrant Exercise Limitation, respectively, and such warrants are therefore not currently exercisable. As a result, such warrants are not reflected in the "Number of Shares Owned" column of this table for any selling stockholder.
- (3) The shares issuable upon the exercise of the PIPE Warrants are not included in this column.
- (4) The impact of the applicable PIPE Maximum Percentage on the number of shares issuable upon exercise of the PIPE Pre-Funded Warrants is not reflected in this column.

- (5) The impact of the applicable PIPE Maximum Percentage and Series A Common Warrant Exercise Limitation on the number of shares issuable upon exercise of the PIPE Series A Common Warrants is not reflected in this column.
- (6) The impact of the applicable PIPE Maximum Percentage and Series B Common Warrant Exercise Limitation on the number of shares issuable upon exercise of the PIPE Series B Common Warrants is not reflected in this column.
- (7) Consists of 157,480 shares of common stock held directly by 9vc SPV 1, Limited Partnership (“9vc”). A B Y Finance (eToro) 21 LP, Gershenberg Massa Family Trust, Doron Mahfood, Negad Ltd, 9vc LP Ltd and Chen Barshai are the Limited Partners of 9vc and may be deemed to beneficially own the securities held by 9vc. The address of 9vc is 10 Rosenblum Street, Tel Aviv, Israel 6937957.
- (8) Consists of (i) 340,552 shares of common stock held directly by ADAR1 Partners, LP (“ADAR1”) and (ii) 53,149 shares of common stock held directly by Spearhead Insurance Solutions IDF, LLC – Series ADAR1 (“Spearhead” and, together with ADAR1, the “ADAR1 Entities”). ADAR1 Capital Management, LLC (“ADAR1 LLC”), the investment advisor of ADAR1 and the sub-advisor of Spearhead, has voting and investment control of the securities held by ADAR1 and the securities held by Spearhead. ADAR1 Capital Management GP, LLC (“ADAR1 GP”) is the general partner of ADAR1. Daniel Schneeberger is the manager of ADAR1 LLC and ADAR1 GP. The address of ADAR1 is 3503 Wild Cherry Drive, Building 9, Austin, TX 78738. The address of Spearhead is 3828 Kennett Pike, Suite 202, Greenville, DE 19807.
- (9) Consists of (i) 429,197 shares of common stock and 9,746 shares of common stock issuable upon the partial exercise of a PIPE Pre-Funded Warrant which is exercisable within 60 days of December 31, 2025 held directly by CDK Associates, LLC (“CDK”) and excludes 261,782 shares issuable upon exercise of such PIPE Pre-Funded Warrant which is not exercisable within 60 days of December 31, 2025 due to the Beneficial Ownership Limitation, based on the number of shares outstanding as of December 31, 2025, and (ii) 26,825 shares of common stock and 610 shares of common stock issuable upon the partial exercise of a PIPE Pre-Funded Warrant which is exercisable within 60 days of December 31, 2025 held directly by Third Street Holdings, LLC (“Third Street” and, together with CDK, the “Blackstone Entities”) and excludes 16,360 shares issuable upon exercise of such PIPE Pre-Funded Warrant which is not exercisable within 60 days of December 31, 2025 due to the Beneficial Ownership Limitation, based on the number of shares outstanding as of December 31, 2025. Bruce Kovner has voting and dispositive power over the holdings of CDK and may be deemed to beneficially own the securities held by CDK. Peter P. D’Angelo has voting and dispositive power over the holdings of Third Street and may be deemed to beneficially own the securities held by Third Street. The address of CDK and Third Street is 731 Alexander Road, Building 2, Suite 500, Princeton, NJ 08540.
- (10) Consists of 464,398 shares of common stock and 1,540 shares of common stock issuable upon the partial exercise of a PIPE Pre-Funded Warrant which is exercisable within 60 days of December 31, 2025 held directly by Commodore Capital Master LP (“Commodore”) and excludes 2,683,669 shares issuable upon exercise of such PIPE Pre-Funded Warrant which is not exercisable within 60 days of December 31, 2025 due to the Beneficial Ownership Limitation, based on the number of shares outstanding as of December 31, 2025. Commodore Capital LP is the investment manager to Commodore and may be deemed to beneficially own the shares held by Commodore. Michael Kramarz and Robert Egen Atkinson are the managing partners of Commodore Capital LP and exercise investment discretion with respect to these shares. Commodore Capital LP and Commodore have shared voting and dispositive power with respect to these shares. See the section of this prospectus titled “Prospectus Summary—December 2025 Private Placement” for additional information. The address of Commodore Capital LP and Commodore is 444 Madison Avenue, 35th Floor, New York, NY 10022.
- (11) Consists of 464,398 shares of common stock and 1,540 shares of common stock issuable upon the partial exercise of a PIPE Pre-Funded Warrant which is exercisable within 60 days of December 31, 2025 held directly by Growth Equity Opportunities 18 VGE, LLC (“GEO 18 VGE”) and excludes 1,108,866 shares issuable upon exercise of such PIPE Pre-Funded Warrant which is not exercisable within 60 days of December 31, 2025 due to the Beneficial Ownership Limitation, based on the number of shares outstanding as of December 31, 2025. GEO 18 VGE is wholly owned by NEA 18 Venture Growth Equity, L.P. (“NEA 18 VGE”). The sole general partner of NEA 18 VGE is NEA Partners 18 VGE, L.P. (“NEA Partners 18 VGE”). The sole general partner of NEA Partners 18 VGE is NEA VGE 18 GP, LLC (“NEA VGE 18 LLC”). The managers of NEA VGE 18 LLC are Scott D. Sandell, Anthony A. Florence, Jr., Mohamad Makhzoumi, Ali Behbahani, Carmen Chang, Edward T. Mathers, Paul E. Walker and Rick C. Yang. NEA VGE 18 LLC and its managers may be deemed to beneficially own the securities held by Growth Equity Opportunities 18 VGE, LLC. Each of NEA VGE 18 and its managers disclaims beneficial ownership of any of the shares of our common stock they may be deemed to beneficially own except to the extent of their respective pecuniary interest therein. The address of GEO 18 VGE, NEA 18 VGE, NEA Partners 18 VGE, NEA VGE 18 LLC and Scott Sandell is New Enterprise Associates, 1954 Greenspring Drive, Suite 600, Timonium, MD 21093. The address of Ali Behbahani, Carmen Chang, Mohamad Makhzoumi, Paul Walker and Rick Yang is New Enterprise Associates, 2855 Sand Hill Road, Menlo Park, California 94025. The address of the principal business office of Edward Mathers and Anthony Florence is New Enterprise Associates, 104 5th Avenue, 19th Floor, New York, NY 10001.

- (12) Consists of 393,701 shares of common stock held directly by Kalehua Capital Partners LP (“Kalehua”). Kalehua Capital Management LLC is the general partner of Kalehua. The address of Kalehua is 3819 Maple Avenue, Dallas, TX 75219.
- (13) Consists of 157,480 shares of common stock held directly by Ligand Pharmaceuticals Incorporated (“Ligand”). The address of Ligand is 555 Heritage Drive, Suite 200, Jupiter, FL 33458.
- (14) Consists of 365,026 shares of common stock held directly by Nemean Asset Management, LLC (“Nemean”). Steven Oliveira is the manager of Nemean and may be deemed to beneficially own the securities held directly by Nemean. The address of Nemean is 207 Commodore Drive, Jupiter, FL 33477.
- (15) Consists of (i) 1,529,566 shares of common stock and 7,120 shares of common stock issuable upon the partial exercise of a PIPE Pre-Funded Warrant which is exercisable within 60 days of December 31, 2025 held directly by Perceptive Life Sciences Master Fund, Ltd. (the “Perceptive Master Fund”) and excludes 1,365,815 shares issuable upon exercise of such PIPE Pre-Funded Warrant which is not exercisable within 60 days of December 31, 2025 due to the Beneficial Ownership Limitation, based on the number of shares outstanding as of December 31, 2025, and (ii) 329,756 shares of common stock and 1,536 shares of common stock issuable upon the partial exercise of a PIPE Pre-Funded Warrant that is exercisable within 60 days of December 31, 2025 held directly by Perceptive Xontogeny Venture Fund II, LP (“PXV II”) and, together with the Perceptive Master Fund, the “Perceptive Entities”) and excludes 456,109 shares issuable upon exercise of such PIPE Pre-Funded Warrant that is not exercisable within 60 days of December 31, 2025 due to the Beneficial Ownership Limitation, based on the number of shares outstanding as of December 31, 2025. Perceptive Advisors LLC (“Perceptive Advisors”) is the investment advisor of the Perceptive Master Fund and may be deemed to have beneficial ownership of the shares beneficially owned thereby. Perceptive Venture Advisors, LP (“Perceptive Venture”), is the investment manager to PXV II, and accordingly, may be deemed to beneficially own the securities directly held by PXV II. Joseph Edelman (a member of our board of directors) is the controlling person of Perceptive Advisors and Perceptive Venture and accordingly, may be deemed to have beneficial ownership of the shares beneficially owned by the Perceptive Master Fund, PXV II, Perceptive Advisors and Perceptive Venture. Perceptive Advisors, Perceptive Venture, the Perceptive Master Fund, PXV II and Mr. Edelman disclaim beneficial ownership of all such securities except to the extent of its or his pecuniary interest therein. The business address for each of Perceptive Advisors, Perceptive Venture, the Perceptive Master Fund, PXV II and Mr. Edelman is 51 Astor Place, 10th Floor, New York, NY 10003.
- (16) Consists of 456,022 shares of common stock and 10,356 shares of common stock issuable upon the partial exercise of a PIPE Pre-Funded Warrant which is exercisable within 60 days of December 31, 2025 held directly by Spruce Street Aggregator L.P. (the “Aggregator Fund”) and excludes 206,426 shares issuable upon exercise of such PIPE Pre-Funded Warrant which is not exercisable within 60 days of December 31, 2025 due to the Beneficial Ownership Limitation, based on the number of shares outstanding as of December 31, 2025. Blackstone Alternative Asset Management Associates LLC is the general partner of the Aggregator Fund. Blackstone Holdings II L.P. is the sole member of Blackstone Alternative Asset Management Associates LLC. Blackstone Holdings I/II GP L.L.C. is the general partner of Blackstone Holdings II L.P. Blackstone Inc. is the sole member of Blackstone Holdings I/II GP L.L.C. Blackstone Group Management L.L.C. is the sole holder of the Series II preferred stock of Blackstone Inc. Blackstone Group Management L.L.C. is wholly owned by its senior managing directors and controlled by its founder, Stephen A. Schwarzman. Each of such Blackstone entities and Mr. Schwarzman may be deemed to beneficially own the securities beneficially owned by the Aggregator Fund directly or indirectly controlled by it or him, but each (other than the Aggregator Fund to the extent of its direct holdings) disclaims beneficial ownership of such securities. The address of each of the entities listed is c/o Blackstone Inc., 345 Park Avenue, New York, New York 10154.
- (17) Consists of (i) 69,900 shares of common stock held directly by MAP 852 SP, a segregated portfolio of MAP Institutional SPC (“MAP”) and (ii) 323,801 shares of common stock held directly by Spruce Street Capital Master Fund LP (the “Fund” and, together with MAP, the “Spruce Street Entities”). Spruce Street Capital LP (“Spruce Street Advisor”) is the discretionary manager of MAP and of the Fund and may be deemed to beneficially own the securities held by Spruce Street Entities. The address of each of MAP, Spruce Street Advisor and Spruce Street is 777 Third Avenue, Suite 1704, New York, NY 10017.
- (18) Consists of (i) 232,199 shares of common stock and 770 shares of common stock issuable upon the partial exercise of a PIPE Pre-Funded Warrant which is exercisable within 60 days of December 31, 2025 held directly by TCG Crossover Fund II, L.P. (“TCG Crossover II”) and excludes 1,341,835 shares issuable upon exercise of such PIPE Pre-Funded Warrant which is not exercisable within 60 days of December 31, 2025 due to the Beneficial Ownership Limitation, based on the number of shares outstanding as of December 31, 2025, and (ii) 232,199 shares of common stock and 770 shares of common stock issuable upon the partial exercise of a PIPE Pre-Funded Warrant which is exercisable within 60 days of December 31, 2025 held directly by TCG Crossover Fund III, L.P. (“TCG Crossover III”) and, together with TCG Crossover II, the “TCGX Entities”) and excludes 1,341,834 shares issuable upon exercise of such PIPE Pre-Funded Warrant that is not exercisable within 60 days of December 31, 2025 due to the Beneficial Ownership Limitation, based on the number of shares outstanding as of December 31, 2025. TCG Crossover GP II, LLC (“TCG Crossover GP II”) is the general partner of TCG Crossover II and may be deemed to have voting, investment and dispositive power with respect to the securities held by TCG Crossover II. TCG Crossover GP III, LLC is the general partner of TCG Crossover III and may be deemed to have voting, investment and dispositive

power with respect to the securities held by TCG Crossover III. Chen Yu is the sole managing member of each of TCG Crossover GP II and TCG Crossover III and may be deemed to have voting, investment and dispositive power with respect to the securities held by each of TCG Crossover II and TCG Crossover III. See the section of this prospectus titled “Prospectus Summary—December 2025 Private Placement” for additional information. The address of the TCGX Entities, TCG Crossover GP II, TCG Crossover GP III and Chen Yu is 245 Lytton Avenue, Suite 350, Palo Alto, CA 94301.

In addition, we may name additional selling stockholders from time to time. Information about such additional selling stockholders, including their identities and the securities to be registered on their behalf, will be set forth in a prospectus supplement, in a post-effective amendment or in filings that we make with the SEC under the Exchange Act that are incorporated by reference in this prospectus.

DESCRIPTION OF CAPITAL STOCK

As of the date of this prospectus, we have one class of securities, our common stock, registered under Section 12 of the Exchange Act. These securities are listed on The Nasdaq Capital Market under the symbol “LONA.”

Our authorized capital stock consists of 90,000,000 shares of common stock, par value \$0.0001 per share, and 100,000,000 shares of preferred stock, par value \$0.0001 per share.

The following is a summary of the rights of our common stock and preferred stock. This summary is not complete. For more detailed information, please refer to our certificate of incorporation, as amended, which was filed as an exhibit to our quarterly report on Form 10-Q for the period ended September 30, 2025, as amended by the certificate of amendment to our certificate of incorporation filed as an exhibit to our current report on Form 8-K filed on January 9, 2026, and to our amended and restated bylaws, which were filed as an exhibit to our current report on Form 8-K filed on January 9, 2026, and to the applicable provisions of Delaware and Washington law.

Common Stock

Dividends

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

Voting Rights

Each share of common stock held as of the applicable record date is entitled to one vote per share on all matters (including the election of directors) submitted to a vote of stockholders, unless otherwise required by law or our certificate of incorporation. Our certificate of incorporation and bylaws do not provide for cumulative voting rights. Because of this, the holders of a plurality of the voting power of the shares of common stock present in person or represented by proxy at the meeting of stockholders and entitled to vote in any election of directors can elect all of the directors standing for election, if they should so choose. With respect to matters other than the election of directors, at any meeting of the stockholders at which a quorum is present or represented, the affirmative vote of a majority of the voting power of the shares, cast affirmatively or negatively, shall be the act of the stockholders, except as otherwise provided by law, our certificate of incorporation, our bylaws or the rules of any applicable stock exchange on which our securities are listed. The holders of a majority of the voting power of the capital stock issued and outstanding and entitled to vote, present in person or represented by proxy, shall constitute a quorum for the transaction of business at all meetings of the stockholders, unless otherwise required by law, our certificate of incorporation, our bylaws or the rules of any applicable stock exchange on which our securities are listed.

Liquidation

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

Rights and Preferences

Holders of common stock have no preemptive, conversion, subscription or other rights, and there are no redemption or sinking fund provisions applicable to our common stock. The rights, preferences and privileges of the holders of common stock

are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate in the future.

Fully Paid and Nonassessable

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

Preferred Stock

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

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

Delaware Law

We are subject to Section 203 of the Delaware General Corporation Law. Section 203 generally prohibits a publicly held Delaware corporation from engaging in a “business combination” with any “interested stockholder” for a period of three years after the date of the transaction in which the person became an interested stockholder, unless:

- prior to the date of the transaction, the board of directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder
- upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares outstanding (1) shares owned by persons who are directors and also officers and (2) shares owned by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- at or subsequent to such time the business combination is approved by the board and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least two-thirds of the outstanding voting stock which is not owned by the interested stockholder.

Section 203 defines a business combination to include:

- any merger or consolidation involving the corporation, or any direct or indirect majority-owned subsidiary of the corporation, and the interested stockholder or any other entity if the merger or consolidation is caused by the interested stockholder;
- any sale, lease, exchange, mortgage, transfer, pledge or other disposition involving the interested stockholder of 10% or more of the assets of the corporation or any direct or indirect majority-owned subsidiary of the corporation;
- subject to exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation, or any direct or indirect majority-owned subsidiary of the corporation, to the interested stockholder;
- subject to exceptions, any transaction involving the corporation, or any direct or indirect majority-owned subsidiary of the corporation, that has the effect of increasing the proportionate share of the stock or any class or series of the corporation or such subsidiary beneficially owned by the interested stockholder; and
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

These provisions may have the effect of delaying, deferring or preventing changes in control in our Company.

Washington Business Corporation Act

The laws of Washington, where our principal executive offices are located, impose restrictions on certain transactions between certain foreign corporations and significant stockholders. In particular, the Washington Business Corporation Act, or WBCA, prohibits a “target corporation,” with certain exceptions, from engaging in certain “significant business transactions”

with a person or group of persons which beneficially owns 10% or more of the voting securities of the target corporation, an “acquiring person,” for a period of five years after such acquisition, unless the transaction or acquisition of shares is approved by a majority of the members of the target corporation’s board of directors prior to the time of acquisition. Such prohibited transactions may include, among other things:

- any merger or consolidation with, disposition of assets to, or issuance or redemption of stock to or from, the acquiring person;
- any termination of 5% or more of the employees of the target corporation as a result of the acquiring person’s acquisition of 10% or more of the shares;
- allowing the acquiring person to receive any disproportionate benefit as a stockholder; and
- liquidating or dissolving the target corporation.

After the five-year period, a significant business transaction may take place as long as it complies with certain fair price provisions of the statute or is approved at an annual or special meeting of stockholders.

We will be considered a “target corporation” so long as our principal executive office is located in Washington, and: (1) a majority of our employees are residents of the state of Washington or we employ more than one thousand residents of the state of Washington; (2) a majority of our tangible assets, measured by market value, are located in the state of Washington or we have more than \$50 million worth of tangible assets located in the state of Washington; and (3) any one of the following: (a) more than 10% of our stockholders of record are resident in the state of Washington; (b) more than 10% of our shares are owned of record by state residents; or (c) 1,000 or more of our stockholders of record are resident in the state.

If we meet the definition of a target corporation, the WBCA may have the effect of delaying, deferring or preventing a change of control.

Certificate of Incorporation and Bylaws

Provisions of our certificate of incorporation and bylaws may delay or discourage transactions involving an actual or potential change in our control or change in our management, including transactions in which stockholders might otherwise receive a premium for their shares, or transactions that our stockholders might otherwise deem to be in their best interests. Therefore, these provisions could adversely affect the price of our common stock. Among other things, our certificate of incorporation and bylaws:

- permit our board of directors to issue shares of preferred stock, with any rights, preferences and privileges as they may designate;
- provide that the authorized number of directors may be changed only by resolution of the board of directors;
- provide that all vacancies, including newly created directorships, may, except as otherwise required by law, be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum;
- divide our board of directors into three classes, each of which stands for election once every three years;
- provide that a director may only be removed from the board of directors by the stockholders for cause;
- require that 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;
- provide that 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 notice in writing in a timely manner, and also meet specific requirements as to the form and content of a stockholder’s notice;
- do not provide for cumulative voting rights (therefore allowing the holders of a plurality of the shares of common stock entitled to vote in any election of directors to elect all of the directors standing for election, if they should so choose);
- provide that special meetings of our stockholders may be called only by the board of directors, the chairman of the board of directors, our chief executive officer or president;
- provide that stockholders will be permitted to amend certain provisions of our bylaws only upon receiving at least two-thirds of the votes entitled to be cast by holders of all outstanding shares then entitled to vote generally in the election of directors, voting together as a single class;
- provide that, unless we otherwise consent in writing, a state or federal court located within the State of Delaware shall be the sole and exclusive forum for (1) any derivative action or proceeding brought on our behalf, (2) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers or other employees or our stockholders, (3) any action asserting a claim against us arising pursuant to any provision of the Delaware General Corporation Law, our certificate of incorporation and bylaws (as either may be amended from time to time), or (4) any action asserting a claim against us governed by the internal affairs doctrine; and
- provide that the federal district courts of the United States of America will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act, against any person in connection with

any offering of our securities, including, without limitation and for the avoidance of doubt, any auditor, underwriter, expert, control person or other defendant.

The amendment of any of these provisions would require approval by the holders of at least two-thirds of our then outstanding common stock, voting as a single class.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Computershare Trust Company, N.A. The transfer agent and registrar's address is 150 Royall Street, Canton, Massachusetts 02021.

PLAN OF DISTRIBUTION

The selling stockholders, which as used herein includes donees, pledgees, transferees or other successors-in-interest selling shares of common stock or interests in shares of common stock received after the date of this prospectus from a selling stockholder as a gift, pledge, partnership distribution or other transfer, may, from time to time, sell, transfer or otherwise dispose of any or all of their shares of common stock or interests in shares of common stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These dispositions may be at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices.

These sales may be effected in transactions, which may involve crosses or block transactions. The selling stockholders may use any one or more of the following methods when disposing of shares or interests therein:

- distributions to members, partners, stockholders or other equityholders of the selling stockholders;
- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent, but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- short sales and settlement of short sales entered into after the effective date of the registration statement of which this prospectus is a part;
- through the writing or settlement of options or other hedging transactions, whether such options are listed on an options exchange or otherwise;
- broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;
- a combination of any such methods of sale; and
- any other method permitted pursuant to applicable law.

The selling stockholders may, from time to time, pledge or grant a security interest in some or all of the shares of common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of common stock, from time to time, under this prospectus, or under an amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act, amending, if necessary, the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus. The selling stockholders also may transfer or donate the shares of common stock in other circumstances, in which case the transferees, pledgees or other successors in interest will be the selling stockholders for purposes of this prospectus.

In connection with the sale of our common stock or interests therein, the selling stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the common stock in the course of hedging the positions they assume. The selling stockholders may also sell shares of our common stock short and deliver these securities to close out their short positions, or loan or pledge the common stock to broker-dealers that in turn may sell these securities. The selling stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The aggregate proceeds to the selling stockholders from the sale of the common stock offered by them will be the purchase price of the common stock less discounts or commissions, if any. Each of the selling stockholders reserves the right to accept and, together with their agents from time to time, to reject, in whole or in part, any proposed purchase of common stock to be made directly or through agents. We will not receive any of the proceeds from this offering. Upon any exercise of the

pre-funded warrants or common warrants by payment of cash, however, we will receive the exercise price of the pre-funded warrants or common warrants.

The selling stockholders also may resell all or a portion of the shares in open market transactions in reliance upon Rule 144 under the Securities Act, provided that they meet the criteria and conform to the requirements of that rule, or another available exemption from the registration requirements under the Securities Act. Broker-dealers engaged by the selling stockholders may arrange for other broker-dealers to participate in sales. If the selling stockholders effect such transactions by selling shares of common stock to or through underwriters, broker-dealers or agents, such underwriters, broker-dealers or agents may receive commissions in the form of discounts, concessions or commissions from the selling stockholders or commissions from purchasers of the shares of common stock for whom they may act as agent or to whom they may sell as principal. Such commissions will be in amounts to be negotiated, but, except as set forth in a supplement to this Prospectus, in the case of an agency transaction will not be in excess of a customary brokerage commission in compliance with FINRA Rule 2440; and in the case of a principal transaction a markup or markdown in compliance with FINRA IM-2440.

The selling stockholders and any underwriters, broker-dealers or agents that participate in the sale of the common stock or interests therein may be “underwriters” within the meaning of Section 2(a)(11) of the Securities Act (it being understood that the selling stockholders shall not be deemed to be underwriters solely as a result of their participation in this offering). Any discounts, commissions, concessions or profit they earn on any resale of the shares may be underwriting discounts and commissions under the Securities Act. Selling stockholders who are “underwriters” within the meaning of Section 2(a)(11) of the Securities Act will be subject to the prospectus delivery requirements of the Securities Act.

To the extent required, the shares of our common stock to be sold, the names of the selling stockholders, the respective purchase prices and public offering prices, the names of any agent, dealer or underwriter, and any applicable commissions or discounts with respect to a particular offer will be set forth in an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement that includes this prospectus.

Each selling stockholder has informed the Company that it is not a registered broker-dealer and does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the common stock. Upon the Company being notified in writing by a selling stockholder that any material arrangement has been entered into with a broker-dealer for the sale of common stock through a block trade, special offering, exchange distribution or secondary distribution or a purchase by a broker or dealer, a supplement to this prospectus will be filed, if required, pursuant to Rule 424(b) under the Securities Act, disclosing (1) the name of each such selling stockholder and of the participating broker-dealer(s), (2) the number of shares involved, (3) the price at which such the shares of common stock were sold, (4) the commissions paid or discounts or concessions allowed to such broker-dealer(s), where applicable, (5) that such broker-dealer(s) did not conduct any investigation to verify the information set out or incorporated by reference in this prospectus, and (6) other facts material to the transaction. In no event shall any broker-dealer receive fees, commissions and markups, which, in the aggregate, would exceed 8.0%. In order to comply with the securities laws of some states, if applicable, the common stock may be sold in these jurisdictions only through registered or licensed brokers or dealers. In addition, in some states the common stock may not be sold unless it has been registered or qualified for sale or an exemption from registration or qualification requirements is available and is complied with.

We have advised the selling stockholders that the anti-manipulation rules of Regulation M under the Exchange Act may apply to sales of shares in the market and to the activities of the selling stockholders and their affiliates. In addition, to the extent applicable, we will make copies of this prospectus (as it may be supplemented or amended from time to time) available to the selling stockholders for the purpose of satisfying the prospectus delivery requirements of the Securities Act. The selling stockholders may indemnify any broker-dealer that participates in transactions involving the sale of the shares against certain liabilities, including liabilities arising under the Securities Act. There can be no assurance that any selling stockholder will sell any or all of the shares of common stock registered pursuant to the registration statement, of which this prospectus forms a part.

We have agreed to indemnify the selling stockholders against liabilities, including liabilities under the Securities Act and state securities laws, relating to the registration of the shares offered by this prospectus.

We have agreed with the selling stockholders to use commercially reasonable efforts to cause the registration statement of which this prospectus constitutes a part to become effective and to remain continuously effective until the earlier of: (1) the date on which the selling stockholders shall have resold or otherwise disposed of all the shares covered by this prospectus pursuant to any applicable securities exemption where the recipient thereof receives unrestricted securities including Rule 144 (or any successor provision) or pursuant to this prospectus, and (2) the date on which the shares covered by this prospectus no longer constitute “Registrable Securities” as such term is defined in the Registration Rights Agreement, such that they may be resold by the selling stockholders without registration and without regard to any volume or manner-of-sale limitations and without current public information pursuant to Rule 144 under the Securities Act or any other rule of similar effect.

We will pay all expenses of the registration of the shares of common stock pursuant to the registration rights agreement, including, without limitation, SEC filing fees and expenses of compliance with state securities or “blue sky” laws; provided, however, that each selling stockholder will pay all underwriting discounts and selling commissions, if any and any related legal expenses incurred by it. We will indemnify the selling stockholders against certain liabilities, including some liabilities under the Securities Act, in accordance with the registration rights agreement, or the selling stockholders will be entitled to contribution. We may be indemnified by the selling stockholders against civil liabilities, including liabilities under the Securities Act, that may arise from any written information furnished to us by the selling stockholders specifically for use in this prospectus, in accordance with the related registration rights agreements, or we may be entitled to contribution.

LEGAL MATTERS

The validity of the securities offered hereby will be passed upon for us by Wilson Sonsini Goodrich & Rosati, Professional Corporation, Seattle, Washington. Additional legal matters may be passed on for us, or any underwriters, dealers or agents, by counsel that we will name in the applicable prospectus supplement. Certain members of, and investment partnerships comprised of members of, and persons associated with, Wilson Sonsini Goodrich & Rosati, P.C. own less than 1% of our common stock.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2024, as set forth in their report, which is incorporated by reference in this prospectus and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on Ernst & Young LLP's report, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at www.sec.gov. Copies of certain information filed by us with the SEC are also available on our website at <https://www.leonabio.com/>. Information accessible on or through our website is not a part of this prospectus.

This prospectus and any prospectus supplement is part of a registration statement that we filed with the SEC and do not contain all of the information in the registration statement. You should review the information and exhibits in the registration statement for further information on us and our consolidated subsidiaries and the securities that we are offering. Forms of any documents establishing the terms of the offered securities are filed as exhibits to the registration statement of which this prospectus forms a part or under cover of a Current Report on Form 8-K and incorporated in this prospectus by reference. Statements in this prospectus or any prospectus supplement about these documents are summaries and each statement is qualified in all respects by reference to the document to which it refers. You should read the actual documents for a more complete description of the relevant matters.

INCORPORATION BY REFERENCE

The SEC allows us to incorporate by reference much of the information that we file with the SEC, which means that we can disclose important information to you by referring you to those publicly available documents. The information that we incorporate by reference in this prospectus is considered to be part of this prospectus. Because we are incorporating by reference future filings with the SEC, this prospectus is continually updated, and those future filings may modify or supersede some of the information included or incorporated by reference in this prospectus. This means that you must look at all of the SEC filings that we incorporate by reference to determine if any of the statements in this prospectus or in any document previously incorporated by reference have been modified or superseded. This prospectus incorporates by reference the documents listed below and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (in each case, other than those documents or the portions of those documents furnished pursuant to Items 2.02 or 7.01 of any Current Report on Form 8-K and, except as may be noted in any such Form 8-K, exhibits filed on such form that are related to such information) after the date of the initial registration statement of which this prospectus forms a part and prior to the effectiveness of the registration statement, as well as subsequent to the effectiveness of the registration statement, until the offering of the securities under the registration statement of which this prospectus forms a part is terminated or completed:

- our Annual Report on Form 10-K for the year ended December 31, 2024, filed with the SEC on [February 27, 2025](#);
- the information incorporated by reference into our Annual Report on Form 10-K for the year ended December 31, 2024 from our Definitive Proxy Statement on Schedule 14A, filed with the SEC on [April 14, 2025](#);
- our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2025, June 30, 2025 and September 30, 2025, filed with the SEC on [May 9, 2025](#), [August 7, 2025](#) and [November 6, 2025](#), respectively;
- our Current Reports on Form 8-K filed with the SEC on [April 16, 2025](#), [June 2, 2025](#), [September 11, 2025](#), [October 3, 2025](#) and [January 9, 2026](#) and Amendment No. 1 to our Current Report on Form 8-K filed with the SEC on [December 18, 2025](#); and
- the description of our common stock contained in the Registration Statement on Form 8-A relating thereto, filed with the SEC on [September 9, 2020](#), including any amendment or report filed for the purpose of updating such description.

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

LeonaBio, Inc.
18706 North Creek Parkway, Suite 104
Bothell, Washington 98011
Attn: Investor Relations
(425) 620-8501



LeonaBio, Inc.

**58,464,567 Shares of Common Stock
Offered by the Selling Stockholders**

PROSPECTUS

, 2026

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution

The following table sets forth fees and expenses to be paid by us in connection with the issuance and distribution of the securities being registered, other than discounts and commissions to be paid to agents or underwriters. All amounts shown are estimates except for the registration fee.

		Amount to be Paid
SEC registration fee for securities offered by the selling stockholders identified in the prospectus	\$	50,140
Accounting fees and expenses		10,000
Legal fees and expenses		50,000
Miscellaneous expenses		4,860
Total	\$	115,000

Item 15. Indemnification of Directors and Officers

Section 145 of the Delaware General Corporation Law authorizes a corporation's board of directors to grant, and authorizes a court to award, indemnity to officers, directors and other corporate agents.

Our certificate of incorporation, as amended, contains provisions that limit the liability of our directors and certain of our officers for monetary damages to the fullest extent permitted by the Delaware General Corporation Law. Consequently, our directors will not be personally liable to us or our stockholders for monetary damages for any breach of fiduciary duties as directors, except liability for the following:

- any breach of their duty of loyalty to us or our stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the Delaware General Corporation Law; or
- any transaction from which they derived an improper personal benefit.

Similarly, our officers who at the time of an act or omission as to which liability is asserted consented to or are deemed to have consented to certain service of process rules under Delaware law will not be personally liable to us or our stockholders for monetary damages for any breach of fiduciary duties as officers, except for liability in connection with:

- any breach of their duty of loyalty to us or our stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- any transaction from which they derived an improper personal benefit; or
- any action by or in the right of the corporation.

Any amendment, repeal or elimination of these provisions will not eliminate or reduce the effect of these provisions in respect of any act, omission or claim that occurred or arose prior to that amendment, repeal or elimination. If the Delaware General Corporation Law is amended to provide for further limitations on the personal liability of directors or officers of corporations, then the personal liability of our directors and officers will be further limited to the greatest extent permitted by the Delaware General Corporation Law.

In addition, our certificate of incorporation provides that we will indemnify our directors, and our bylaws provide that we will indemnify our directors and officers, and may indemnify our employees, agents and any other persons, to the fullest extent permitted by the Delaware General Corporation Law. Our bylaws also provide that we must advance expenses incurred by or on behalf of a director or officer in advance of the final disposition of any action or proceeding, subject to limited exceptions.

Further, we have entered into indemnification agreements with each of our directors and executive officers that may be broader than the specific indemnification provisions contained in the Delaware General Corporation Law. These indemnification agreements require us to, among other things, indemnify our directors and executive officers against liabilities that may arise by reason of their status or service. These indemnification agreements also generally require us to advance all

expenses reasonably and actually incurred by our directors and executive officers in investigating or defending any such action, suit or proceeding. We believe that these agreements are necessary to attract and retain qualified individuals to serve as directors and executive officers.

The limitation of liability and indemnification provisions in our certificate of incorporation, bylaws and indemnification agreements may discourage stockholders from bringing a lawsuit against our directors and officers for breach of their fiduciary duties. They may also reduce the likelihood of derivative litigation against our directors and officers, even though an action, if successful, might benefit us and other stockholders. Further, a stockholder's investment may be adversely affected to the extent that we pay the costs of settlement and damage awards against our directors and officers as required by these indemnification provisions.

We have obtained insurance policies under which, subject to the limitations of the policies, coverage is provided to our directors and officers against loss arising from claims made by reason of breach of fiduciary duty or other wrongful acts as a director or officer, including claims relating to public securities matters, and to us with respect to payments that may be made by us to our directors and officers pursuant to our indemnification obligations or otherwise as a matter of law.

Certain of our non-employee directors may, through their relationships with their employers, be insured or indemnified against certain liabilities incurred in their capacity as members of our board of directors.

Item 16. Exhibits

Exhibit Number	Exhibit Description	Form	Incorporation by Reference			Filed Herewith
			File Number	Exhibit Number	Filing Date	
3.1	Amended and Restated Certificate of Incorporation	10-Q	001-39503	3.1	November 12, 2020	
3.2	Certificate of Amendment to the Amended and Restated Certificate of Incorporation of the Company dated May 23, 2024	8-K	001-39503	3.1	May 29, 2024	
3.3	Certificate of Amendment to the Amended and Restated Certificate of Incorporation of the Company dated September 10, 2025	8-K	001-39503	3.1	September 11, 2025	
3.4	Certificate of Amendment to the Amended and Restated Certificate of Incorporation	8-K	001-39503	3.1	January 9, 2026	
3.5	Amended and Restated Bylaws	8-K	001-39503	3.2	January 9, 2026	
4.1	Specimen Common Stock Certificate					X
4.2	Form of PIPE Registration Rights Agreement	8-K/A	001-39503	4.5	December 18, 2025	
4.3	Form of Sermonix Registration Rights Agreement	8-K/A	001-39503	4.6	December 18, 2025	
4.4	Form of PIPE Pre-Funded Warrant	8-K/A	001-39503	4.1	December 18, 2025	
4.5	Form of Sermonix Pre-Funded Warrant	8-K/A	001-39503	4.4	December 18, 2025	
4.6	Form of PIPE Series A Common Warrant	8-K/A	001-39503	4.2	December 18, 2025	
4.7	Form of PIPE Series B Common Warrant	8-K/A	001-39503	4.3	December 18, 2025	
5.1	Opinion of Wilson Sonsini Goodrich & Rosati, Professional Corporation					X
23.1	Consent of Independent Registered Public Accounting Firm					X
23.2	Consent of Wilson Sonsini Goodrich & Rosati, Professional Corporation (included in the opinion filed as Exhibit 5.1 to this Registration Statement)					X
24.1	Power of Attorney (included on the signature page to this Registration Statement)					X
107	Filing Fee Table					X

Item 17. Undertakings

(a) The undersigned registrant hereby undertakes:

(1) to file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) to include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii)to reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the “Calculation of Filing Fee Tables” or “Calculation of Registration Fee” table, as applicable, in the effective registration statement; and

(iii)to include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement; *provided, however*, that paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

(2) that, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(3) to remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) that, for the purpose of determining liability under the Securities Act to any purchaser:

(i)each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(ii)each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii) or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

(5) that, for the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i)any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

(ii)any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(iii)the portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv)any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

(6) that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(b) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Bothell, State of Washington, on January 20, 2026.

LEONABIO, INC.	
By:	<u>/s/ Mark Litton</u>
	Mark Litton
	President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Mark Litton and Robert Renninger, and each of them, as his or her true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments to this registration statement, including post-effective amendments, and registration statements filed pursuant to Rule 462 under the Securities Act, and to file the same, with all exhibits thereto, and all other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith and about the premises, as fully for all intents and purposes as they, he or she might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent or any of them, or their, his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed by the following persons in the capacities and on the dates indicated:

Signature	Title	Date
<u>/s/ Mark Litton</u> Mark Litton	President and Chief Executive Officer and Director (Principal Executive Officer)	January 20, 2026
<u>/s/ Robert Renninger</u> Robert Renninger	Chief Financial Officer (Principal Financial and Accounting Officer)	January 20, 2026
<u>/s/ Kelly Romano</u> Kelly Romano	Chairperson	January 20, 2026
<u>/s/ Joseph Edelman</u> Joseph Edelman	Director	January 20, 2026
<u>/s/ John Fluke, Jr.</u> John Fluke, Jr.	Director	January 20, 2026
<u>/s/ James Johnson</u> James Johnson	Director	January 20, 2026
<u>/s/ Barbara Kosacz</u> Barbara Kosacz	Director	January 20, 2026
<u>/s/ Michael A. Panzara</u> Michael A. Panzara	Director	January 20, 2026
<u>/s/ Grant Pickering</u> Grant Pickering	Director	January 20, 2026

ZQ|CERT#|COY|CLS|RGSTRY|ACCT#|TRANSTYPE|RUN#|TRANS#

WRA SAMPLE
DESIGNATION (if any)
ADD 1
ADD 2
ADD 3
ADD 4

CUSIP/IDENTIFIER	Holder ID	Insurance Value	Number of Shares	Certificate Numbers	Num/No. Denom.	Total
XXXXXX XX	XXXXXX XX	1,000,000.00	12345678	12345678901234567890	1	1
XXXXXX XX	XXXXXX XX	1,000,000.00	12345678	12345678901234567890	2	2
XXXXXX XX	XXXXXX XX	1,000,000.00	12345678	12345678901234567890	3	3
XXXXXX XX	XXXXXX XX	1,000,000.00	12345678	12345678901234567890	4	4
XXXXXX XX	XXXXXX XX	1,000,000.00	12345678	12345678901234567890	5	5
XXXXXX XX	XXXXXX XX	1,000,000.00	12345678	12345678901234567890	6	6
XXXXXX XX	XXXXXX XX	1,000,000.00	12345678	12345678901234567890	7	7

COMMON STOCK

PAR VALUE \$0.0001

Certificate
Number

ZQ00000000

LEONABIO, INC.

INCORPORATED UNDER THE LAWS OF THE STATE OF DELAWARE

THIS CERTIFIES THAT

is the owner of

MR. SAMPLE & MRS. SAMPLE &
MR. SAMPLE & MRS. SAMPLE

ZERO HUNDRED THOUSAND
ZERO HUNDRED AND ZERO

Shares

SEE REVERSE FOR CERTAIN DEFINITIONS

CUSIP 047461 20 3

THIS CERTIFICATE IS TRANSFERABLE IN
CITIES DESIGNATED BY THE TRANSFER
AGENT, AVAILABLE ONLINE AT
www.computershare.com

FULLY-PAID AND NON-ASSESSABLE SHARES OF COMMON STOCK OF

LeonaBio, Inc. (hereinafter called the "Company"), transferable on the books of the Company in person or by duly authorized attorney, upon surrender of this Certificate properly endorsed. This Certificate and the shares represented hereby, are issued and shall be held subject to all of the provisions of the Articles of Incorporation, as amended, and the By-Laws, as amended, of the Company (copies of which are on file with the Company and with the Transfer Agent), to all of which each holder, by acceptance hereof, assents. This Certificate is not valid unless countersigned and registered by the Transfer Agent and Registrar.

Witness the facsimile seal of the Company and the facsimile signatures of its duly authorized officers.

FACSIMILE SIGNATURE TO COME

President

FACSIMILE SIGNATURE TO COME

Secretary

DATED DD-MMM-YYYY

COUNTERSIGNED AND REGISTERED:
COMPUTERSHARE TRUST COMPANY, N.A.
TRANSFER AGENT AND REGISTRAR.

By _____ AUTHORIZED SIGNATURE

SECURITY INSTRUCTIONS ON REVERSE

1234567

LEONABIO, INC.

THE COMPANY WILL FURNISH WITHOUT CHARGE TO EACH STOCKHOLDER WHO SO REQUESTS, A SUMMARY OF THE POWERS, DESIGNATIONS, PREFERENCES AND RELATIVE, PARTICIPATING, OPTIONAL OR OTHER SPECIAL RIGHTS OF EACH CLASS OF STOCK OF THE COMPANY AND THE QUALIFICATIONS, LIMITATIONS OR RESTRICTIONS OF SUCH PREFERENCES AND RIGHTS, AND THE VARIATIONS IN RIGHTS, PREFERENCES AND LIMITATIONS DETERMINED FOR EACH SERIES, WHICH ARE FIXED BY THE CERTIFICATE OF INCORPORATION OF THE COMPANY, AS AMENDED, AND THE RESOLUTIONS OF THE BOARD OF DIRECTORS OF THE COMPANY, AND THE AUTHORITY OF THE BOARD OF DIRECTORS TO DETERMINE VARIATIONS FOR FUTURE SERIES. SUCH REQUEST MAY BE MADE TO THE OFFICE OF THE SECRETARY OF THE COMPANY OR TO THE TRANSFER AGENT. THE BOARD OF DIRECTORS MAY REQUIRE THE OWNER OF A LOST OR DESTROYED STOCK CERTIFICATE, OR HIS LEGAL REPRESENTATIVES, TO GIVE THE COMPANY A BOND TO INDEMNIFY IT AND ITS TRANSFER AGENTS AND REGISTRARS AGAINST ANY CLAIM THAT MAY BE MADE AGAINST THEM ON ACCOUNT OF THE ALLEGED LOSS OR DESTRUCTION OF ANY SUCH CERTIFICATE.

For US purposes the following abbreviations, when used in the Inscription on the face of this certificate, shall be construed as though they were written out in full according to applicable laws or regulations:

TEN COM - as tenants in common	UNIF GIFT MIN ACT	Custodian
		(Coast) (Minor)
TEN ENT - as tenants by the entireties		under Uniform Gifts to Minors Act
		(State)
JT TEN - as joint tenants with right of survivorship and not as tenants in common	UNIF TRF MIN ACT	Custodian (until age)
		(Coast) (State)
		under Uniform Transfers to Minors Act
		(Minor) (State)

Additional abbreviations may also be used though not in the above list.

PLEASE INSERT SOCIAL SECURITY OR OTHER IDENTIFYING NUMBER OF ASSIGNEE

For value received, _____ hereby sell, assign and transfer unto

(PLEASE PRINT OR TYPEWRITE NAME AND ADDRESS, INCLUDING POSTAL ZIP CODE, OF ASSIGNEE)

_____ Shares
of the common stock represented by the within Certificate, and do hereby irrevocably constitute and appoint

_____ Attorney
to transfer the said stock on the books of the within-named Company with full power of substitution in the premises.

Dated: _____ 20

Signature: _____

Signature: _____

Notice: The signature to this assignment must correspond with the name as written upon the face of the certificate, in every particular, without alteration or enlargement, or any change whatever.

Signature(s) Guaranteed: Medallion Guarantee Stamp
THE SIGNATURE(S) SHOULD BE GUARANTEED BY AN ELIGIBLE GUARANTOR INSTITUTION (banks, stockbrokers, savings and loan associations and credit unions) WITH MEMBERSHIP IN AN APPROVED SIGNATURE GUARANTEE MEDALLION PROGRAM, PURSUANT TO S.E.C. RULE 17A-6-15.

SECURITY INSTRUCTIONS

THIS IS WATERMARKED PAPER. DO NOT ACCEPT WITHOUT NOTING WATERMARK. HOLD TO LIGHT TO VERIFY WATERMARK.



The IRS requires that the named transfer agent ("we") report the cost basis of certain shares or units acquired after January 1, 2011. If your shares or units are covered by the legislation, and you requested to sell or transfer the shares or units using a specific cost basis calculation method, then we have processed as you requested. If you did not specify a cost basis calculation method, then we have defaulted to the first in, first out (FIFO) method. Please consult your tax advisor if you need additional information about cost basis.
If you do not keep in contact with the issuer or do not have any activity in your account for the time period specified by state law, your property may become subject to state unclaimed property laws and transferred to the appropriate state.

1534291



Wilson Sonsini Goodrich & Rosati
Professional Corporation

701 Fifth Avenue, Suite 5100
Seattle, WA 98104-7036

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January 20, 2026

LeonaBio, Inc.
18706 North Creek Parkway, Suite 104
Bothell, Washington 98011

Re: Registration Statement on Form S-3

Ladies and Gentlemen:

At your request, we have examined the Registration Statement on Form S-3 (the "Registration Statement"), filed by LeonaBio, Inc., a Delaware corporation (the "Company"), with the Securities and Exchange Commission (the "SEC") in connection with the registration pursuant to the Securities Act of 1933, as amended (the "Securities Act"), of the Shares and Warrant Shares (each as defined below).

The Registration Statement relates to the proposed offer and sale by the selling stockholders (the "Selling Stockholders"), from time to time, pursuant to Rule 415 under the Securities Act, as set forth in the Registration Statement, the prospectus contained therein (the "Prospectus") and any supplements to the prospectus referred to therein (each a "Prospectus Supplement"), of (i) up to 5,356,547 shares of the Company's common stock that are issued and outstanding (the "Shares"), (ii) up to 8,816,684 shares of the Company's common stock (the "Pre-Funded Warrant Shares") that are issuable upon exercise of outstanding prefunded warrants (the "Pre-Funded Warrants") to purchase the Company's common stock, (iii) up to 23,031,494 shares of the Company's common stock (the "Series A Warrant Shares") that are issuable upon exercise of outstanding warrants (the "Series A Warrants") to purchase the Company's common stock, and (iv) up to 21,259,842 shares of the Company's common stock (the "Series B Warrant Shares", together with the Pre-Funded Warrant Shares and the Series A Warrants Shares, the "Warrant Shares") that are issuable upon exercise of outstanding warrants (the "Series B Warrants", together with the Pre-Funded Warrants and the Series B Warrants, the "Warrants").

The Shares and Warrant Shares are to be sold from time to time as set forth in the Registration Statement, the Prospectus contained therein and the Prospectus Supplements.

We have examined instruments, documents, certificates and records that we have deemed relevant and necessary for the basis of our opinions hereinafter expressed. In such examination, we have assumed (1) the authenticity of original documents and the genuineness of all signatures, (2) the conformity to the originals of all documents submitted to us as copies, (3) the truth, accuracy, and completeness of the information, representations and warranties contained in the instruments, documents, certificates and records we have reviewed, (4) that the Registration Statement, and any amendments thereto (including post-effective amendments), will have become effective under the Securities Act; (5) that a Prospectus Supplement, as applicable, will have been filed with the SEC describing the Shares and Warrant Shares offered thereby; (6) that the Shares and Warrant Shares will be issued and sold in compliance with applicable U.S. federal and state securities laws and in the manner stated in the Registration Statement and the applicable Prospectus Supplement; (7) that a definitive purchase, underwriting or similar agreement with respect to any Shares and Warrant Shares offered will have been duly authorized and validly

executed and delivered by the Selling Stockholders and the other parties thereto; (8) that any Shares and Warrant Shares issuable upon conversion, exchange, redemption or exercise of any Shares and Warrant Shares being offered will be duly authorized, created and, if appropriate, reserved for issuance upon such conversion, exchange, redemption or exercise; and (9) the legal capacity of all natural persons. As to any facts material to the opinions expressed herein that were not independently established or verified, we have relied upon oral or written statements and representations of officers and other representatives of the Company.

Based on such examination, we are of the opinion that:

- 1. The Shares have been duly authorized and are validly issued, fully paid and nonassessable.
- 2. The Warrant Shares issuable upon exercise of the Warrants have been duly authorized by the Company and, when issued and delivered by the Company upon exercise thereof in accordance with the terms of the Warrants, will be validly issued, fully paid and nonassessable.

Our opinion that any document is legal, valid and binding is qualified as to:

- (a) limitations imposed by bankruptcy, insolvency, reorganization, arrangement, fraudulent transfer, moratorium or other similar laws relating to or affecting the rights of creditors generally;
- (b) rights to indemnification and contribution, which may be limited by applicable law or equitable principles; and
- (c) the effect of general principles of equity, including without limitation concepts of materiality, reasonableness, good faith and fair dealing, and the possible unavailability of specific performance or injunctive relief, whether considered in a proceeding in equity or at law.

We express no opinion as to the laws of any other jurisdiction, other than the federal laws of the United States of America and the General Corporation Law of the State of Delaware.

* * *

We hereby consent to the filing of this opinion as an exhibit to the above-referenced Registration Statement and to the use of our name wherever it appears in the Registration Statement, the Prospectus, any Prospectus Supplement, and in any amendment or supplement thereto. In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the SEC thereunder.

Very truly yours,

WILSON SONSINI GOODRICH & ROSATI
Professional Corporation

/s/ Wilson Sonsini Goodrich & Rosati, P.C.

Consent of Independent Registered Public Accounting Firm

We consent to the reference to our firm under the caption "Experts" in the Registration Statement (Form S-3) and related Prospectus of LeonaBio, Inc. for the registration of 58,464,567 shares of its common stock and to the incorporation by reference therein of our report dated February 27, 2025, with respect to the consolidated financial statements of LeonaBio, Inc., included in its Annual Report (Form 10-K) for the year ended December 31, 2024, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Seattle, Washington
January 20, 2026

CALCULATION OF FILING FEE TABLES

Form S-3 (Form Type)

LeonaBio, Inc.
(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered Securities

	Security Type	Security Class Title	Fee Calculation Rule	Amount Registered (1) (2)	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
Newly Registered Securities								
Fees to Be Paid	Equity	Shares of Common Stock, par value \$0.0001 per share ("Common Stock")	457(c)	5,356,547	\$6.21 (3)	\$33,264,156.87	\$138.10 per \$1,000,000	\$4,593.79
Fees to Be Paid	Equity	Shares of Common Stock, par value \$0.0001 per share, issuable upon exercise of Warrants	457(c)	53,108,020	\$6.21 (3)	\$329,800,804.20	\$138.10 per \$1,000,000	\$45,545.50
	Total Offering Amounts					\$363,064,961.07		\$50,139.29
	Total Fees Previously Paid							—
	Total Fee Offsets							—
	Net Fee Due							\$50,139.29

- (1) This registration statement registers the resale of 5,356,547 outstanding shares of common stock of the Registrant ("Common Stock"), 8,816,684 shares of Common Stock issuable upon the exercise of pre-funded warrants issued by the Registrant at an exercise price of \$0.001 per share ("Pre-Funded Warrants"), 23,031,494 shares of Common Stock issuable upon the exercise of warrants issued by the Registrant at an exercise price of \$6.35 per share ("Series A Warrants"), and 21,259,842 shares of Common Stock issuable upon the exercise of warrants issued by the Registrant at an exercise price of \$7.62 per share ("Series B Warrants", together with the Pre-Funded Warrants and the Series A Warrants, the "Warrants"), which may be sold by the selling stockholders identified in the registration statement.
- (2) Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Act"), this registration statement shall also cover any additional shares of Common Stock that become issuable as a result of any stock dividend, stock split, recapitalization, or other similar transaction effected without the receipt of consideration that results in an increase to the number of outstanding shares of Common Stock, as applicable.
- (3) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(c) under the Securities Act based on the average of the high and low prices of the Registrant's common stock on The Nasdaq Capital Market on January 16, 2026, which was approximately \$6.21 per share.

