

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

Subject to Completion
Preliminary Prospectus Supplement dated June 11, 2025

PRELIMINARY PROSPECTUS SUPPLEMENT
(To prospectus dated March 31, 2025)

Caballetta BioTM

Shares of Common Stock

Pre-funded Warrants to Purchase up to Shares of Common Stock

Warrants to Purchase up to Shares of Common Stock (or Pre-Funded Warrants)

We are selling _____ shares of our common stock, par value \$0.00001 per share, or the common stock, in this offering and, in lieu of common stock to certain investors that so choose, pre-funded warrants to purchase _____ shares of common stock, as well as accompanying common stock warrants to purchase up to an aggregate of _____ shares of our common stock (or _____ pre-funded warrants in lieu thereof) pursuant to this prospectus supplement and the accompanying prospectus. The purchase price of each pre-funded warrant equals the price per share at which shares of common stock and the accompanying common stock warrant are being sold to the public in this offering, minus \$0.00001, and the exercise price of each pre-funded warrant equals \$0.00001 per share. This prospectus supplement also relates to the offering of the shares of common stock issuable upon exercise of such pre-funded warrants and common stock warrants. The common stock and pre-funded warrants will be sold in combination with an accompanying common stock warrant to purchase _____ shares of common stock (or _____ pre-funded warrants in lieu thereof) issued for each share of common stock or pre-funded warrant sold.

The shares of our common stock (or pre-funded warrants) and common stock warrants are immediately separable and will be issued separately. The common stock warrants will be immediately exercisable and will expire fifteen months from the date of issuance. The common stock warrants will have an exercise price of \$ _____ per whole share of our common stock, subject to adjustment as described elsewhere in this prospectus supplement.

Our common stock is listed on the Nasdaq Global Select Market under the symbol "CABA." On June 10, 2025, the last reported sale price of our common stock on the Nasdaq Global Select Market was \$2.35 per share. There is no established public trading market for the pre-funded warrants or the common stock warrants, and we do not expect a market to develop. In addition, we do not intend to apply for a listing of the pre-funded warrants or the common stock warrants on the Nasdaq Global Select Market, any other national securities exchange or any other nationally recognized trading system.

Investing in our securities involves a high degree of risk. See the information contained under **"Risk Factors"** beginning on page S-10 of this prospectus supplement and the documents incorporated by reference herein.

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

	<i>Per share and Accompanying Common Stock Warrant</i>	<i>Per Pre-funded Warrant and Accompanying Common Stock Warrant</i>	<i>Total</i>
Offering price	\$ _____	\$ _____	\$ _____
Underwriting discounts and commissions(1)	\$ _____	\$ _____	\$ _____
Proceeds, before expenses, to us	\$ _____	\$ _____	\$ _____

(1) See the section entitled "Underwriting" for additional disclosure regarding underwriter compensation and estimated offering expenses.

The underwriters may also exercise their option to purchase up to an additional \$ _____ of shares and/or warrants from us, at the public offering price, less the underwriting discount, for 30 days after the date of this prospectus supplement.

Delivery of the shares of common stock, the common stock warrants and the pre-funded warrants is expected to be made on or about _____, 2025.

Joint Book-Running Managers

Jefferies

TD Cowen

Cantor

Prospectus dated _____, 2025

We are responsible for the information contained and incorporated by reference in this prospectus supplement, in any accompanying prospectus, and in any related free writing prospectus we prepare or authorize. We have not authorized anyone to give you any other information, and we take no responsibility for any other information that others may give you. If you are in a jurisdiction where offers to sell, or solicitations of offers to purchase, the securities offered by this documentation are unlawful, or if you are a person to whom it is unlawful to direct these types of activities, then the offer presented in this document does not extend to you. The information contained in this document speaks only as of the date of this document, unless the information specifically indicates that another date applies. Our business, financial condition, results of operations and prospects may have changed since those dates.

TABLE OF CONTENTS

Prospectus Supplement

	Page
ABOUT THIS PROSPECTUS SUPPLEMENT	S-1
PROSPECTUS SUPPLEMENT SUMMARY	S-3
THE OFFERING	S-8
RISK FACTORS	S-10
CAUTIONARY STATEMENT ON FORWARD-LOOKING STATEMENTS	S-13
USE OF PROCEEDS	S-16
DIVIDEND POLICY	S-17
DILUTION	S-18
MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS FOR NON-U.S. HOLDERS	S-20
DESCRIPTION OF CAPITAL STOCK	S-26
DESCRIPTION OF WARRANTS	S-32
UNDERWRITING	S-36
LEGAL MATTERS	S-44
EXPERTS	S-44
WHERE YOU CAN FIND MORE INFORMATION	S-44
INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE	S-45

Prospectus

	Page
ABOUT THIS PROSPECTUS	1
RISK FACTORS	2
CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS	3
THE COMPANY	6
USE OF PROCEEDS	9
SECURITIES WE MAY OFFER	10
DESCRIPTION OF CAPITAL STOCK	11
DESCRIPTION OF DEBT SECURITIES	18
DESCRIPTION OF WARRANTS	24
DESCRIPTION OF UNITS	25
PLAN OF DISTRIBUTION	28
LEGAL MATTERS	32
EXPERTS	33
WHERE YOU CAN FIND MORE INFORMATION	34
INCORPORATION BY REFERENCE	35

ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement is part of a shelf registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or the SEC. Under the shelf registration process, we may offer from time to time various securities, of which this offering of shares of our common stock, common stock warrants and pre-funded warrants to certain investors is a part. Such registration statement also includes exhibits that provide more detail on the matters discussed in this prospectus supplement and the accompanying prospectus.

If the information contained in this prospectus supplement differs or varies from the information contained in any document incorporated by reference herein that was filed with the SEC before the date of this prospectus supplement, you should rely on the information set forth in this prospectus supplement. If any statement in one of these documents is inconsistent with a statement in another document having a later date (for example, a subsequently filed document deemed incorporated by reference in this prospectus supplement), the statement in the document having the later date modifies or supersedes the earlier statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus supplement.

You should rely only on the information contained or incorporated by reference in this prospectus supplement. We have not, and the underwriters have not, authorized anyone to provide you with information that is in addition to or different from that contained or incorporated by reference in this prospectus supplement or contained in any permitted free writing prospectuses we have authorized for use in connection with this offering. We and the underwriters take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may provide.

The information contained in this prospectus supplement and the documents incorporated by reference herein is accurate only as of their respective dates, regardless of the time of delivery of any such document or the time of any sale of our common stock, common stock warrants or pre-funded warrants. Our business, financial condition, results of operations and prospects may have changed since those dates. It is important for you to read and consider all information contained or incorporated by reference in this prospectus supplement in making your investment decision. You should read this prospectus supplement, as well as the documents incorporated by reference herein, the additional information described under the section titled “Where You Can Find More Information” and “Incorporation of Certain Documents by Reference” in this prospectus supplement and any free writing prospectus that we have authorized for use in connection with this offering, before investing in our common stock, common stock warrants or pre-funded warrants.

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

We use various trademarks, trade names and service marks in our business, including without limitation our corporate name and logo. All other trademarks, trade names or service marks referred to in this prospectus supplement are the property of their respective owners. Solely for convenience, the trademarks, trade names and service marks in this prospectus supplement may be referred to without the ®, ™ and SM symbols, but such references should not be construed as any indicator that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto. This prospectus supplement and the documents incorporated by reference herein also contain estimates, projections and other information concerning our industry, our business, and the markets for certain diseases, including data regarding the estimated size of those markets, and the incidence and prevalence of certain medical conditions. Information that is based on estimates, forecasts,

Table of Contents

projections, market research or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances reflected in this information. Unless otherwise expressly stated, we obtained this industry, business, market and other data from reports, research surveys, studies and similar data prepared by market research firms and other third parties, industry, medical and general publications, government data and similar sources.

We are offering to sell, and seeking offers to buy, shares of our common stock, common stock warrants and pre-funded warrants to certain investors only in jurisdictions where such offers and sales are permitted. The distribution of this prospectus supplement and the offering of our common stock, common stock warrants and pre-funded warrants in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus supplement must inform themselves about, and observe any restrictions relating to, the offering of our common stock, common stock warrants and pre-funded warrants and the distribution of this prospectus supplement outside the United States. This prospectus supplement does not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities offered by this prospectus supplement by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

Unless the context suggests otherwise, all references in this prospectus supplement and any free writing prospectus to “us,” “our,” “Cabaletta Bio,” “we,” the “Company” and similar designations refer to Cabaletta Bio, Inc.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights selected information about us and this offering and does not contain all of the information that you should consider before investing in our securities. Before investing in our common stock, common stock warrants and pre-funded warrants, you should carefully read the information contained and incorporated by reference in this prospectus supplement, including the sections titled “Risk Factors” and the financial statements and accompanying notes.

Our Company

We are a clinical-stage biotechnology company focused on the discovery and development of innovative engineered T cell therapies that have the potential to provide deep and durable, perhaps curative, responses with one-time administration for patients with autoimmune diseases. Our proprietary CABA®, or Cabaletta Approach to B cell Ablation, platform encompasses two strategies. Our CARTA, or Chimeric Antigen Receptor T cells for Autoimmunity, approach is designed to potentially reset the immune system. Our legacy CAART, or Chimeric AutoAntibody Receptor T cells, approach is designed to engineer T cells to selectively engage and eliminate only disease-causing B cells. We believe our CABA® platform has the potential to safely enable complete and durable responses for a broad range of autoimmune diseases and that it has potential applicability across dozens of autoimmune diseases that we have identified, evaluated and prioritized.

Resecabtagene autoleucel (rese-cel, formerly referred to as CABA-201) is a 4-1BB co-stimulatory domain-containing fully human CD19-CAR T construct designed to treat patients with a broad range of autoimmune diseases and our lead product candidate within the CARTA strategy. Rese-cel is designed to achieve transient and deep depletion of all B cells following a single, weight-based infusion of T cells that are engineered to express an antibody fragment that recognizes a B cell receptor expressed on the surface of all B cells. The construct is designed to allow for the deep elimination of all B cells, including all B cells that contribute to disease, with subsequent repopulation by healthy naïve B cells. This approach has the potential to reset the immune system and result in meaningful clinical responses without chronic therapy requirements in patients.

The United States Food and Drug Administration, or the FDA, granted clearance of our rese-cel Investigational New Drug, or IND, application for treatment of systemic lupus erythematosus, or SLE, in patients with active lupus nephritis, or LN, or active SLE without renal involvement in March 2023. We announced the FDA subsequently granted clearance of our rese-cel IND applications for treatment of idiopathic inflammatory myopathies, or myositis in May 2023, systemic sclerosis, or SSc in October 2023, generalized myasthenia gravis, or gMG in November 2023, and multiple sclerosis, or MS in January 2025. In May 2024, we announced that we are working with active clinical sites to incorporate the RESET-PV™ trial as a sub-study within the Phase 1 DesCAARTes™ trial following the submission of a protocol amendment, to evaluate rese-cel in patients with mucosal pemphigus vulgaris, or mPV, and mucocutaneous pemphigus vulgaris, or mcPV.

RESET-Myositis

The three adult myositis subtypes, dermatomyositis, or DM, anti-synthetase syndrome, or ASyS, and immune-mediated necrotizing myopathy, or IMNM, being evaluated in the RESET-Myositis™ Phase 1/2 clinical trial of rese-cel affect approximately 80,000 patients in the U.S. and approximately 85,000 patients in Europe. Myositis typically affects middle-aged individuals, particularly women, and disease is often refractory, despite existing therapies. In the United States, we believe approximately 20% to 25% of the prevalent population, or 16,000 to 20,000 people, would be potentially eligible patients for rese-cel.

The RESET-Myositis™ Phase 1/2 clinical trial, which is actively enrolling patients, is designed to treat six patients with DM, six patients with ASyS, six patients with IMNM, as well as six patients with juvenile idiopathic inflammatory myopathy, or JIIM, all in separate parallel cohorts, with a single weight-based dose of 1.0×10^6 cells/kg. We announced the FDA granted Fast Track Designation for rese-cel for the treatment of

patients with dermatomyositis and Orphan Drug Designation for rese-cel for the treatment of myositis in January and February 2024, respectively. In March 2024, we announced the FDA granted Rare Pediatric Disease designation for rese-cel for juvenile dermatomyositis. In May 2025, we announced the FDA granted Regenerative Medicine Advanced Therapy, or RMAT, to rese-cel for the treatment of myositis.

Following a Type C meeting with the FDA and receipt of meeting minutes in April 2025, we are planning to implement the following design for two single-arm, sub-type disease-specific registrational cohorts in the ongoing RESET-MyositisTM trial, either of which, if successful, enable a future Biologics License Application, or BLA, submission for rese-cel in myositis. One cohort will evaluate approximately 15 patients with either DM or ASyS, and one cohort will evaluate approximately 15 patients with IMNM. Inclusion and exclusion criteria will remain highly similar to the Phase 1/2 cohorts. While a BLA for either cohort can be submitted independently, we believe that together, these two cohorts have the potential to support a broad label to address many of the approximately 80,000 myositis patients in the U.S., including those with or without a history of IVIg use. The registrational cohorts will evaluate the same single, weight-based infusion of rese-cel at 1×10^6 cells/kg as used in the Phase 1/2 myositis cohorts. The primary endpoint for the registrational cohorts is based on the total improvement score, or TIS, to evaluate patient outcomes within 26 weeks of rese-cel infusion. The FDA supported the use of pooled rese-cel safety data from across the entire RESETTM clinical trial program to supplement myositis specific safety data for the BLA submission in myositis. In the recent Type C meeting, we aligned with the FDA on the size of the required safety database, which is expected to be approximately 100 autoimmune disease patients treated with the same single weight-based dose, approximately 50% of which have already been enrolled across the RESETTM clinical development program. We also aligned with the FDA on combining the Phase 1/2 DM & ASyS cohorts into a single cohort designed to treat six patients with either DM or ASyS. As of May 30, 2025, there are 14 sites open and recruiting for the RESET-Myositis program, and the Phase 1/2 cohorts are fully enrolled.

RESET-SLE

SLE is a chronic, potentially severe, autoimmune disease, most commonly impacting young women between the ages of 15 and 40 with higher frequency and more severity in people of color, where the immune system attacks healthy tissue throughout the body. SLE affects an estimated up to 320,000 patients in the U.S., and 150,000 patients in Europe, with LN as the most common end-organ manifestation, affecting approximately 30-40% of SLE patients.

The RESET-SLETM Phase 1/2 clinical trial, which is actively enrolling patients, is designed to treat six SLE patients with active LN, and in a separate parallel cohort, six patients with active SLE without renal involvement, with a single weight-based dose of 1.0×10^6 cells/kg. In May 2023, we announced the FDA granted Fast Track Designation for rese-cel in patients with SLE and LN. In March 2024, Health Canada issued a No Objection Letter in response to a Clinical Trial Application, or CTA, for the RESET-SLETM trial, and in October 2024, the European Medicines Agency allowed a CTA submitted by Cabaletta for the RESET-SLETM trial to proceed, enabling us to begin the process of activating clinical trial sites and pursuing patient enrollment in these geographies. As of May 30, 2025, there are 21 sites open and recruiting for the RESET-SLE trial. Leveraging FDA alignment in myositis, we anticipate aligning with the FDA on the registrational cohort design for studies in SLE/LN in 3Q25.

RESET-SSc

SSc is a rare and potentially fatal chronic autoimmune disease characterized by progressive skin and internal organ fibrosis that can be life-threatening, including interstitial lung disease, pulmonary hypertension, and scleroderma renal crisis. SSc affects approximately 90,000 patients in the U.S. and approximately 60,000 patients in Europe, typically middle-aged individuals, particularly women.

The actively enrolling RESET-SScTM Phase 1/2 clinical trial of rese-cel is designed to treat six patients with severe skin manifestations and six patients with severe organ involvement associated with SSc, each in separate parallel cohorts, with a single weight-based dose of 1.0×10^6 cells/kg. We announced the FDA granted Fast Track Designation for rese-cel for SSc patients and Orphan Drug Designation for rese-cel for SSc in January and March 2024, respectively. As of May 30, 2025, there are 10 sites open and recruiting for the RESET-SSc trial. Leveraging FDA alignment in myositis, we anticipate aligning with the FDA on the registrational cohort design for studies in SSc in 4Q25.

RESET-MG

MG is a rare autoimmune disease characterized by autoantibodies that interfere with signaling at the neuromuscular junction, leading to potentially life-threatening muscle weakness. The majority of patients with MG have autoantibodies known to be pathogenic based on their interference with proteins in the NMJ, of which the majority target AChR. gMG affects approximately 55,000 patients in the U.S. and approximately 100,000 patients in Europe. Symptoms of gMG include profound muscle weakness throughout the body, disabling fatigue, and potential shortness of breath due to respiratory muscle weakness, with risk for episodes of respiratory failure.

The actively enrolling RESET-MGTM Phase 1/2 clinical trial of rese-cel is designed to treat six patients with AChR-positive gMG and six patients with AChR-negative gMG, each in separate parallel cohorts, with a single weight-based dose of 1.0×10^6 cells/kg. As of May 30, 2025, there are 11 sites open and recruiting for the RESET-MG trial. Leveraging FDA alignment in myositis, we anticipate aligning with the FDA on the registrational cohort design for studies in MG in 1H26.

RESET-PV

Pemphigus vulgaris, or PV, is an autoimmune disease that occurs when the immune system produces antibodies that attack a protein called desmoglein, or DSG. DSG normally enables skin cells and the cells lining the inside of your mouth, nose, throat, eyelids, etc. to bind tightly together. Disruption by the antibodies directed to DSG causes the painful blisters and erosions characteristic of PV. Approximately 15,000 patients in the U.S. and approximately 20,000 patients in Europe are affected by PV.

The ongoing RESET-PVTM trial is designed to evaluate rese-cel as a monotherapy without preconditioning in patients with mucosal pemphigus vulgaris, or mPV, and mucocutaneous pemphigus vulgaris, or mcPV. As of May 30, 2025, there are 10 sites open and recruiting in the RESET-PV trial. We anticipate sharing initial dose data from the RESET-PV trial in 2H25.

RESET-MS

Multiple sclerosis is an autoimmune-mediated demyelinating disease of the central nervous system. The immune system attack on nerves in the brain and spinal cord impairs nerve electrical conduction, resulting in a range of symptoms including muscle weakness, sensory loss, visual impairment, incoordination, memory loss, fatigue, and walking difficulty. MS is classified into relapsing or progressive forms based on the pattern of clinical symptoms over time. MS affects approximately 750,000 patients in the U.S. and approximately 550,000 patients in Europe.

The RESET-MSTM trial is a Phase 1/2 open-label, dose escalation study of rese-cel in subjects with relapsing and progressive forms of MS, evaluated in separate cohorts. In January 2025, we announced the FDA granted Fast Track Designation for rese-cel for relapsing and progressive forms of MS.

Manufacturing

Our manufacturing strategy is comprised of two stages. The initial stage is designed to leverage the extensive early-stage manufacturing expertise of our academic partners and contract development and

manufacturing organizations, or CDMOs, for early development and clinical supply, and in parallel partner with commercially compliant CDMOs to support late-stage clinical studies and commercial production. Our aim is to achieve full manufacturing readiness through expanded CDMO relationships, establishment of our own manufacturing facilities, and/or through strategic partnership(s). For cell manufacturing, we have collaborated with the Clinical Cell and Vaccine Production Facility, or CVPF, at Penn, as well as Minaris Advanced Therapies, LLC, or Minaris Advanced Therapies (f/k/a WuXi Advanced Therapies, Inc.), to serve as an additional and commercially compliant cell manufacturing partner for our RESET™ clinical trials. We also entered into a new technology transfer agreement and Development and Manufacturing Services Agreement in July 2024 and December 2024, respectively, with Lonza Houston Inc., or Lonza, to serve as one of our manufacturing partners for the global clinical development of rese-cel, including potential late-stage clinical trials and preparations for commercial readiness. Our manufacturing process at Lonza is anticipated to come online for our ongoing clinical trials in early 3Q25. For supply of lentiviral vector for the clinical and commercial manufacturing of rese-cel, we are currently working with Oxford Biomedica (UK) Limited, or Oxford and have previously manufactured lentiviral vector at the Children's Hospital of Philadelphia, or CHOP.

As part of our innovative manufacturing strategy where we intend to increase scale, reduce cost of goods and improve patient experience, in November 2023, we partnered with Cellares Corp., or Cellares, to evaluate their automated manufacturing platform, the Cell Shuttle™, through the Cellares Technology Adoption Program, or TAP. In August 2024, we expanded our partnership with Cellares to facilitate the potential to incorporate the Cellares manufacturing platform to support the RESET™ clinical program. In March 2025, we and Cellares announced the successful conclusion of the TAP on Cellares' Cell Shuttle™, facilitating the potential integration of the Cell Shuttle™ into our clinical and commercial, if approved, manufacturing strategy for rese-cel.

Recent Developments

EULAR Clinical Data

In February 2025, we announced updated clinical and translational data from the first 10 patients in the RESET™ clinical trial program, with a data cut off of January 8, 2025. We are presenting new clinical and translational data from 18 evaluable patients who were dosed with rese-cel across the RESET-Myositis, RESET-SLE and RESET-SSc trials at the EULAR 2025 Congress in three oral presentations, as of the datacut-off dates of May 6, 2025, for the RESET-Myositis and RESET-SSc trials and June 2, 2025, for the RESET-SLE trial.

In the RESET-Myositis trial, 7 out of 8 patients achieved a clinical response off all immunomodulators and off, or while actively tapering, steroids. Clinical responses were sustained throughout the follow-up period in all 7 responding patients. All 4 ASyS and DM patients achieved a clinically meaningful TIS response, with 3 of these patients having achieved a major TIS response as of the most recent follow-up. Clinically meaningful drug-free TIS responses were observed in 3 of 4 refractory patients with IMNM, which are consistent with published data. These findings continue to reflect the more modest TIS responses in IMNM compared to other myositis subtypes. Regarding safety findings, 4 of 8 patients experienced Grade 1 CRS (fever) and no ICANS was observed.

In the RESET-SLE trial, 7 out of 7 patients with sufficient follow-up to evaluate efficacy achieved substantial SLEDAI reductions off all immunomodulators and glucocorticoids. All 3/4 of the SLE patients without nephropathy achieved definition of remission in SLE, or DORIS, as of the latest follow-up, and the first LN patient achieved DORIS and a complete renal response. Follow up is continuing on the other two LN patients who were treated more recently. In the 8 patients with safety follow-up, 2 of 8 patients experienced Grade 1 CRS (fever), and 1 ICANS event was observed (Grade 4, previously reported).

In the RESET-SSc trial, both patients in the severe skin cohort had meaningful modified Rodnan Skin Score (mRSS) improvements after discontinuing immunomodulatory drugs and steroids, which was sustained out to 6

Table of Contents

months in the first patient. The first patient also met the revised Composite Response Index in Systemic Sclerosis (CRISS) criteria starting at 3 months, highlighting the potential of rese-cel to provide a drug-free, clinical response in patients with SSc. 1 patient experienced transient Grade 2 CRS, and 1 ICANS event was observed (Grade 3, previously reported)

Overall, in the 18 evaluable patients who were dosed with rese-cel with at least 4 weeks of follow-up across the RESET-Myositis, RESET-SLE and RESET-SSc trials, 94% had either no CRS or Grade 1 CRS (transient fever) and 89% had no ICANS (2 patients with ICANS events previously reported). Peak rese-cel expansion was observed within approximately two weeks across myositis, lupus, and SSc patients. B cells were rapidly and transiently reduced in peripheral blood within the first month, and their repopulation was observed beginning approximately two months after infusion, generally expressing a transitional, naïve phenotype. Tissue-resident B cell depletion was confirmed via a lymph node biopsy in the first systemic sclerosis patient.

As of May 30, 2025, multiple Phase 1/2 disease cohorts are fully enrolled across the RESETTM clinical development program with 51 patients enrolled and 24 patients dosed.

Corporate Information

We were incorporated under the laws of the state of Delaware in April 2017. We have two subsidiaries, Cabaletta Bio GmbH incorporated in Switzerland and Cabaletta Bio (Germany) GmbH, incorporated in Germany. Our principal executive offices are located at 2929 Arch Street, Suite 600, Philadelphia, Pennsylvania 19104. Our telephone number is (267) 759-3100, and our website is located at www.cabalettabio.com. No portion of our website is incorporated by reference into this prospectus supplement. We do not incorporate the information on or accessible through our website into this prospectus supplement, and you should not consider any information on, or that can be accessed through, our website as part of this prospectus supplement. Our common stock trades on the Nasdaq Global Select Market under the symbol “CABA”.

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

Implications of Being a Smaller Reporting Company

We qualify as a “smaller reporting company,” as defined in Rule 12b-2 under the Securities Exchange Act of 1934, as amended. We would cease to be a smaller reporting company if we have a public float in excess of \$250 million, or have annual revenues in excess of \$100 million and a public float in excess of \$700 million, determined on an annual basis on the last business day of our second fiscal quarter. Consequently, we may take advantage of specified reduced disclosure and other requirements that are otherwise applicable generally to public companies, including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act and reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements.

THE OFFERING

Common stock offered by us:	<p>\$ of shares of our common stock (or shares if the underwriters exercise their option to purchase additional shares in full).</p> <p>Each share of common stock is being offered and sold together with an accompanying common stock warrant to purchase shares of common stock (or pre-funded warrants in lieu thereof) at a combined offering price of \$.</p>
Pre-funded Warrants Offered by us:	<p>We are also offering, in lieu of common stock to certain investors, pre-funded warrants to purchase shares of common stock. Each pre-funded warrant is being offered and sold together with an accompanying common stock warrant to purchase shares of common stock (or pre-funded warrants in lieu thereof) at a combined offering price of \$. The purchase price of each pre-funded warrant equals the price per share at which the shares of common stock and accompanying stock warrant are being sold to the public in this offering, minus \$0.00001, and the exercise price of each pre-funded warrant will be \$0.00001 per share. Each pre-funded warrant will be exercisable at any time after the date of issuance, subject to an ownership limitation. See “Description of Warrants.” This prospectus supplement also relates to the offering of the shares of common stock issuable upon exercise of such pre-funded warrants.</p>
Common stock warrants offered by us	<p>Common stock warrants to purchase up to shares of our common stock (or pre-funded warrants in lieu thereof). Each share of our common stock or pre-funded warrant is being offered and sold together with an accompanying common stock warrant to purchase shares of our common stock (or pre-funded warrants in lieu thereof).</p> <p>Each common stock warrant will have an initial exercise price per share of \$, subject to certain adjustments, are exercisable immediately, and will expire fifteen months from the date of issuance. For more information, see the section titled “Description of Warrants” on page S-32 of this prospectus supplement. This prospectus supplement also relates to the offering of the shares of our common stock issuable upon exercise of the common stock warrants (or pre-funded warrants in lieu thereof).</p>
Option to purchase additional shares	<p>We have granted the underwriters an option, exercisable for 30 days from the date of this prospectus supplement, to purchase up to an additional shares of our common stock and/or common stock warrants to purchase shares of our common stock.</p>
Common stock to be outstanding after this offering:	<p>shares (or shares if the underwriters exercise their option to purchase additional shares in full) assuming no exercise of any warrants included in this offering.</p>
Use of proceeds:	<p>Our management will retain broad discretion regarding the allocation and use of the net proceeds. We currently intend to use the net proceeds from this offering, together with our existing cash and cash equivalents, primarily to fund the expanded clinical development of rese-cel in multiple indications including the initiation of potentially</p>

registrational studies, and to further advance our manufacturing capabilities in preparation for late-stage clinical trials and commercial readiness for rese-cel, in addition to working capital and general corporate purposes. Based upon our current operating plan, we believe that the net proceeds from this offering together with our existing cash and cash equivalents, will enable us to fund our operating expenses and capital expenditure requirements into . See “Use of Proceeds.”

Risk factors:

Investing in our securities involves risks. See “Risk Factors” beginning on pageS-10 of this prospectus supplement and under similar headings in the documents incorporated by reference herein for a discussion of the factors you should carefully consider before deciding to purchase our securities.

Nasdaq Global Select
Market symbol:

“CABA” There is no established public trading market for the common stock warrants or the pre-funded warrants and we do not expect a market to develop. In addition, we do not intend to apply for listing of the common stock warrants or the pre-funded warrants on any securities exchange or recognized trading system.

All information in this prospectus supplement related to the number of shares of our common stock to be outstanding immediately after this offering is based on 50,743,101 shares of our common stock outstanding as of March 31, 2025. The number of shares outstanding as of March 31, 2025 excludes:

- 14,066,205 shares of common stock issuable upon the exercise of stock options outstanding as of March 31, 2025, at a weighted average exercise price of \$8.80 per share;
- 167,668 shares of common stock issuable upon the exercise of outstanding stock options granted subsequent to March 31, 2025, at a weighted average exercise price of \$1.85 per share;
- 596,630 shares of common stock reserved for future issuance under our 2019 Stock Option and Incentive Plan, as amended, or the 2019 Plan, and our 2019 Employee Stock Purchase Plan, or the 2019 ESPP, as of March 31, 2025; and
- 1,384,865 shares of common stock issued in a series of sales pursuant to our “at-the-market” program in accordance with our Sales Agreement with TD Securities (USA) LLC (as successor to Cowen and Company, LLC), or the Sales Agreement, since March 31, 2025, at an average price of \$1.91 per share for aggregate net proceeds of approximately \$2.6 million, after deducting sales agent commissions, but before deducting any expenses related to such sales.

To the extent that any options are exercised, new options are issued or we otherwise issue additional shares of common stock or pre-funded warrants or warrants in the future at a price less than the public offering price, there may be further dilution to new investors purchasing common stock, common stock warrants or pre-funded warrants in this offering. To the extent that pre-funded warrants or common stock warrants purchased in this offering are exercised, investors purchasing our securities in this offering may experience dilution. In addition, we may choose to raise additional capital because of market conditions or strategic considerations, even if we believe that we have sufficient funds for our current or future operating plans. If we raise additional capital through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

Unless otherwise stated, all information contained in this prospectus supplement assumes no exercise of stock options after March 31, 2025. Except as otherwise indicated, all information in this preliminary prospectus supplement assumes no exercise of the pre-funded warrants or common stock warrants we are offering to certain investors and that the underwriters do not exercise their option to purchase up to of additional shares of our common stock and up to of additional common stock warrants.

RISK FACTORS

Investing in our securities involves a high degree of risk. Before making an investment decision, you should carefully consider the risks described below and in our most recent Annual Report on Form 10-K and any subsequent Quarterly Reports on Form 10-Q or Current Reports on Form 8-K, as well as any amendments thereto reflected in subsequent filings with the SEC, each of which are incorporated by reference in this prospectus supplement, and all of the other information in this prospectus supplement, including our financial statements and related notes incorporated by reference herein. If any of these risks is realized, our business, financial condition, results of operations and prospects could be materially and adversely affected. In that event, the trading price of our common stock could decline and you could lose part or all of your investment. Additional risks and uncertainties that are not yet identified or that we currently believe to be immaterial may also materially harm our business, financial condition, results of operations and prospects and could result in a complete loss of your investment.

Risks Related to This Offering

We have broad discretion over the use of the net proceeds from this offering and our existing cash and may not use them effectively.

Our management will have broad discretion over the application of the net proceeds from this offering, including for any of the purposes described in the section titled “Use of Proceeds,” as well as our existing cash, and you will be relying on the judgment of our management regarding such application. You will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being used effectively. Our management might not apply the net proceeds or our existing cash in ways that ultimately increase the value of your investment. If we do not invest or apply the net proceeds from this offering or our existing cash in ways that enhance stockholder value, we may fail to achieve expected results, which could cause our stock price to decline. Pending their use, we may invest the net proceeds from this offering in short-term U.S. Treasury securities with insignificant rates of return. These investments may not yield a favorable return to our stockholders.

If you purchase our securities in this offering, you may incur immediate and substantial dilution in the net tangible book value of your shares.

The offering price per share in this offering may exceed the net tangible book value per share of our common stock outstanding prior to this offering. After giving effect to (i) an aggregate of shares of our common stock sold at a price of \$ per share and accompanying common stock warrant and (ii) pre-funded warrants to purchase shares of our common stock sold at a public offering price of \$ per pre-funded warrant and accompanying common stock warrant, and after deducting commissions and estimated offering expenses payable by us, you will experience immediate dilution of \$ per share, representing the difference between our as adjusted net tangible book value per share as of March 31, 2025 after giving effect to this offering at the offering price. The exercise of outstanding stock options would result in further dilution of your investment.

This dilution would be due to the substantially lower price paid by some of our investors who purchased shares prior to this offering as compared to the price offered to the public in this offering and the exercise of stock options granted to our employees, directors and consultants. In addition, we have a significant number of stock options outstanding. The exercise of any of these outstanding options would result in further dilution. As a result of the dilution to investors purchasing shares in this offering, investors may receive significantly less than the purchase price paid in this offering, if anything, in the event of our liquidation. Further, because we expect we will need to raise additional capital to fund our future activities, we may in the future sell substantial amounts of common stock or securities convertible into or exchangeable for common stock. Future issuances of common stock or common stock-related securities, together with the exercise of outstanding stock options, if any, may result in further dilution. For a further description of the dilution that you will experience immediately after this offering, see the section titled “Dilution.”

The market price of our common stock may be adversely affected by market conditions affecting the stock markets in general, including price and trading fluctuations on the Nasdaq Global Select Market.

Market conditions may result in volatility in the level of, and fluctuations in, market prices of stocks generally and, in turn, our common stock and sales of substantial amounts of our common stock in the market, in each case being unrelated or disproportionate to changes in our operating performance. Concerns over global stability and economic conditions in the U.S. and abroad have contributed to the extreme volatility of the markets, which may have an effect on the market price of our common stock.

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

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

We will not receive a significant amount or any additional funds upon the exercise of the pre-funded warrants.

Each pre-funded warrant is exercisable for \$0.00001 per share of common stock underlying such warrant, which may be paid by way of a cashless exercise, meaning that the holder may not pay a cash purchase price upon exercise, but instead would receive upon such exercise the net number of shares of common stock determined according to the formula set forth in the pre-funded warrant. Accordingly, we will not receive a significant amount or any additional funds upon the exercise of the pre-funded warrants.

The common stock warrants are speculative in nature. You may not be able to recover your investment in the common stock warrants, and the common stock warrants may expire worthless.

The common stock warrants do not confer any rights of our common stock ownership on their holders, such as voting rights, but rather merely represent the right to acquire shares of our common stock at a fixed price for a limited period of time. Specifically, immediately after the date of issuance, holders of common stock warrants may exercise their right to acquire the underlying common stock (or pre-funded warrants in lieu thereof) and pay an exercise price per share equal to \$, subject to certain adjustments, and the common stock warrants will expire fifteen months after the date of issuance. Moreover, following this offering, the market value of the common stock warrants, if any, is uncertain and there can be no assurance that the market value of the common stock warrants will equal or exceed their imputed offering price. In addition, there can be no assurance that the market price of our common stock will equal or exceed the exercise price of the common stock warrants for a sustained period of time or at all, and, consequently, it may not ever be profitable for holders of the common stock warrants to exercise the common stock warrants.

Holders of pre-funded warrants or common stock warrants purchased in this offering will have no rights as common stockholders until such holders exercise their pre-funded warrants or common stock warrants and acquire our common stock.

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

Significant holders or beneficial holders of our common stock may not be permitted to exercise warrants that they hold.

A holder of a warrant will not be entitled to exercise any portion of any warrant, (i) if immediately prior to exercise the holder (together with its affiliates) beneficially owns an aggregate number of shares of our common stock greater than 4.99% or 9.99%, as applicable, of the number of shares of our common stock outstanding immediately before giving effect to the exercise of the warrant or (ii) to the extent that immediately following exercise, the holder (together with its affiliates) would beneficially own in excess of 4.99% or 9.99%, as applicable, of the number of shares of common stock outstanding immediately after giving effect to the issuance of such shares of common stock unless such percentage is increased upon at least 61 days' prior notice, but not in excess of 19.99%. As a result, you may not be able to exercise your warrants for shares of our common stock at a time when it would be financially beneficial for you to do so. In such circumstance, you could seek to sell your warrants to realize value, but you may be unable to do so in the absence of an established trading market for the warrants.

If we do not maintain a current and effective registration statement relating to the shares of our common stock issuable upon exercise of the pre-funded warrants or common stock warrants, holders will only be able to exercise such warrants on a "cashless basis."

If we do not maintain a current and effective registration statement relating to the shares of our common stock issuable upon exercise of the pre-funded warrants or common stock warrants at the time that holders wish to exercise such pre-funded warrants or common stock warrants, they will only be able to exercise them on a "cashless basis" provided that an exemption from registration is available. As a result, the number of shares of our common stock that holders will receive upon exercise of the pre-funded warrants or common stock warrants will be fewer than it would have been had such holder exercised the warrant for cash, and holders may be limited in their ability to immediately sell shares upon exercise subject to volume or other securities law limitations. Further, if an exemption from registration is not available, holders would not be able to exercise on a cashless basis and would only be able to exercise their pre-funded warrants or common stock warrants for cash if a current and effective registration statement relating to the shares of our common stock issuable upon exercise of the pre-funded warrants or common stock warrants is available.

CAUTIONARY STATEMENT ON FORWARD-LOOKING STATEMENTS

This prospectus supplement and the information and documents incorporated by reference herein, contain forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. Any statements about our expectations, beliefs, plans, objectives, assumptions or future events or performance are not historical facts and may be forward-looking. These statements are often, but are not always, made through the use of words or phrases such as “may,” “will,” “could,” “should,” “expects,” “intends,” “plans,” “anticipates,” “believes,” “estimates,” “predicts,” “projects,” “potential,” “continue,” and similar expressions, or the negative of these terms, or similar expressions. Accordingly, these statements involve estimates, assumptions, risks and uncertainties which could cause actual results to differ materially from those expressed in them. Any forward-looking statements are qualified in their entirety by reference to the factors discussed throughout this prospectus supplement and the documents incorporated by reference herein, and in particular those factors referenced in the section “Risk Factors.”

This prospectus supplement, any related free writing prospectus and the information and documents incorporated by reference herein contain forward-looking statements that are based on our management’s belief and assumptions and on information currently available to our management. Although we believe that the expectations reflected in these forward-looking statements are reasonable, these statements relate to future events or our future operational or financial performance, and involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by these forward-looking statements. Forward-looking statements include, but are not limited to, statements about:

- the success, cost and timing and conduct of our clinical trial program, including our Phase 1/2 RESET™ clinical trials for rese-cel, our MusCAARTes™ trial, and any other product candidates, including statements regarding the timing of initiation, enrollment and completion of the clinical trials and the period during which the results of the clinical trials will become available;
- the expected timing and significance around the announcement of safety, biologic activity and/or any additional clinical data from our RESET™ clinical trials for rese-cel or MusCAARTes™ trial;
- the timing of and our ability to obtain and maintain regulatory approval of our product candidates, including rese-cel, MuSK-CAART, and our other product candidates, in any of the indications for which we plan to develop them, and any related restrictions, limitations, and/or warnings in the label of an approved product candidate;
- our expectations for the tolerability and clinical activity of rese-cel and ability to advance this product candidate through our license agreement with Nanjing IASO Biotherapeutics Co., Ltd.;
- the potential benefits of our Orphan Drug, Rare Pediatric Disease and Fast Track designations;
- our expected use of proceeds from sales of our common stock in “at-the-market” offerings and other offerings, including this offering, and the period over which such proceeds, together with existing cash, will be sufficient to extend our current cash runway beyond our current expectations and meet our operating needs, including our ability to continue as a going concern;
- our plans to pursue research and development of other product candidates;
- the potential advantages of our proprietary Cabaletta Approach for B cell Ablation platform, called our CAB® platform, and our product candidates;
- the extent to which our scientific approach and CAB® platform may potentially address a broad range of diseases;
- the potential benefits and success of our arrangements with Penn, CHOP, and Minaris Advanced Therapies;

Table of Contents

- our ability to successfully leverage our research and translational insights;
- our expectations regarding the results observed with the similarly-designed construct employed in recent academic publications, including the dosing regimen, and the implications on rese-cel;
- our ability to successfully commercialize our product candidates, including rese-cel, MuSK-CAART and any other product candidates;
- the potential receipt of revenue from future sales of rese-cel, MuSK-CAART and any other product candidates, if approved;
- the rate and degree of market acceptance and clinical utility of rese-cel, MuSK-CAART and any other product candidates;
- our estimates regarding the potential market opportunity for rese-cel, MuSK-CAART and any other product candidates, and our ability to serve those markets;
- our sales, marketing and distribution capabilities and strategy, whether alone or with potential future collaborators;
- our ability to establish and maintain arrangements or a facility for manufacture of rese-cel, MuSK-CAART and any other product candidates;
- our ability to obtain funding for our operations, including funding necessary to initiate and complete our RESET™ clinical trials of rese-cel, our MusCAARTes™ trial and any ongoing preclinical studies of other product candidates;
- our expectations for the efficiency of the trial design for our RESET™ clinical trials for rese-cel and the potential success and therapeutic benefits of rese-cel, including our belief that rese-cel may enable an “immune system reset” and provide deep and durable responses in patients across an increasing number of autoimmune diseases;
- the potential achievement of milestones and receipt of payments under our collaborations;
- our ability to enter into additional collaborations with existing collaborators or other third parties;
- our expectations regarding our ability to obtain and maintain intellectual property protection for our product candidates and our ability to operate our business without infringing on the intellectual property rights of others;
- our expectations regarding international expansion and results of our efforts to do so;
- the success of competing therapies that are or become available, and our competitive position;
- the accuracy of our estimates regarding expenses, future revenues, capital requirements and needs for additional financing;
- the impact of government laws and regulations in the United States and foreign countries;
- the effect of any geopolitical conflicts or new or increased international tariffs, including mitigation efforts and economic effects, on any of the foregoing or other aspects of our business operations, including but not limited to any preclinical studies or research and development efforts, ongoing clinical trials and future clinical trials; and
- our ability to attract and retain key scientific or management personnel.

These forward-looking statements are neither promises nor guarantees of future performance due to a variety of risks and uncertainties, many of which are beyond our control, which could cause actual results to differ materially from those indicated by these forward-looking statements, including, without limitation the risk factors and cautionary statements described in other documents that we file from time to time with the SEC, specifically under “Item 1A: Risk Factors” and elsewhere in our most recent Annual Report on Form 10-K and any subsequent Quarterly Reports on Form 10-Q or Current Reports on Form 8-K, and the section of this prospectus supplement titled “Risk Factors.”

[Table of Contents](#)

The forward-looking statements in this prospectus supplement, any related free writing prospectus and the documents incorporated by reference represent our views as of their respective dates. We anticipate that subsequent events and developments will cause our views to change. However, while we may elect to update these forward-looking statements at some point in the future, we assume no obligation to update or revise any forward-looking statements except to the extent required by applicable law. You should, therefore, not rely on these forward-looking statements as representing our views as of any date subsequent to the dates on which they were made.

This prospectus supplement, any related free writing prospectus and the documents incorporated by reference also contain estimates, projections and other information concerning our industry, our business, and the markets for certain diseases, including data regarding the estimated size of those markets, and the incidence and prevalence of certain medical conditions. Information that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances reflected in this information. Unless otherwise expressly stated, we obtained this industry, business, market and other data from reports, research surveys, studies and similar data prepared by market research firms and other third parties, industry, medical and general publications, government data and similar sources.

USE OF PROCEEDS

We estimate that we will receive net proceeds of approximately \$ million (or approximately \$ million if the underwriters exercise in full their option to purchase additional shares), after deducting the underwriting discounts and commissions and estimated offering expenses payable by us. We will receive nominal proceeds, if any, from the exercise of the pre-funded warrants. If all of the common stock warrants sold in this offering were to be exercised in cash at an exercise price per share equal to \$, we would receive additional proceeds of approximately \$ million. We cannot predict when or if the common stock warrants will be exercised. It is also possible that the common stock warrants may expire and may never be exercised.

We currently intend to use the net proceeds from this offering together with our existing cash and cash equivalents, primarily to fund the expanded clinical development of rese-cel in multiple indications including the initiation of potentially registrational studies, and to further advance our manufacturing capabilities in preparation for late-stage clinical trials and commercial readiness for rese-cel, in addition to working capital and general corporate purposes. Based upon our current operating plan, we believe that the net proceeds from this offering, together with our existing cash and cash equivalents, will enable us to fund our operating expenses and capital expenditure requirements into .

The expected use of the net proceeds from this offering represents our intentions based upon our current plans and business conditions, which could change in the future as our plans and business conditions evolve. The amounts and timing of our actual expenditures will depend on numerous factors, including the factors described under “Risk Factors” in this prospectus supplement and in the documents incorporated by reference herein, as well as the amount of cash used in our operations. We may find it necessary or advisable to use the net proceeds for other purposes, and we will have broad discretion in the application of the net proceeds. Pending the uses described above, we plan to invest the net proceeds from this offering in short- and intermediate-term, interest-bearing obligations, investment-grade instruments, certificates of deposit or direct or guaranteed obligations of the U.S. government.

DIVIDEND POLICY

We have never declared or paid cash dividends on our capital stock. We intend to retain all of our future earnings, if any, to finance the growth and development of our business. We do not intend to pay cash dividends to our stockholders in the foreseeable future.

DILUTION

If you invest in this offering, your ownership interest will be diluted to the extent of the difference between the public offering price per share of our common stock or pre-funded warrant and accompanying common stock warrant in this offering and the as adjusted net tangible book value per share of our common stock immediately after this offering. The net tangible book value of our common stock as of March 31, 2025 was approximately \$121.6 million, or approximately \$2.40 per share of common stock based upon 50,743,101 shares outstanding. Net tangible book value per share is equal to our total tangible assets, less our total liabilities, divided by the total number of shares of common stock outstanding as of March 31, 2025.

Net tangible book value dilution per share to investors participating in this offering represents the difference between the amount per share paid by purchasers of shares of common stock in this offering and the as adjusted net tangible book value per share of our common stock immediately after this offering. After giving effect to the (i) sale of _____ shares of common stock and accompanying common stock warrants to purchase an additional _____ shares of our common stock in this offering at the combined public offering price of \$ _____ per share and (ii) pre-funded warrants to purchase _____ shares of our common stock and accompanying common stock warrants to purchase an additional _____ shares of our common stock in this offering at a combined public offering price of \$ _____ per underlying share warrant (which equals the price per share at which shares of our common stock are being sold in this offering, minus the \$0.00001 per share exercise price of each such pre-funded warrant), including shares of common stock issuable upon exercise of the pre-funded warrants and common stock warrants but excluding any resulting accounting associated therewith, and after deducting underwriting discounts and commissions and estimated aggregate offering expenses payable by us, our as adjusted net tangible book value as of March 31, 2025 would have been approximately \$ _____ million, or approximately \$ _____ per share of common stock. This would represent an immediate increase in as adjusted net tangible book value of \$ _____ per share of common stock to our existing stockholders and an immediate dilution in net tangible book value of \$ _____ per share of common stock to purchasers of our common stock and pre-funded warrants and accompanying common stock warrants in this offering.

Dilution per share to new investors is determined by subtracting as adjusted net tangible book value per share after this offering from the public offering price per share paid by new investors. The following table illustrates this per share dilution to new investors:

Public offering price per share (or pre-funded warrant) and accompanying common stock warrant	\$ _____
Historical net tangible book value per share as of March 31, 2025	\$2.40
Increase in net tangible book value per share attributable to the offering	\$ _____
As adjusted net tangible book value per share after giving effect to this offering	\$ _____
Dilution in net tangible book value per share to investors participating in this offering	\$ _____

If the underwriters exercise their option to purchase _____ additional shares and/or common stock warrants to purchase _____ additional shares of our common stock in full at the public offering price of \$ _____ per share, the as adjusted net tangible book value will increase to \$ _____ per share, and accompanying common stock warrant representing an immediate increase in net tangible book value of \$ _____ per share of our common stock to existing stockholders and an immediate dilution of \$ _____ per share to purchasers of our common stock in this offering.

Table of Contents

If the holders of pre-funded warrants exercised the pre-funded warrants offered in this offering in full, our as adjusted net tangible book value per share after this offering would be \$, representing an immediate increase in as adjusted net tangible book value per share of \$ to existing stockholders and immediate dilution in as adjusted net tangible book value per share of \$ to purchasers in this offering.

If the holders of common stock warrants exercised the common stock warrants offered in this offering in full, our as adjusted net tangible book value per share after this offering would be \$, representing an immediate increase in as adjusted net tangible book value per share of \$ to existing stockholders and immediate dilution in as adjusted net tangible book value per share of \$ to purchasers in this offering.

The above table is based on 50,743,101 shares of our common stock outstanding as of March 31, 2025 and assumes the full exercise of the pre-funded warrants and common stock warrants sold in this offering. The number of shares outstanding as of March 31, 2025 excludes:

- 14,066,205 shares of common stock issuable upon the exercise of stock options outstanding as of March 31, 2025, at a weighted average exercise price of \$8.80 per share;
- 167,668 shares of common stock issuable upon the exercise of outstanding stock options granted subsequent to March 31, 2025, at a weighted average exercise price of \$1.85 per share;
- 596,630 shares of common stock reserved for future issuance under our 2019 Plan and our 2019 ESPP as of March 31, 2025; and
- 1,384,865 shares of common stock issued in a series of sales pursuant to our “at-the-market” program in accordance with our Sales Agreement, since March 31, 2025, at an average price of \$1.91 per share for aggregate net proceeds of approximately \$2.6 million, after deducting sales agent commissions, but before deducting any expenses related to such sales.

To the extent that any stock options are exercised, new options are issued under our 2019 Plan or our 2019 ESPP, or we otherwise issue additional shares of common stock in the future (including shares issued in connection with acquisitions), there will be further dilution to new investors.

In addition, we may choose to raise additional capital due to market conditions or strategic considerations, even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

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

The following discussion is a summary of certain material U.S. federal income tax considerations applicable to non-U.S. holders (as defined below) with respect to their purchase, ownership and disposition of shares of our common stock, common stock warrants and pre-funded warrants issued pursuant to this offering. For purposes of this discussion, a non-U.S. holder means a beneficial owner of our common stock that is for U.S. federal income tax purposes:

- a non-resident alien individual;
- a foreign corporation or any other foreign organization taxable as a corporation for U.S. federal income tax purposes; or
- an estate or trust, the income of which is not subject to U.S. federal income tax on a net income basis and that (1) is not subject to the primary supervision of a court within the United States or over which no U.S. persons have authority to control all substantial decisions and (2) has not made an election to be treated as a U.S. person under applicable U.S. Treasury Regulations.

This discussion does not address the tax treatment of partnerships or other entities or arrangements that are pass-through entities for U.S. federal income tax purposes (including S-corporations) or persons that hold their common stock through partnerships or other pass-through entities. A partner in a partnership or other pass-through entity that will hold our common stock, common stock warrants or pre-funded warrants should consult his, her or its tax advisor regarding the tax consequences of acquiring, holding and disposing of our common stock, common stock warrants or pre-funded warrants through a partnership or other pass-through entity, as applicable.

This discussion is based on current provisions of the U.S. Internal Revenue Code of 1986, as amended, which we refer to as the Code, existing and proposed U.S. Treasury Regulations promulgated thereunder, current administrative rulings and judicial decisions, all as in effect as of the date of this prospectus supplement and all of which are subject to change or to differing interpretation, possibly with retroactive effect. Any such change or differing interpretation could alter the tax consequences to non-U.S. holders described in this prospectus supplement. There can be no assurance that the Internal Revenue Service, which we refer to as the IRS, will not challenge one or more of the tax consequences described in this prospectus supplement. We have not sought and will not seek any rulings from the IRS regarding the matters discussed below. We assume in this discussion that a non-U.S. holder holds shares of our common stock as a capital asset within the meaning of Section 1221 of the Code, generally property held for investment.

This discussion does not address all aspects of U.S. federal income taxation that may be relevant to a particular non-U.S. holder in light of that non-U.S. holder's individual circumstances nor does it address any aspects of U.S. state, local or non-U.S. taxes, the alternative minimum tax, the rules regarding qualified small business stock within the meaning of Section 1202 of the Code, the Medicare tax on net investment income or any aspects of any U.S. federal tax other than the income tax. This discussion also does not consider any specific facts or circumstances that may apply to a non-U.S. holder and does not address the special tax rules applicable to particular non-U.S. holders, such as:

- insurance companies;
- banks;
- tax-exempt or governmental organizations;
- financial institutions;
- brokers or dealers in securities;
- regulated investment companies;
- pension plans;

Table of Contents

- “controlled foreign corporations,” “passive foreign investment companies,” and corporations that accumulate earnings to avoid U.S. federal income tax;
- “qualified foreign pension funds” as defined in Section 897(l)(2) of the Code and entities all of the interests of which are held by qualified foreign pension funds;
- partnerships or other entities or arrangements treated as partnerships for U.S. federal income tax purposes (and partners and investors therein);
- persons deemed to sell our common stock, common stock warrants or pre-funded warrants under the constructive sale provisions of the Code;
- persons that hold our common stock, common stock warrants or pre-funded warrants as part of a straddle, hedge, conversion transaction, synthetic security or other integrated investment;
- persons who hold or receive our common stock, common stock warrants or pre-funded warrants pursuant to the exercise of any employee stock option or otherwise as compensation; and
- persons who have elected to mark securities to market;
- U.S. expatriates.

This discussion is for general information only and is not tax advice. Accordingly, all prospective non-U.S. holders of our common stock, common stock warrants or pre-funded warrants should consult their tax advisors with respect to the U.S. federal, state, local and non-U.S. tax consequences of the purchase, ownership and disposition of our common stock, common stock warrants or pre-funded warrants.

Treatment of Pre-Funded Warrants

Although it is not entirely free from doubt, we believe a pre-funded warrant should be treated as a share of our common stock for U.S. federal income tax purposes and a holder of pre-funded warrants should generally be taxed in the same manner as a holder of common stock as described below. Accordingly, for U.S. federal income tax purposes, no gain or loss should be recognized upon the exercise of a pre-funded warrant, and upon exercise, the holding period of the share of common stock received should include the holding period of the pre-funded warrant. Similarly, the tax basis of a share of common stock received upon exercise of a pre-funded warrant should include the tax basis of the pre-funded warrant increased by the exercise price of \$0.00001 per share. Each holder should consult his, her or its own tax advisor regarding the risks associated with the acquisition of a pre-funded warrant pursuant to this offering (including potential alternative characterizations). The balance of this discussion generally assumes that the characterization described above is respected for U.S. federal income tax purposes, and the discussion below, to the extent it pertains to our common stock, is generally intended to also pertain to the pre-funded warrants.

Treatment of Common Stock Warrants

A U.S. holder generally will not recognize gain or loss on the exercise of a common stock warrant and the related receipt of warrant shares (unless cash is received in lieu of the issuance of a fractional warrant share). A U.S. holder's initial tax basis in a warrant share will be equal to the sum of (a) such U.S. holder's tax basis in the common stock warrant plus (b) the exercise price paid by such U.S. holder on the exercise of such common stock warrant. A U.S. holder's holding period in a warrant share received on the exercise of a common stock warrant generally should begin on the day after the date that such common stock warrant is exercised by such U.S. holder.

In certain circumstances, the common stock warrants may be exercised on a cashless basis. The U.S. federal income tax treatment of an exercise of a warrant on a cashless basis is not clear, and could differ from the consequences described above. It is possible that a cashless exercise could be a taxable event. U.S. holders are urged to consult their tax advisors as to the consequences of an exercise of a common stock warrant on a cashless basis, including with respect to their holding period and tax basis in the warrant share.

Distributions on the Shares or the Warrant Shares

We do not anticipate declaring or paying any future distributions. However, if we do make distributions on the Shares or the warrant shares, such distributions will constitute dividends to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles, and will be includible in your income as ordinary income when received. However, with respect to dividends received by individuals, such dividends are generally taxed at the lower applicable long-term capital gains rates, provided certain holding period and other requirements are satisfied. If a distribution exceeds our current and accumulated earnings and profits, the excess will be treated as a tax-free return of the U.S. holder's investment, up to such U.S. holder's adjusted tax basis in the Shares or the warrant shares, as applicable. Any remaining excess will be treated as capital gain from the sale or exchange of such Shares or warrant shares, subject to the tax treatment described in "—Sale or Other Taxable Disposition of the Shares, Pre-Funded Warrants, Common Stock Warrants or Warrant Shares."

Sale or Other Taxable Disposition of the Shares, Pre-Funded Warrants, Common Stock Warrants or Warrant Shares

Upon the sale, exchange or other taxable disposition of the Shares, pre-funded warrants (other than by exercise), common stock warrants (other than by exercise) or warrant shares, a U.S. holder will generally recognize capital gain or loss equal to the difference between the amount of cash and the fair market value of any property received upon the sale, exchange or other taxable disposition and such U.S. holder's adjusted tax basis in the Shares, pre-funded warrants, common stock warrants or warrant shares. This capital gain or loss will be long-term capital gain or loss if the U.S. holder's holding period in such Shares, pre-funded warrants, common stock warrants or warrant shares is more than one year at the time of the sale, exchange or other taxable disposition. Long-term capital gains recognized by certain non-corporate U.S. holders, including individuals, generally will be subject to reduced rates of U.S. federal income tax. The deductibility of capital losses is subject to certain limitations.

Lapse of Pre-Funded Warrants and Common Stock Warrants

Upon the lapse or expiration of a pre-funded warrant or a common stock warrant, a U.S. holder will recognize a loss in an amount equal to such U.S. holder's tax basis in the pre-funded warrant or the common stock warrant. Any such loss generally will be a capital loss and will be long-term capital loss if the pre-funded warrant or the common stock warrant is held for more than one year. Deductions for capital losses are subject to limitations.

Certain Adjustments to the Pre-Funded Warrants and Common Stock Warrants

The terms of each pre-funded warrant and common stock warrant provide for an adjustment to the number of warrant shares for which the pre-funded warrant or common stock warrant may be exercised and/or to the exercise price of the pre-funded warrant or common stock warrant in certain events. An adjustment to the exercise price of a pre-funded warrant or common stock warrant may be treated as a constructive distribution to a U.S. holder of the pre-funded warrants or common stock warrants depending on the circumstances of such adjustment if, and to the extent that, such adjustment has the effect of increasing such U.S. holder's proportionate interest in our "earnings and profits" or assets, depending on the circumstances of such adjustment. In addition, the failure to provide for such an adjustment (or to adequately adjust) may also result in a deemed distribution to U.S. holders of the pre-funded warrants or common stock warrants or Shares. Any such constructive distribution may be taxable whether or not there is an actual distribution of cash or other property. However, adjustments to the exercise price of pre-funded warrants or common stock warrants made pursuant to a bona fide reasonable adjustment formula that has the effect of preventing dilution of the interest of the holders thereof generally should not be considered to result in a constructive distribution. Generally, such deemed distributions will be taxable in the same manner as an actual distribution as described in "—Distributions on the Shares or the

Warrant Shares,” except that it is unclear whether such deemed distributions would be eligible for the reduced tax rate applicable to certain dividends paid to non-corporate holders or the dividend-received deduction applicable to certain dividends paid to corporate holders. Generally, a U.S. holder’s tax basis in the underlying stock will be increased to the extent any such constructive distribution is treated as a dividend. Proposed U.S. Treasury Regulations address the amount of, timing of, and withholding obligations in respect to, constructive distributions made to holders of convertible securities such as the pre-funded warrants or common stock warrants. These proposed regulations are effective for constructive distributions made on or after the date of finalization, but may generally be relied upon as to certain matters for constructive distributions that occur prior to such date. U.S. holders should consult their own tax advisors regarding the application of such regulations and other tax considerations relating to the possibility of constructive distributions.

Subject to the discussion in the following two paragraphs in this section, dividends paid to anon-U.S. holder generally will be subject to withholding of U.S. federal income tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder’s country of residence. If we or the applicable withholding agent are unable to determine, at a time reasonably close to the date of payment of a distribution on our common stock, what portion, if any, of the distribution will constitute a dividend, then we or the applicable withholding agent may withhold U.S. federal income tax on the basis of assuming that the full amount of the distribution will be a dividend. If we or another withholding agent apply over-withholding, a non-U.S. holder may be entitled to a refund or credit of any excess tax withheld by timely filing an appropriate claim with the IRS.

Dividends that are treated as effectively connected with a trade or business conducted by anon-U.S. holder within the United States and, if an applicable income tax treaty so provides, that are attributable to a permanent establishment or a fixed base maintained by the non-U.S. holder within the United States, are generally exempt from the 30% withholding tax if the non-U.S. holder satisfies applicable certification and disclosure requirements (generally including provision of a properly executed IRS Form W-8ECI (or applicable successor form) certifying that the dividends are effectively connected with the non-U.S. holder’s conduct of a trade or business within the United States). However, such U.S. effectively connected income, net of specified deductions and credits, is taxed at the same graduated U.S. federal income tax rates applicable to United States persons (as defined in the Code). Any U.S. effectively connected income received by a non-U.S. holder that is classified as a corporation for U.S. federal income tax purposes may also, under certain circumstances, be subject to an additional “branch profits tax” at a 30% rate or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder’s country of residence.

A non-U.S. holder of our common stock who claims the benefit of an applicable income tax treaty between the United States and such holder’s country of residence generally will be required to provide a properly executed IRS Form W-8BEN or W-8BEN-E (or applicable successor form) to the applicable withholding agent and satisfy applicable certification and other requirements. Non-U.S. holders are urged to consult their own tax advisors regarding their entitlement to benefits under a relevant income tax treaty. A non-U.S. holder that is eligible for a reduced rate of U.S. withholding tax under an income tax treaty may obtain a refund or credit of any excess amounts withheld by timely filing a U.S. tax return with the IRS.

Gain on Sale, Exchange or Other Taxable Disposition of Our Common Stock

Subject to the discussions below under “Backup Withholding and Information Reporting” and “FATCA,” anon-U.S. holder generally will not be subject to any U.S. federal income or withholding tax on any gain realized upon such holder’s sale, exchange or other taxable disposition of shares of our common stock unless:

- the gain is effectively connected with the non-U.S. holder’s conduct of a U.S. trade or business and, if an applicable income tax treaty so provides, the gain is attributable to a permanent establishment or a fixed base maintained by such non-U.S. holder in the United States, in which case the non-U.S. holder generally will be taxed on a net income basis at the graduated U.S. federal income tax rates applicable

to United States persons (as defined in the Code) with respect to the gain and, if the non-U.S. holder is a foreign corporation, an additional branch profits tax described above in “—Distributions on Our Common Stock” also may apply with respect to such effectively connected gain, as adjusted for certain items;

- the non-U.S. holder is a nonresident alien individual who is present in the United States for 183 days or more in the taxable year of the disposition and certain other conditions are met, in which case the non-U.S. holder will be subject to a 30% tax (or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder’s country of residence) on the net gain derived from the disposition, which may be offset by certain U.S. source capital losses of the non-U.S. holder, if any (even though the individual is not considered a resident of the United States), provided that the non-U.S. holder has timely filed U.S. federal income tax returns with respect to such losses; or
- we are, or have been, at any time during the five-year period preceding such sale, exchange or other taxable disposition (or thenon-U.S. holder’s holding period, if shorter) a “United States real property holding corporation,” as defined in the Code and applicable Treasury Regulations, unless our common stock is “regularly traded,” as defined by applicable U.S. Treasury Regulations, on an established securities market and the non-U.S. holder holds no more than 5% of our outstanding common stock, directly or indirectly, actually or constructively, during the shorter of the 5-year period ending on the date of the disposition or the period that thenon-U.S. holder held our common stock. If we are or were a “United States real property holding corporation” during the relevant period and the foregoing 5% exception does not apply, the non-U.S. holder generally will be taxed on its net gain derived from the disposition at the graduated U.S. federal income tax rates applicable to United States persons (as defined in the Code). Generally, a corporation is a U.S. real property holding corporation only if the fair market value of its “United States real property interests,” as defined in the Code and applicable Treasury Regulations, equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests plus its other assets used or held for use in a trade or business. Although there can be no assurance, we do not believe that we are, or have been, a “United States real property holding corporation,” or that we are likely to become one in the future. No assurance can be provided that our common stock will be regularly traded on an established securities market for purposes of the rules described above.

Backup Withholding and Information Reporting

We, or any other applicable withholding agent, must report annually to the IRS and to eachnon-U.S. holder the gross amount of the distributions on our common stock paid to such holder and the tax withheld, if any, with respect to such distributions, regardless of whether any tax was actually withheld. Non-U.S. holders may have to comply with specific certification procedures, such as the provision of a valid IRS FormW-8BEN, W-8BEN-E or W-8ECI (or other applicable Form W-8), to establish that the holder is not a United States person (as defined in the Code), or otherwise establish an exemption, in order to avoid backup withholding at the applicable rate with respect to dividends on our common stock. Dividends paid to non-U.S. holders subject to withholding of U.S. federal income tax, as described above in “Distributions on Our Common Stock,” generally will be exempt from U.S. backup withholding.

Information reporting and backup withholding will generally apply to the proceeds of a disposition of our common stock by anon-U.S. holder effected by or through the U.S. office of any broker, U.S. or foreign, unless the holder certifies its status as a non-U.S. holder and satisfies certain other requirements, or otherwise establishes an exemption. Generally, information reporting and backup withholding will not apply to a payment of disposition proceeds to a non-U.S. holder where the transaction is effected outside the United States through anon-U.S. office of a broker. However, for information reporting purposes, dispositions effected through a non-U.S. office of a broker with substantial U.S. ownership or operations generally will be treated in a manner similar to dispositions effected through a U.S. office of a broker. Non-U.S. holders should consult their own tax advisors regarding the application of the information reporting and backup withholding rules to them. Copies of

information returns may be made available to the tax authorities of the country in which the non-U.S. holder resides or is incorporated under the provisions of a specific treaty or agreement. Any documentation provided to an applicable withholding agent may need to be updated in certain circumstances. Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules from a payment to a non-U.S. holder may be refunded or credited against the non-U.S. holder's U.S. federal income tax liability, if any, provided that an appropriate claim is filed with the IRS in a timely manner.

FATCA

The Foreign Account Tax Compliance Act, or FATCA, generally imposes a U.S. federal withholding tax at a rate of 30% on payments of dividends on our common stock paid to a foreign entity unless (i) if the foreign entity is a "foreign financial institution," such foreign entity undertakes certain due diligence, reporting, withholding, and certification obligations, (ii) if the foreign entity is not a "foreign financial institution," such foreign entity identifies certain of its U.S. investors, if any, or (iii) the foreign entity is otherwise exempt under FATCA. Such withholding may also apply to gross proceeds from the sale or other disposition of our common stock, although under proposed U.S. Treasury Regulations, no withholding would apply to such gross proceeds. The preamble to the proposed regulations specifies that taxpayers (including withholding agents) are permitted to rely on the proposed regulations pending finalization. Under certain circumstances, a non-U.S. holder may be eligible for refunds or credits of this withholding tax. An intergovernmental agreement between the United States and an applicable foreign country may modify the requirements described in this paragraph. Non-U.S. holders should consult their tax advisors regarding the possible implications of this legislation on their investment in our common stock and the entities through which they hold our common stock, including, without limitation, the process and deadlines for meeting the applicable requirements to prevent the imposition of the 30% withholding tax under FATCA.

DESCRIPTION OF CAPITAL STOCK

The following description of our common stock and preferred stock summarizes the material terms and provisions of the common stock that we may offer under this prospectus. The following description of our capital stock does not purport to be complete and is subject to, and qualified in its entirety by, our certificate of incorporation and bylaws, which are exhibits to the registration statement of which this prospectus forms a part, and by applicable law. The terms of our common stock and preferred stock may also be affected by Delaware law.

Authorized Capital Stock

Our authorized capital stock consists of (i) 300,000,000 shares of common stock, par value \$0.00001 per share, of which (x) 293,590,481 are designated as voting common stock, and (y) 6,409,519 are designated as non-voting common stock, and (ii) 10,000,000 shares of preferred stock, par value \$0.00001 per share, all of which are undesignated preferred stock. As of March 31, 2025, we had 50,743,101 shares of voting common stock outstanding, no shares of non-voting common stock outstanding and no shares of preferred stock outstanding.

Common Stock

The holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of the stockholders, and the holders of our non-voting common stock are not entitled to any votes per share of non-voting common stock. The holders of our common stock do not have any cumulative voting rights. Holders of our common stock and non-voting common stock are entitled to receive ratably any dividends declared by our board of directors out of funds legally available for that purpose, subject to any preferential dividend rights of any outstanding preferred stock. Our common stock and non-voting common stock have no preemptive rights, conversion rights or other subscription rights or redemption or sinking fund provisions. Holders of our non-voting common stock have the right to convert each share of our non-voting common stock into one share of common stock at such holder's election, provided that as a result of such conversion, such holder, together with its affiliates and any members of a Schedule 13(d) group with such holder, would not beneficially own in excess of 4.99% of our common stock immediately prior to and following such conversion, unless otherwise as expressly provided for in our certificate of incorporation. However, this ownership limitation may be increased or decreased to any other percentage designated by such holder of non-voting common stock upon 61 days' notice to us.

In the event of our liquidation, dissolution or winding up, holders of our common stock and non-voting common stock will be entitled to share ratably in all assets remaining after payment of all debts and other liabilities and any liquidation preference of any outstanding preferred stock. All outstanding shares are fully paid and nonassessable.

When we issue shares of common stock under this prospectus, the shares will fully be paid and nonassessable and will not have, or be subject to, any preemptive or similar rights.

Pre-funded Warrants

In December 2022, we issued 126,815 shares of our common stock at a price of \$5.52 per share and to certain investors in lieu of common stock, pre-funded warrants to purchase 6,213,776 shares of our common stock at a price of \$5.51999 per pre-funded warrant. The purchase price per share of each pre-funded warrant represents the per share offering price for the common stock, minus the \$0.00001 per share exercise price of such pre-funded warrant. At the time of this filing, no pre-funded warrants remain outstanding.

A holder of the pre-funded warrants will not be entitled to exercise any portion of any pre-funded warrant, which, upon giving effect to such exercise, would cause (i) the aggregate number of shares of our Common Stock

Table of Contents

beneficially owned by the holder (together with its affiliates) to exceed 4.99% (or, at the election of the holder, 9.99%) of the number of shares of our Common Stock outstanding immediately after giving effect to the exercise, or (ii) the combined voting power of our securities beneficially owned by the holder (together with its affiliates) to exceed 4.99% (or, at the election of the holder, 9.99%) of the combined voting power of all of our securities then outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the pre-funded warrants. However, any holder may increase or decrease such percentage to any other percentage not in excess of 19.99% upon at least 61 days' prior notice from the holder to us.

The exercise price of the pre-funded warrants and the number of shares of our common stock issuable upon exercise of the pre-funded warrants is subject to appropriate adjustment in the event of certain stock dividends and distributions, stock splits, stock combinations, reclassifications or similar events affecting our common stock. The exercise price will not be adjusted below the par value of our common stock. The pre-funded warrants will not expire.

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

Listing

Our common stock is listed on the Nasdaq Global Select Market under the symbol "CABA." On June 10, 2025, the closing price for our common stock, as reported on the Nasdaq Global Select Market, was \$2.35 per share.

Transfer Agent and Registrar

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

Undesignated Preferred Stock

Our board of directors is authorized to issue up to 10,000,000 shares of undesignated preferred stock in one or more series without stockholder approval. Our board of directors may determine the rights, preferences, privileges and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences, of each series of preferred stock.

The purpose of authorizing our board of directors to issue preferred stock in one or more series and determine the number of shares in the series and its rights and preferences is to eliminate delays associated with a stockholder vote on specific issuances. Examples of rights and preferences that the Board may fix are:

- dividend rights;
- conversion rights;
- voting rights;
- terms of redemption;
- liquidation preferences;
- sinking fund terms; and
- the number of shares constituting, or the designation of, such series, any or all of which may be greater than the rights of common stock.

Table of Contents

The existence of authorized but unissued shares of undesignated preferred stock may enable our board of directors to render more difficult or to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise. For example, if in the due exercise of its fiduciary obligations, our board of directors were to determine that a takeover proposal is not in the best interests of us or our stockholders, our board of directors could cause shares of preferred stock to be issued without stockholder approval in one or more private offerings or other transactions that might dilute the voting or other rights of the proposed acquirer, stockholder or stockholder group. The rights of holders of our common stock described above will be subject to, and may be adversely affected by, the rights of any preferred stock that we may designate and issue in the future. The issuance of shares of undesignated preferred stock could decrease the amount of earnings and assets available for distribution to holders of shares of common stock. The issuance may also adversely affect the rights and powers, including voting rights, of these holders and may have the effect of delaying, deterring or preventing a change in control of us.

We will incorporate by reference as an exhibit to the registration statement, of which this prospectus is a part, the form of any certificate of designation that describes the terms of the series of preferred stock we are offering. This description and the applicable prospectus supplement will include:

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

Antitakeover Effects of Delaware Law and Provisions of our Third Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws

Certain provisions of the Delaware General Corporation Law and of our third amended and restated certificate of incorporation and amended and restated bylaws could have the effect of delaying, deferring or discouraging another party from acquiring control of us. These provisions, which are summarized below, are expected to discourage certain types of coercive takeover practices and inadequate takeover bids and, as a consequence, they might also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored hostile takeover attempts. These provisions are also designed in part to encourage anyone seeking to acquire control of us to first negotiate with our board of directors. These provisions might also have the effect of preventing changes in our management. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders might otherwise deem to be in their best interests. However, we believe that the advantages gained by protecting our ability to negotiate with any unsolicited and potentially unfriendly acquirer outweigh the disadvantages of discouraging such proposals, including those priced above the then-current market value of our common stock, because, among other reasons, the negotiation of such proposals could improve their terms.

Delaware Takeover Statute

We are subject to the provisions of Section 203 of the Delaware General Corporation Law. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a “business combination” with an “interested stockholder” for a three-year period following the time that this stockholder becomes an interested stockholder, unless the business combination is approved in a prescribed manner. Under Section 203, a business combination between a corporation and an interested stockholder is prohibited unless it satisfies one of the following conditions:

- before the stockholder became interested, our board of directors 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 voting stock outstanding, shares owned by persons who are directors and also officers, and employee stock plans, in some instances, but not the outstanding voting stock owned by the interested stockholder; or at or after the time the stockholder became interested, the business combination was approved by our board of directors and authorized at an annual or special meeting of the stockholders 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 and the interested stockholder;
- any sale, transfer, lease, pledge, exchange, mortgage or other disposition involving the interested stockholder of 10% or more of the assets of the corporation;
- subject to exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- subject to exceptions, any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; or
- 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.

In general, Section 203 defines an interested stockholder as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by the entity or person.

Provisions of our Third Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws

Our third amended and restated certificate of incorporation and amended and restated bylaws include a number of provisions that may have the effect of delaying, deferring or discouraging another party from acquiring control of us and encouraging persons considering unsolicited tender offers or other unilateral takeover proposals to negotiate with our board of directors rather than pursue non-negotiated takeover attempts. These provisions include the items described below.

Board composition and filling vacancies. In accordance with our third amended and restated certificate of incorporation, our board is divided into three classes serving staggered three-year terms, with one class being elected each year. Our third amended and restated certificate of incorporation also provides that directors may be removed only for cause and then only by the affirmative vote of the holders of 75% or more of the shares then entitled to vote at an election of directors. Furthermore, any vacancy on our board of directors, however occurring, including a vacancy resulting from an increase in the size of our board, may only be filled by the affirmative vote of a majority of our directors then in office even if less than a quorum. The classification of directors, together with the limitations on removal of directors and treatment of vacancies, has the effect of making it more difficult for stockholders to change the composition of our board of directors.

No written consent of stockholders. Our third amended and restated certificate of incorporation provides that all stockholder actions are required to be taken by a vote of the stockholders at an annual or special meeting, and that stockholders may not take any action by written consent in lieu of a meeting. This limit may lengthen the amount of time required to take stockholder actions and would prevent the amendment of our bylaws or removal of directors by our stockholder without holding a meeting of stockholders.

Meetings of stockholders. Our bylaws provide that only a majority of the members of our board of directors then in office may call special meetings of stockholders and only those matters set forth in the notice of the special meeting may be considered or acted upon at a special meeting of stockholders. Our bylaws limit the business that may be conducted at an annual meeting of stockholders to those matters properly brought before the meeting.

Advance notice requirements. Our bylaws establish advance notice procedures with regard to stockholder proposals relating to the nomination of candidates for election as directors or new business to be brought before meetings of our stockholders. These procedures provide that notice of stockholder proposals must be timely given in writing to our corporate secretary prior to the meeting at which the action is to be taken. Generally, to be timely, notice must be received at our principal executive offices not less than 90 days or more than 120 days prior to the first anniversary date of the annual meeting for the preceding year. The notice must contain certain information specified in our bylaws. These requirements may preclude stockholders from bringing matters before the stockholders at an annual or special meeting.

Amendment to certificate of incorporation and bylaws. As required by the Delaware General Corporation Law, any amendment of our third amended and restated certificate of incorporation must first be approved by a majority of our board of directors, and if required by law or our third amended and restated certificate of incorporation, must thereafter be approved by a majority of the outstanding shares entitled to vote on the amendment, and a majority of the outstanding shares of each class entitled to vote thereon as a class, except that the amendment of the provisions relating to stockholder action, directors, limitation of liability and the amendment of our third amended and restated certificate of incorporation must be approved by not less than 75% of the outstanding shares entitled to vote on the amendment, and not less than 75% of the outstanding shares of each class entitled to vote thereon as a class. Our bylaws may be amended by the affirmative vote of a majority

vote of the directors then in office, subject to any limitations set forth in the bylaws; and may also be amended by the affirmative vote of at least 75% of the outstanding shares entitled to vote on the amendment, or, if the board of directors recommends that the stockholders approve the amendment, by the affirmative vote of the majority of the outstanding shares entitled to vote on the amendment, in each case voting together as a single class.

Undesignated preferred stock. Our third amended and restated certificate of incorporation provides for authorized shares of preferred stock. The existence of authorized but unissued shares of preferred stock may enable our board of directors to render more difficult or to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise. For example, if in the due exercise of its fiduciary obligations, our board of directors were to determine that a takeover proposal is not in the best interests of us or our stockholders, our board of directors could cause shares of preferred stock to be issued without stockholder approval in one or more private offerings or other transactions that might dilute the voting or other rights of the proposed acquirer or insurgent stockholder or stockholder group. In this regard, our third amended and restated certificate of incorporation grants our board of directors broad power to establish the rights and preferences of authorized and unissued shares of preferred stock. The issuance of shares of preferred stock could decrease the amount of earnings and assets available for distribution to holders of shares of common stock. The issuance may also adversely affect the rights and powers, including voting rights, of these holders and may have the effect of delaying, deterring or preventing a change in control of us.

Choice of forum

Our bylaws provide that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for any state law claim 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 to us or our stockholders; (3) any action asserting a claim arising pursuant to any provision of the DGCL or our certificate of incorporation or bylaws (including the interpretation, validity or enforceability thereof); or (4) any action asserting a claim governed by the internal affairs doctrine, or the Delaware Forum Provision. The choice of forum provision does not apply to any actions arising under the Securities Act or the Exchange Act. Our bylaws further provide that, unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States of America are the sole and exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act, or the rules and regulations promulgated thereunder, or the Federal Forum Provision. In addition, our bylaws provide that any person or entity purchasing or otherwise acquiring any interest in shares of our common stock is deemed to have notice of and consented to the foregoing Delaware Forum Provision and Federal Forum Provision; provided, however, that stockholders cannot and will not be deemed to have waived our compliance with the U.S. federal securities laws and the rules and regulations thereunder.

The Delaware Forum Provision and the Federal Forum Provision may impose additional litigation costs on stockholders in pursuing any such claims. Additionally, these forum selection clauses may limit our stockholders' ability to bring a claim in a judicial forum that they find favorable for disputes with us or our directors, officers or employees, which may discourage the filing of lawsuits against us and our directors, officers and employees even though an action, if successful, might benefit our stockholders. In addition, Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder. While the Delaware Supreme Court and other states have upheld the validity of federal forum selection provisions purporting to require claims under the Securities Act be brought in federal court, there is uncertainty as to whether other courts will enforce our Federal Forum Provision. If the Federal Forum Provision is found to be unenforceable, we may incur additional costs with resolving such matters. The Federal Forum Provision may also impose additional litigation costs on us and/or our stockholders who assert that the provision is invalid or unenforceable. The Court of Chancery of the State of Delaware or the federal district courts of the United States of America may also reach different judgments or results than would other courts, including courts where a stockholder considering an action may be located or would otherwise choose to bring the action, and such judgments may be more or less favorable to us than our stockholders.

DESCRIPTION OF WARRANTS

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

Description of Pre-Funded Warrants

Form

The pre-funded warrants will be issued as individual warrant agreements to the investors. The form of pre-funded warrant will be filed as an exhibit to our Current Report on Form 8-K that we expect to file with the SEC in connection with this offering.

Term

The pre-funded warrants will not expire.

Exercisability

The pre-funded warrants are exercisable at any time between their original issuance and their expiration. The pre-funded warrants will be exercisable, at the option of each holder, in whole or in part by delivering to us a duly executed exercise notice solely by means of a cashless exercise, in which the holder would receive upon such exercise the net number of shares of our common stock determined according to the formula set forth in the pre-funded warrant. No fractional shares of common stock will be issued in connection with the exercise of a pre-funded warrant. In lieu of fractional shares, we will pay the holder an amount in cash equal to the fractional amount multiplied by the last trade price of our common stock on the exercise date.

Exercise limitations

Under the pre-funded warrants, we may not effect the exercise of any pre-funded warrant, and a holder will not be entitled to exercise any portion of any pre-funded warrant, (i) if immediately prior to exercise the holder (together with its affiliates) beneficially owns an aggregate number of shares of our common stock greater than 4.99% or 9.99%, as applicable, of the number of shares of our common stock outstanding immediately before giving effect to the exercise of any pre-funded warrant or (ii) to the extent that immediately following exercise, the holder (together with its affiliates) would beneficially own in excess of 4.99% or 9.99%, as applicable, of the number of shares of common stock outstanding immediately after giving effect to the issuance of such shares of common stock, and without taking account any other pre-funded warrants. However, any holder may increase or decrease such percentage to any other percentage not in excess of 19.99% upon at least 61 days' prior notice from the holder to us.

Exercise price

The exercise price per whole share of our common stock purchasable upon the exercise of the pre-funded warrants is \$0.00001 per share of common stock. The exercise price of the pre-funded warrants and the number of shares of our common stock issuable upon exercise of the pre-funded warrants is subject to appropriate adjustment in the event of certain stock dividends and distributions, stock splits, stock combinations, reclassifications or similar events affecting our common stock. The exercise price will not be adjusted below the par value of our common stock.

Transferability

Subject to applicable laws, the pre-funded warrants may be offered for sale, sold, transferred or assigned without our consent. The pre-funded warrants will be held in definitive form by the purchasers. The ownership of

Table of Contents

the pre-funded warrants and any transfers of the pre-funded warrants will be registered in a warrant register maintained by us or our transfer agent.

Exchange listing

We do not plan on applying to list the pre-funded warrants on the Nasdaq Global Select Market, any other national securities exchange or any other nationally recognized trading system.

Warrant agent

We will initially serve as the warrant agent under the pre-funded warrants.

Fundamental transactions

Upon the consummation of a fundamental transaction (as described in the pre-funded warrants, and generally including any reorganization, recapitalization or reclassification of our common stock, the sale, transfer or other disposition of all or substantially all of our assets, our consolidation or merger with or into another person in which we are not the surviving entity, the acquisition of more than 50% of our outstanding common stock, or any person or group becoming the beneficial owner of 50% of the voting power of our outstanding common stock), the holders of the pre-funded warrants will be entitled to receive, upon exercise of the pre-funded warrants, the same kind and amount of securities, cash or other property that such holders would have received had they exercised the pre-funded warrants immediately prior to such fundamental transaction, without regard to any limitations on exercise contained in the pre-funded warrants. Notwithstanding the foregoing, in the event of a fundamental transaction where the consideration consists solely of cash, solely of marketable securities or a combination of cash and marketable securities, then each pre-funded warrant shall automatically be deemed to be exercised in full in a cashless exercise effective immediately prior to and contingent upon the consummation of such fundamental transaction.

No rights as a stockholder

Except by virtue of such holder's ownership of shares of our common stock, the holder of a pre-funded warrant does not have the rights or privileges of a holder of our common stock, including any voting rights, until such holder exercises the pre-funded warrant. Additionally, a holder is generally not entitled to receive distributions paid with respect to common stock prior to the exercise of the pre-funded warrant, and instead such distributions are expected to be held in abeyance for the holder until such pre-funded warrant is exercised or the ownership limitations would not be exceeded, at which time such holder shall be entitled to receive such distributions.

Description of Common Stock Warrants

Form

The common warrants will be issued as individual warrant agreements to the investors. The form of common warrant will be filed as an exhibit to our Current Report on Form 8-K that we expect to file with the SEC in connection with this offering.

Term

The common warrants will expire on _____, 2026.

Exercisability

The common stock warrants are exercisable at any time after their original issuance. Except as noted below, the common stock warrants will be exercisable solely by means of a cash exercise at the option of each holder, in

Table of Contents

whole or in part by delivering to us a duly executed exercise notice and by payment in full of the applicable exercise price in immediately available funds for the number of shares of our common stock purchased upon such exercise. If, at the time a holder exercises its common stock warrants, a registration statement registering the issuance of the shares of common stock underlying the common stock warrants under the Securities Act is not then effective or available for the issuance of such shares, then in lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, the holder may elect to exercise the common stock warrant through a cashless exercise, in which the holder would receive upon such exercise the net number of shares of our common stock determined according to the formula set forth in the common stock warrant. No fractional shares of our common stock will be issued in connection with the exercise of a common stock warrant. In lieu of any fractional shares, we will pay cash equal to the product of such fraction multiplied by the fair market value of one share underlying such common stock warrant.

Exercise Limitations

Under the common stock warrants, we may not effect the exercise of any common stock warrant, and a holder will not be entitled to exercise any portion of any common stock warrant, (i) if immediately prior to exercise the holder (together with its affiliates) beneficially owns an aggregate number of shares of our common stock greater than 4.99% or 9.99%, as applicable, of the number of shares of our common stock outstanding immediately before giving effect to the exercise of any common stock warrant or (ii) to the extent that immediately following exercise, the holder (together with its affiliates) would beneficially own in excess of 4.99% or 9.99%, as applicable, of the number of shares of common stock outstanding immediately after giving effect to the issuance of such shares of common stock. However, any holder may increase or decrease such percentage to any other percentage not in excess of 19.99% upon at least 61 days' prior notice from the holder to us.

Exercise Price

The initial exercise price per whole share of our common stock purchasable upon the exercise of the common stock warrants is \$ _____ per share of common stock (or, if the purchaser elects, \$ _____ per pre-funded warrant). The exercise price of the common stock warrants and the number of shares of our common stock (or, if the purchaser elects, pre-funded warrants) issuable upon exercise of the common stock warrants is subject to appropriate adjustment in the event of certain stock dividends, subdivisions, stock splits, stock combinations, reclassifications, reorganizations or similar events affecting our common stock.

Transferability

Subject to applicable laws and the restrictions on transfer set forth in the common stock warrants, the common stock warrants may be offered for sale, sold, transferred or assigned without our consent.

Exchange Listing

We do not plan on applying to list the common stock warrants on The Nasdaq Global Select Market, any other national securities exchange or any other nationally recognized trading system.

Fundamental Transactions

In the event of a fundamental transaction, as described in the common stock warrants, which generally includes a merger or consolidation resulting in the sale of 50% or more of the voting securities of the Company, the sale of all or substantially all of the assets or voting securities of the Company, or other change of control transaction, the holders of the common stock warrants will be entitled to receive upon exercise of the common warrants the kind and amount of securities, cash or other property that the holders would have received had they exercised the common stock warrants immediately prior to such change of control without regard to any

limitations on exercise contained in the common stock warrants. Notwithstanding the foregoing, as more fully described in the common stock warrants, in the event of certain fundamental transactions, the holders of the common stock warrants will be entitled to receive consideration in an amount equal to the Black Scholes value of the common stock warrants.

No Rights as a Stockholder

Except by virtue of such holder's ownership of shares of our common stock, the holder of a common stock warrant does not have the rights or privileges of a holder of our common stock, including any voting rights, until the holder exercises the common stock warrant to receive shares of our common stock. In the event of certain distributions, including cash dividends, if any, to all holders of our common stock for no consideration, the holder of a common stock warrant shall be entitled to participate in such distributions to the same extent as if a holder of shares of our common stock, subject to not exceeding the ownership limitations described above under "—Description of Common Warrants—Exercise limitations," in which case such distribution shall be held in abeyance for the benefit of such holder until the earlier of such time as the ownership limitations would not be exceeded or the warrant is exercised. In the event of certain distributions, including cash dividends, if any, to all holders of our common stock for no consideration, the holder of a common stock warrant shall be entitled to participate in such distributions to the same extent as if a holder of shares of our common stock, subject to not exceeding the ownership limitations described above under "—Description of Common Warrants—Exercise limitations," in which case such distribution shall be held in abeyance for the benefit of such holder until the earlier of such time as the ownership limitations would not be exceeded or the warrant is exercised.

UNDERWRITING

Subject to the terms and conditions set forth in the underwriting agreement, dated _____, 2025, among us and Jefferies LLC, TD Securities (USA) LLC and Cantor Fitzgerald & Co. as the representatives of the underwriters named below and the joint book-running managers of this offering, we have agreed to sell to the underwriters, and each of the underwriters has agreed, severally and not jointly, to purchase from us, the respective number of shares of common stock, pre-funded warrants and warrants shown opposite its name below:

Underwriters	Number of Shares	Number of Pre-funded Warrants	Number of Warrants
Jefferies LLC			
TD Securities (USA) LLC			
Cantor Fitzgerald & Co.			
Total			

The underwriting agreement provides that the obligations of the several underwriters are subject to certain conditions precedent such as the receipt by the underwriters of officers' certificates and legal opinions and approval of certain legal matters by their counsel. The underwriting agreement provides that the underwriters will purchase all of the shares of common stock and pre-funded warrants if any of them are purchased. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the nondefaulting underwriters may be increased or the underwriting agreement may be terminated. We have agreed to indemnify the underwriters and certain of their controlling persons against certain liabilities, including liabilities under the Securities Act, and to contribute to payments that the underwriters may be required to make in respect of those liabilities.

The underwriters have advised us that, following the completion of this offering, they currently intend to make a market in the common stock as permitted by applicable laws and regulations. However, the underwriters are not obligated to do so, and the underwriters may discontinue any market-making activities at any time without notice in their sole discretion. Accordingly, no assurance can be given as to the liquidity of the trading market for the common stock, that you will be able to sell any of the common stock held by you at a particular time or that the prices that you receive when you sell will be favorable.

The underwriters are offering the shares of common stock and pre-funded warrants and the accompanying warrants subject to their acceptance of the shares of common stock and pre-funded warrants and the accompanying warrants from us and subject to prior sale. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part. In addition, the underwriters have advised us that they do not intend to confirm sales to any account over which they exercise discretionary authority.

Commission and Expenses

The underwriters have advised us that they propose to offer the shares of common stock and pre-funded warrants and the accompanying warrants to the public at the initial public offering prices set forth on the cover page of this prospectus and to certain dealers, which may include the underwriters, at that price less a concession not in excess of \$ _____ per share of common stock and \$ _____ per pre-funded warrant. The underwriters may allow, and certain dealers may reallocate, a discount from the concession not in excess of \$ _____ per share of common stock and \$ _____ per pre-funded warrant to certain brokers and dealers. After the offering, the initial public offering price, concession and reallocation to dealers may be reduced by the representatives. No such reduction will change the amount of proceeds to be received by us as set forth on the cover page of this prospectus.

Table of Contents

The following table shows the public offering price, the underwriting discounts and commissions that we are to pay the underwriters and the proceeds, before expenses, to us in connection with this offering. Such amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional shares on common stock and/or warrants to purchase common stock.

	Per Pre-funded Warrant and Accompanying Warrant	Per Share and Accompanying Warrant	Total Without Option Exercise	Total With Full Option Exercise
Public offering price	\$	\$	\$	\$
Underwriting discounts and commissions paid by us	\$	\$	\$	\$
Proceeds to us, before expenses	\$	\$	\$	\$

We estimate expenses payable by us in connection with this offering, other than the underwriting discounts and commissions referred to above, will be approximately \$.

Option to Purchase Additional Shares

We have granted to the underwriters an option, exercisable for 30 days from the date of this prospectus supplement, to purchase, from time to time, in whole or in part, up to an aggregate of shares of our common stock and/or warrants to purchase shares of our common stock from us at the public offering price set forth on the cover page of this prospectus supplement, less underwriting discounts and commissions. If the underwriters exercise this option, each underwriter will be obligated, subject to specified conditions, to purchase a number of additional shares and/or warrants proportionate to that underwriter's initial purchase commitment as indicated in the table above.

Listing

Our common stock is listed on the Nasdaq Global Select Market under the trading symbol "CABA". We do not intend to list the warrants or the pre-funded warrants on the Nasdaq Global Select Market, any other national recognized securities exchange or any other nationally recognized trading system.

No Sales of Similar Securities

We, our officers and our executive directors have agreed, subject to specified exceptions, not to directly or indirectly:

- sell, offer, contract or grant any option to sell (including any short sale), pledge, transfer, establish an open "put equivalent position" within the meaning of Rule 16a-1(h) under the Securities Exchange Act of 1934, as amended, or
- otherwise dispose of any shares of common stock, options or warrants to acquire shares of common stock, or securities exchangeable or exercisable for or convertible into shares of common stock currently or hereafter owned either of record or beneficially, or
- publicly announce an intention to do any of the foregoing for a period of 90 days, or 60 days for directors and officers, after the date of this prospectus without the prior written consent of Jefferies LLC and TD Securities (USA) LLC.

This restriction terminates after the close of trading of the common stock on and including the 90th day, or the 60th day for directors and officers, after the date of this prospectus. The foregoing restriction shall not apply to the issuance of common stock pursuant to an at the market sales agreement that the Company may enter into with TD Securities (USA) LLC (the "ATM Sales Agreement"), through which we may offer and sell, from time to time, shares of our common stock through TD Securities (USA) LLC in "at-the-market offerings" as defined in Rule 415(a)(4) promulgated under the Securities Act.

Table of Contents

Jefferies LLC and TD Securities (USA) LLC may, in their sole discretion and at any time or from time to time before the termination of the 90 and/or 60 day period release all or any portion of the securities subject to lock-up agreements. There are no existing agreements between the underwriters and any of our shareholders who will execute a lock-up agreement, providing consent to the sale of shares prior to the expiration of the lock-up period.

Stabilization

The underwriters have advised us that they may engage in short sale transactions, stabilizing transactions, syndicate covering transactions or the imposition of penalty bids in connection with this offering. These activities may have the effect of stabilizing or maintaining the market price of the common stock at a level above that which might otherwise prevail in the open market. Establishing short sales positions may involve either “covered” short sales or “naked” short sales.

“Covered” short sales are sales made in an amount not greater than the underwriters’ option to purchase additional shares of our common stock in this offering. The underwriters may close out any covered short position by either exercising their option to purchase additional shares of our common stock or purchasing shares of our common stock in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the option to purchase additional shares.

“Naked” short sales are sales in excess of the option to purchase additional shares of our common stock. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the shares of our common stock in the open market after pricing that could adversely affect investors who purchase in this offering.

A stabilizing bid is a bid for the purchase of shares of common stock on behalf of the underwriters for the purpose of fixing or maintaining the price of the common stock. A syndicate covering transaction is the bid for or the purchase of shares of common stock on behalf of the underwriters to reduce a short position incurred by the underwriters in connection with the offering. Similar to other purchase transactions, the underwriter’s purchases to cover the syndicate short sales may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock may be higher than the price that might otherwise exist in the open market. A penalty bid is an arrangement permitting the underwriters to reclaim the selling concession otherwise accruing to a syndicate member in connection with the offering if the common stock originally sold by such syndicate member are purchased in a syndicate covering transaction and therefore have not been effectively placed by such syndicate member.

Neither we nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common stock. The underwriters are not obligated to engage in these activities and, if commenced, any of the activities may be discontinued at any time.

The underwriters may also engage in passive market making transactions in our common stock on The NASDAQ Global Select Market in accordance with Rule 103 of Regulation M during a period before the commencement of offers or sales of shares of our common stock in this offering and extending through the completion of distribution. A passive market maker must display its bid at a price not in excess of the highest independent bid of that security. However, if all independent bids are lowered below the passive market maker’s bid, that bid must then be lowered when specified purchase limits are exceeded.

Electronic Distribution

A prospectus in electronic format may be made available by e-mail or on the web sites or through online services maintained by one or more of the underwriters or their affiliates. In those cases, prospective investors may view offering terms online and may be allowed to place orders online. The underwriters may agree with us to allocate a specific number of shares of common stock and pre-funded warrants and accompanying warrants for sale to online brokerage account holders. Any such allocation for online distributions will be made by the underwriters on the same basis as other allocations. Other than the prospectus in electronic format, the information on the underwriters' web sites and any information contained in any other web site maintained by any of the underwriters is not part of this prospectus, has not been approved and/or endorsed by us or the underwriters and should not be relied upon by investors.

Other Activities and Relationships

The underwriters and certain of their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. The underwriters and certain of their respective affiliates have, from time to time, performed, and may in the future perform, various commercial and investment banking and financial advisory services for us and our affiliates, for which they received or will receive customary fees and expenses. For example, TD Securities (USA) LLC would act as the sales agent under the ATM Sales Agreement. Additionally, certain of the underwriters have served as underwriters in other of our equity offerings.

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

Disclaimers About Non-U.S. Jurisdictions

Canada. The shares and pre-funded warrants and the accompanying warrants may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the shares and pre-funded warrants and the accompanying warrants must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

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

Table of Contents

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

Switzerland. The shares or pre-funded warrants and the accompanying warrants will not be offered, directly or indirectly, to the public in Switzerland and this prospectus does not constitute a public offering prospectus as that term is understood pursuant to article 652a or 1156 of the Swiss Federal Code of Obligations.

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

A. to any legal entity which is a qualified investor as defined under Article 2 the Prospectus Regulation;

B. to fewer than 150 natural or legal persons (other than qualified investors as defined under Article 2 the Prospectus Regulation), subject to obtaining the prior consent of the representatives for any such offer; or

C. in any other circumstances falling within Article 1(4) of the Prospectus Regulation,

provided that no such offer of the shares or pre-funded warrants and the accompanying warrants shall require us or any of the representatives to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation.

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

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

A. to any legal entity which is a qualified investor as defined under Article 2 of the UK Prospectus Regulation;

B. to fewer than 150 natural or legal persons (other than qualified investors as defined under Article 2 of the UK Prospectus Regulation), subject to obtaining the prior consent of the representatives for any such offer; or

C. in any other circumstances falling within Section 86 of the FSMA,

provided that no such offer of the shares or pre-funded warrants and the accompanying warrants shall require the Issuer or any Manager to publish a prospectus pursuant to Section 85 of the FSMA or supplement a prospectus pursuant to Article 23 of the UK Prospectus Regulation. For the purposes of this provision, the expression an “offer to the public” in relation to the shares or pre-funded warrants and the accompanying warrants in the United Kingdom means the communication in any form and by any means of sufficient information on the terms of the

Table of Contents

offer and any shares or pre-funded warrants and the accompanying warrants to be offered so as to enable an investor to decide to purchase or subscribe for any shares or pre-funded warrants and the accompanying warrants and the expression “UK Prospectus Regulation” means Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018.

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

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

A. to an institutional investor (as defined in Section 4A of the Securities and Futures Act (Chapter 289) of Singapore, as modified or amended from time to time (the “SFA”)) pursuant to Section 274 of the SFA;

B. to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA; or

C. otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the shares or pre-funded warrants and the accompanying warrants are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

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

b. a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities or securities-based derivatives contracts (each term as defined in Section 2(1) of the SFA) of that corporation or the beneficiaries’ rights and interest (however described) in that trust shall not be transferred

within six months after that corporation or that trust has acquired the shares or pre-funded warrants and the accompanying warrants pursuant to an offer made under Section 275 of the SFA except:

(i) to an institutional investor or to a relevant person, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;

(ii) where no consideration is or will be given for the transfer;

(iii) where the transfer is by operation of law;

(iv) as specified in Section 276(7) of the SFA; or

(v) as specified in Regulation 37A of the Securities and Futures (Offers of Investments) (Securities and Securities-based Derivatives Contracts) Regulations 2018.

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

Israel. In the State of Israel this prospectus supplement shall not be regarded as an offer to the public to purchase shares of common stock or pre-funded warrants and the accompanying warrants under the Israeli Securities Law, 5728 – 1968, which requires a prospectus to be published and authorized by the Israel Securities Authority, if it complies with certain provisions of Section 15 of the Israeli Securities Law, 5728–1968, including, inter alia, if: (i) the offer is made, distributed or directed to not more than 35 investors, subject to certain conditions (the “Addressed Investors”); or (ii) the offer is made, distributed or directed to certain qualified investors defined in the First Addendum of the Israeli Securities Law, 5728 – 1968, subject to certain conditions (the “Qualified Investors”). The Qualified Investors shall not be taken into account in the count of the Addressed Investors and may be offered to purchase securities in addition to the 35 Addressed Investors. We have not and will not take any action that would require us to publish a prospectus in accordance with and subject to the Israeli Securities Law, 5728 – 1968. We have not and will not distribute this prospectus or make, distribute or direct an offer to subscribe for our common stock or pre-funded warrants and the accompanying warrants to any person within the State of Israel, other than to Qualified Investors and up to 35 Addressed Investors.

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

[Table of Contents](#)

We have not authorized and do not authorize the making of any offer of securities through any financial intermediary on our behalf, other than offers made by the underwriters and their respective affiliates, with a view to the final placement of the securities as contemplated in this document. Accordingly, no purchaser of the shares or pre-funded warrants and the accompanying warrants, other than the underwriters, is authorized to make any further offer of shares or pre-funded warrants and the accompanying warrants on our behalf or on behalf of the underwriters.

LEGAL MATTERS

Certain legal matters in connection with this offering and the validity of the securities offered by this prospectus supplement will be passed upon for us by Goodwin Procter LLP, Boston, MA. The underwriters are being represented in connection with this offering by Duane Morris LLP, New York, New York.

EXPERTS

The consolidated financial statements of Cabaletta Bio, Inc. appearing in Cabaletta Bio, Inc.'s Annual Report (Form 10-K) for the year ended December 31, 2024, have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon (which contains an explanatory paragraph describing conditions that raise substantial doubt about the Company's ability to continue as a going concern as described in Note 1 to the consolidated financial statements), included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus supplement is part of a shelf registration statement on Form S-3 that we have filed with the SEC. This prospectus supplement, filed as part of the registration statement, does not contain all the information set forth in the registration statement and its exhibits and schedules, portions of which have been omitted as permitted by the rules and regulations of the SEC. For further information about us, we refer you to the registration statement and to its exhibits and schedules. Certain information in the registration statement has been omitted from this prospectus supplement in accordance with the rules of the SEC.

We are subject to the reporting and information requirements of the Exchange Act and, in accordance therewith, file annual, quarterly and special reports, proxy statements and other information with the SEC. These documents also may be accessed through the SEC's electronic data gathering, analysis and retrieval system, or EDGAR, via electronic means, including the SEC's home page on the Internet (www.sec.gov). Copies of certain information filed by us with the SEC are also available on our website at www.cabalettabio.com. Information contained on our website is not incorporated by reference in this prospectus supplement and, therefore, is not part of this prospectus supplement.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to incorporate by reference the information and reports we file with it, which means that we can disclose important information to you by referring you to these documents. The information incorporated by reference is an important part of this prospectus supplement, and information that we file later with the SEC will automatically update and supersede the information already incorporated by reference. We are incorporating by reference the documents listed below, which we have already filed with the SEC (SEC File No. 001-39103), and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, including all filings made after the date of the filing of this prospectus supplement and prior to the effectiveness of this registration statement, except as to any portion of any future report or document that is not deemed filed under such provision, after the date of this prospectus supplement and prior to the termination of this offering:

- Annual Report on Form 10-K for the year ended December 31, 2024, filed with the SEC on [March 31, 2025](#);
- Quarterly Report on Form 10-Q for the quarter ended March 31, 2025, filed with the SEC on [May 15, 2025](#);
- Current Reports on Form 8-K, filed with the SEC on [January 13, 2025](#), [February 18, 2025](#), [February 18, 2025](#), [May 15, 2025](#), [May 19, 2025](#), [June 10, 2025](#), and [June 11, 2025](#); and
- The description of our common stock contained in our registration statement on Form 8-A filed with the SEC on [October 23, 2019](#) under Section 12(b) of the Exchange Act, including any amendments or reports filed for the purpose of updating such description.

We incorporate by reference any future filings made with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act between the date of this prospectus supplement and the termination of the offering.

Notwithstanding the foregoing, unless specifically stated to the contrary, information that we furnish (and that is not deemed “filed” with the SEC) under Items 2.02 and 7.01 of any Current Report on Form 8-K, including the related exhibits under Item 9.01, is not incorporated by reference into this prospectus supplement or the registration statement of which this prospectus supplement is a part.

Any statement contained in a document that is incorporated by reference will be modified or superseded for all purposes to the extent that a statement contained in this prospectus supplement, or in any other document that is subsequently filed with the SEC and incorporated by reference into this prospectus supplement, modifies or is contrary to that previous statement. Any statement so modified or superseded will not be deemed a part of this prospectus supplement, except as so modified or superseded. Since information that we later file with the SEC will update and supersede previously incorporated information, you should look at all of the SEC filings that we incorporate by reference to determine if any of the statements in this prospectus supplement or in any documents previously incorporated by reference have been modified or superseded.

Upon request, we will provide, without charge, to each person, including any beneficial owner, to whom a copy of this prospectus supplement is delivered, a copy of the documents incorporated by reference into this prospectus supplement but not delivered therewith. You may request a copy of these filings, and any exhibits we have specifically incorporated by reference as an exhibit in this prospectus supplement, at no cost by writing or telephoning us at the following address: Cabaletta Bio, Inc. 2929 Arch Street, Suite 600, Philadelphia, Pennsylvania 19104; telephone: (267) 759-3100.

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

[Table of Contents](#)

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

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

PROSPECTUS

Caballetta Bio™

\$400,000,000

**Common Stock
Preferred Stock
Debt Securities
Warrants
Units**

We may from time to time issue, in one or more series or classes, up to \$400,000,000 in aggregate principal amount of our common stock, preferred stock, debt securities, warrants and/or units. We may offer these securities separately or together in units. We will specify in the applicable accompanying prospectus supplement the terms of the securities being offered. We may sell these securities to or through underwriters and also to other purchasers or through agents. We will set forth the names of any underwriters or agents, and any fees, conversions or discount arrangements, in the applicable accompanying prospectus supplement. We may not sell any securities under this prospectus without delivery of the applicable prospectus supplement.

You should read this document and any prospectus supplement or amendment carefully before you invest in our securities.

Our common stock is listed on the Nasdaq Global Select Market under the symbol “CABA.” On March 26 2025, the closing price for our common stock, as reported on the Nasdaq Global Select Market, was \$1.57 per share. Our principal executive office is located at 2929 Arch Street, Suite 600, Philadelphia, Pennsylvania 19104.

Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties referenced under the heading “[Risk Factors](#)” contained in this prospectus beginning on page 2 and any applicable prospectus supplement, and under similar headings in the other documents that are incorporated by reference into this prospectus.

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

The date of this Prospectus is March 31, 2025.

TABLE OF CONTENTS

	Page
ABOUT THIS PROSPECTUS	1
RISK FACTORS	2
CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS	3
THE COMPANY	6
USE OF PROCEEDS	9
SECURITIES WE MAY OFFER	10
DESCRIPTION OF CAPITAL STOCK	11
DESCRIPTION OF DEBT SECURITIES	18
DESCRIPTION OF WARRANTS	24
DESCRIPTION OF UNITS	25
PLAN OF DISTRIBUTION	28
LEGAL MATTERS	32
EXPERTS	33
WHERE YOU CAN FIND MORE INFORMATION	34
INCORPORATION BY REFERENCE	35

ABOUT THIS PROSPECTUS

This prospectus is part of a shelf registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or the SEC, using a “shelf” registration process. Under this shelf registration process, we may from time to time sell any combination of the securities described in this prospectus in one or more offerings for an aggregate offering amount of up to \$400,000,000.

This prospectus provides you with a general description of the securities we may offer. Each time we sell securities, we will provide one or more prospectus supplements that will contain specific information about the terms of the offering. The applicable prospectus supplement may also add, update or change information contained in this prospectus. You should read both this prospectus and any accompanying prospectus supplement together with the additional information described under the heading “Where You Can Find More Information” beginning on page 34 of this prospectus.

You should rely only on the information contained in or incorporated by reference in this prospectus, the accompanying prospectus supplement or in any related free writing prospectus filed by us with the SEC. We have not authorized anyone to provide you with different information. This prospectus and the accompanying prospectus supplement do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the securities described in the accompanying 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.

Unless the context suggests otherwise, all references to “us,” “our,” “Cabaletta Bio,” “we,” the “Company” and similar designations refer to Cabaletta Bio, Inc.

RISK FACTORS

Investing in our securities involves a high degree of risk. You should carefully consider the risks referenced below and described in the documents incorporated by reference in this prospectus and any applicable prospectus supplement, as well as other information we include or incorporate by reference into this prospectus and any applicable prospectus supplement, before making an investment decision. Our business, financial condition or results of operations could be materially adversely affected by the materialization of any of these risks. The trading price of our securities could decline due to the materialization of any of these risks, and you may lose all or part of your investment. This prospectus and the documents incorporated herein by reference also contain forward-looking statements that involve risks and uncertainties. Actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including the risks referenced below and described in the documents incorporated herein by reference, including (i) our annual report on Form 10-K for the fiscal year ended December 31, 2024, which is on file with the SEC and is incorporated herein by reference and (ii) other documents we file with the SEC that are deemed incorporated by reference into this prospectus.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, any applicable prospectus supplement, any related free writing prospectus and the documents that we incorporate by reference herein or therein contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. Any statements about our expectations, beliefs, plans, objectives, assumptions or future events or performance are not historical facts and may be forward-looking. These statements are often, but are not always, made through the use of words or phrases such as “may,” “will,” “could,” “should,” “expects,” “intends,” “plans,” “anticipates,” “believes,” “estimates,” “predicts,” “projects,” “potential,” “continue,” and similar expressions, or the negative of these terms, or similar expressions. Accordingly, these statements involve estimates, assumptions, risks and uncertainties which could cause actual results to differ materially from those expressed in them. Any forward-looking statements are qualified in their entirety by reference to the factors discussed throughout this prospectus, and in particular those factors referenced in the section “Risk Factors.”

This prospectus contains forward-looking statements that are based on our management’s belief and assumptions and on information currently available to our management. Although we believe that the expectations reflected in these forward-looking statements are reasonable, these statements relate to future events or our future operational or financial performance, and involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by these forward-looking statements. Forward-looking statements include, but are not limited to, statements about:

- the success, cost and timing and conduct of our clinical trial program, including our Phase 1/2 RESET™ clinical trials for rese-cel, our MusCAARTes™ trial, and any other product candidates, including statements regarding the timing of initiation, enrollment and completion of the clinical trials and the period during which the results of the clinical trials will become available;
- the expected timing and significance around the announcement of safety, biologic activity and/or any additional clinical data from our RESET™ clinical trials for rese-cel or MusCAARTes™ trial;
- the timing of and our ability to obtain and maintain regulatory approval of our product candidates, including rese-cel, MuSK-CAART, and our other product candidates, in any of the indications for which we plan to develop them, and any related restrictions, limitations, and/or warnings in the label of an approved product candidate;
- our expectations for the tolerability and clinical activity of rese-cel and ability to advance this product candidate through our license agreement with IASO;
- the potential benefits of our Orphan Drug, Rare Pediatric Disease and Fast Track designations;
- our expected use of proceeds from sales of our common stock in “at-the-market” offerings and other offerings, and the period over which such proceeds, together with existing cash, will be sufficient to extend our current cash runway beyond our current expectations into the first half of 2026 and meet our operating needs, including our ability to continue as a going concern;
- our plans to pursue research and development of other product candidates;
- the potential advantages of our proprietary Cabaletta Approach for B cell Ablation platform, called our CABA® platform, and our product candidates;
- the extent to which our scientific approach and CABA® platform may potentially address a broad range of diseases;
- the potential benefits and success of our arrangements with Penn, the Children’s Hospital of Philadelphia, or CHOP, and WuXi;

Table of Contents

- our ability to successfully leverage our research and translational insights;
- our expectations regarding the results observed with the similarly-designed construct employed in recent academic publications, including the dosing regimen, and the implications on rese-cel;
- our ability to successfully commercialize our product candidates, including rese-cel, MuSK-CAART and any other product candidates;
- the potential receipt of revenue from future sales of rese-cel, MuSK-CAART and any other product candidates, if approved;
- the rate and degree of market acceptance and clinical utility of rese-cel, MuSK-CAART and any other product candidates;
- our estimates regarding the potential market opportunity for rese-cel, MuSK-CAART and any other product candidates, and our ability to serve those markets;
- our sales, marketing and distribution capabilities and strategy, whether alone or with potential future collaborators;
- our ability to establish and maintain arrangements or a facility for manufacture of rese-cel, MuSK-CAART and any other product candidates;
- our ability to obtain funding for our operations, including funding necessary to initiate and complete our RESET™ clinical trials of rese-cel, our MusCAARTes™ trial and any ongoing preclinical studies of other product candidates;
- our expectations for the efficiency of the trial design for our RESET™ clinical trials for rese-cel and the potential success and therapeutic benefits of rese-cel, including our belief that rese-cel may enable an “immune system reset” and provide deep and durable responses in patients across an increasing number of autoimmune diseases;
- the potential achievement of milestones and receipt of payments under our collaborations;
- our ability to enter into additional collaborations with existing collaborators or other third parties;
- our expectations regarding our ability to obtain and maintain intellectual property protection for our product candidates and our ability to operate our business without infringing on the intellectual property rights of others;
- our expectations regarding international expansion and results of our efforts to do so;
- the success of competing therapies that are or become available, and our competitive position;
- the accuracy of our estimates regarding expenses, future revenues, capital requirements and needs for additional financing;
- the impact of government laws and regulations in the United States and foreign countries; and
- our ability to attract and retain key scientific or management personnel.

These forward-looking statements are neither promises nor guarantees of future performance due to a variety of risks and uncertainties, many of which are beyond our control, which could cause actual results to differ materially from those indicated by these forward-looking statements, including, without limitation the risk factors and cautionary statements described in other documents that we file from time to time with the SEC, specifically under “Item 1A: Risk Factors” and elsewhere in our most recent Annual Report on Form 10-K for the period ended December 31, 2024 and our Current Reports on Form 8-K, and the section of any accompanying prospectus supplement entitled “Risk Factors.”

The forward-looking statements in this prospectus and the documents incorporated by reference represent our views as of their respective dates. We anticipate that subsequent events and developments will cause our views to change. However, while we may elect to update these forward-looking statements at some point in the

[Table of Contents](#)

future, we assume no obligation to update or revise any forward-looking statements except to the extent required by applicable law. You should, therefore, not rely on these forward-looking statements as representing our views as of any date subsequent to the dates on which they were made.

This prospectus and the documents incorporated by reference also contain estimates, projections and other information concerning our industry, our business, and the markets for certain diseases, including data regarding the estimated size of those markets, and the incidence and prevalence of certain medical conditions. Information that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances reflected in this information. Unless otherwise expressly stated, we obtained this industry, business, market and other data from reports, research surveys, studies and similar data prepared by market research firms and other third parties, industry, medical and general publications, government data and similar sources.

THE COMPANY

We are a clinical-stage biotechnology company focused on the discovery and development of innovative engineered T cell therapies that have the potential to provide deep and durable, perhaps curative, responses with one-time administration for patients with autoimmune diseases. Our proprietary CABA®, or Cabaletta Approach to B cell Ablation, platform encompasses two strategies. Our CARTA, or Chimeric Antigen Receptor T cells for Autoimmunity, approach is designed to potentially reset the immune system. Our legacy CAART, or Chimeric AutoAntibody Receptor T cells, approach is designed to engineer T cells to selectively engage and eliminate only disease-causing B cells. We believe our CABA® platform has the potential to safely enable complete and durable responses for a broad range of autoimmune diseases and that it has potential applicability across dozens of autoimmune diseases that we have identified, evaluated and prioritized.

Resecabtagene autoleucel (rese-cel, formerly referred to as CABA-201) is a 4-1BB co-stimulatory domain-containing fully human CD19-CAR T construct designed to treat patients with a broad range of autoimmune diseases and our lead product candidate within the CARTA strategy. Rese-cel is designed to achieve transient and deep depletion of all B cells following a single treatment by using T cells engineered to express an antibody fragment that recognizes a B cell receptor expressed on the surface of all B cells. The construct is designed to allow for the deep elimination of all B cells, including all B cells that contribute to disease, with subsequent repopulation by healthy naïve B cells. This approach has the potential to reset the immune system, providing meaningful durable and complete clinical responses to patients off immunosuppressive therapies.

In March 2023, the United States Food and Drug Administration, or the FDA, granted clearance of our rese-cel Investigational New Drug, or IND, application for treatment of SLE in patients with active lupus nephritis, or LN, or active SLE without renal involvement. SLE is a chronic, potentially severe, autoimmune disease, most commonly impacting young women between the ages of 15 and 40 with higher frequency and more severity in people of color, where the immune system attacks healthy tissue throughout the body. SLE affects an estimated up to 320,000 patients in the U.S., and 150,000 patients in Europe, with LN as the most common end-organ manifestation, affecting approximately 40% of SLE patients. In May 2023, we announced the FDA granted Fast Track Designation for rese-cel, designed to deplete CD19-positive B cells and improve disease activity in patients with SLE and LN. The RESET-SLE™ Phase 1/2 clinical trial of rese-cel is designed to treat six SLE patients with active LN, and in a separate parallel cohort, six patients with active SLE without renal involvement, with a single weight-based dose of 1.0×10^6 cells/kg. In March 2024, Health Canada issued a No Objection Letter in response to a Clinical Trial Application, or CTA, for the RESET-SLE™ trial submitted by Cabaletta, enabling us to begin the process to activate clinical trial sites and pursue patient enrollment for the RESET-SLE™ trial in Canada. In October 2024, the European Medicines Agency allowed a CTA submitted by Cabaletta for the RESET-SLE™ trial to proceed, enabling us to begin the process of activating clinical trial sites and pursuing patient enrollment for the RESET-SLE™ trial. The trial is open for enrollment across multiple sites in the United States and one site in the European Union.

In May 2023, the FDA granted clearance of our rese-cel IND application for treatment of idiopathic inflammatory myopathies, or IIM, or myositis. We announced the FDA granted Fast Track Designation for rese-cel for the treatment of patients with dermatomyositis to improve disease activity and Orphan Drug Designation for rese-cel for the treatment of myositis in January and February 2024, respectively. In March 2024, we announced the FDA granted Rare Pediatric Disease designation for rese-cel for juvenile dermatomyositis. The trial is open for enrollment across multiple sites in the United States and one site in the United Kingdom.

In October 2023, we announced that the FDA granted clearance of our rese-cel IND application for treatment of systemic sclerosis, or SSc. We announced the FDA granted Fast Track Designation for rese-cel for the treatment of patients with SSc to improve associated organ dysfunction and Orphan Drug Designation for rese-cel for the treatment of systemic sclerosis in January and March 2024, respectively. The trial is open for enrollment across multiple sites in the United States.

Table of Contents

In November 2023, the FDA granted clearance of our rese-cel IND application for treatment of generalized myasthenia gravis, or gMG, a subset of patients with myasthenia gravis, or MG.

In January 2025, we announced the FDA granted clearance of our rese-cel IND application for treatment of multiple sclerosis, or MS. In addition, we announced the FDA granted Fast Track Designation for rese-cel for the treatment of relapsing and progressive forms of MS. The RESET-MS™ trial is a Phase 1/2 open-label, dose escalation study of rese-cel in subjects with relapsing and progressive forms of MS, evaluated in separate cohorts. Approximately 750,000 patients in the U.S. and approximately 550,000 patients in Europe are affected by MS.

In February 2025, we announced updated clinical and translational data from the first 10 patients in the RESET™ clinical trial program, with a data cut off of January 8, 2025. Overall, clinical responses continued to deepen over three SLE patients in DORIS remission, the first LN patient achieving complete renal response, and the first dermatomyositis patient maintaining a major total improvement score, or TIS, improvement. Each of these patients discontinued all immunosuppressants and were off or tapering steroids as of January 8, 2025. The safety profile continued to suggest a favorable risk-benefit in the first 10 patients dosed with 90% of patients having experienced either no CRS or Grade 1 CRS and 90% of patients having experienced no ICANS.

In March 2025, we learned of an important protocol deviation in the RESET-SSc™ trial. The protocol requires that in any patient with a fever or infection during the two weeks prior to rese-cel infusion, the investigator promptly discuss the appropriateness and timing of infusion with the trial's Medical Monitor. In this case, the patient reported a fever three days prior to infusion. The Cabaletta Medical Monitor was not notified by the investigator prior to the site infusing the patient. Nine days following rese-cel infusion, the patient experienced a dose-limiting toxicity of grade 3 immune effector cell-associated neurotoxicity syndrome, or ICANS, based on a transient period of confusion. There was no cerebral edema, seizures or motor dysfunction associated with the ICANS event, and the patient was arousable throughout. The ICANS resolved rapidly following treatment with dexamethasone, and the patient was discharged without further symptoms. After data review, the Independent Data Monitoring Committee recommended that the trial proceed at the current dose without delay and endorsed our proposal to require investigators to affirmatively confirm in writing to the company the absence of fevers or evidence of infection. As of March 14, 2025, 56 clinical sites across the U.S. and Europe were actively recruiting with 33 patients enrolled across the RESET™ clinical trial program.

Our manufacturing strategy is comprised of two stages. The initial stage is designed to leverage the extensive early-stage manufacturing expertise of our academic partners and contract development and manufacturing organizations, or CDMOs, for rapid early development and clinical supply, and in parallel partner with commercially compliant CDMOs capable of supporting late-stage clinical studies and commercial production. Our aim is to achieve full manufacturing readiness through expanded CDMO relationships, establishment of our own manufacturing facilities, and/or through strategic partnership(s). We are leveraging the expertise in cell and vector manufacturing of our partners at the Children's Hospital of Philadelphia, or CHOP, and the University of Pennsylvania, or Penn. For supply of lentiviral vector for the late-stage clinical and commercial manufacturing of rese-cel, we are working with Oxford Biomedica (UK) Limited, or Oxford. We have also collaborated with WuXi Advanced Therapies, Inc., or WuXi, to serve as an additional and commercially compliant cell manufacturing partner for our MusCAARTes™ and RESET™ clinical trials to meet planned capacity and international supply requirements. In July 2024, we entered into a new technology transfer agreement with Lonza Houston Inc., or Lonza, another commercially compliant CDMO, to execute a technology transfer of our expected commercial manufacturing process for rese-cel. In December 2024, we entered into a Development and Manufacturing Services Agreement, or the Lonza Agreement, with Lonza to serve as one of our manufacturing partners for the global clinical development of rese-cel in multiple indications, including potential late-stage clinical trials and preparations for commercial readiness. This improved process is nearly fully closed, semi-automated, and more easily scaled than the current process. Transfer of this updated process will be performed from Cabaletta to Lonza in anticipation of being able to supply rese-cel drug product for any of Cabaletta's ongoing and planned RESET™ clinical trials. We plan to secure commercial, scalable

Table of Contents

manufacturing capabilities through multiple potential strategies, including expanding existing or establishing new CDMO relationships, leasing, building, qualifying and operating our own manufacturing facility, and/or establishing a strategic partnership to rapidly and reliably scale manufacturing by leveraging the partner's manufacturing expertise. We believe this later stage will enable control of product development and commercial supply for products arising from our CABA™ platform, enabling us to achieve continuous improvement of our product candidates. Multiple members of our team have previously built and led organizations that have constructed and commissioned cell therapy facilities, which we believe will enable us to build our own manufacturing organizations and facilities, if desirable.

As part of our innovative manufacturing strategy where we intend to increase scale, reduce cost of goods and improve patient experience, in November 2023, we partnered with Cellares Corp., or Cellares, to evaluate their automated manufacturing platform, the Cell Shuttle™, through the Cellares Technology Adoption Program, or TAP. As part of the collaboration, the companies have agreed on a proof-of-concept technology transfer process for the automated manufacture and release testing of rese-cel. In August 2024, we expanded our partnership with Cellares to facilitate the potential to incorporate the Cellares manufacturing platform to support the RESET™ clinical program. In March 2025, we and Cellares announced the successful conclusion of the Technology Adoption Program on Cellares' automated cell therapy manufacturing Cell Shuttle™, facilitating the potential integration of the Cell Shuttle™ into our clinical and commercial, if approved, manufacturing strategy for rese-cel. We are also evaluating pathways to improve patient experience and scalability of collection through the removal of the requirement for apheresis. Data were published at the American Society of Cell and Gene Therapy conference in May 2024 illustrating the feasibility of this approach.

Corporate History and Information

We were incorporated under the laws of the state of Delaware in April 2017. Our principal executive offices are located at 2929 Arch Street, Suite 600, Philadelphia, Pennsylvania 19104. Our telephone number is (267) 759-3100, and our website is located at www.cabalettabio.com. No portion of our website is incorporated by reference into this prospectus. We do not incorporate the information on or accessible through our website into this prospectus, and you should not consider any information on, or that can be accessed through, our website as part of this prospectus. Our common stock trades on the Nasdaq Global Select Market under the symbol "CABA".

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

Implications of Being a Smaller Reporting Company

We qualify as a "smaller reporting company," as defined in Rule 12b-2 under the Securities Exchange Act of 1934, as amended. We would cease to be a smaller reporting company if we have a public float in excess of \$250 million, or have annual revenues in excess of \$100 million and a public float in excess of \$700 million, determined on an annual basis on the last business day of our second fiscal quarter. Consequently, we may take advantage of specified reduced disclosure and other requirements that are otherwise applicable generally to public companies, including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act and reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements.

USE OF PROCEEDS

We intend to use the net proceeds from the sale of any securities offered under this prospectus for general corporate purposes unless otherwise indicated in the applicable prospectus supplement. General corporate purposes may include research and development and clinical development costs to support the advancement of our product candidates and the expansion of our research and development programs; manufacturing; working capital; capital expenditures; office expansion; and other general corporate purposes. We may temporarily invest the net proceeds in a variety of capital preservation instruments, including short-term, investment-grade, interest-bearing instruments and U.S. government securities, or may hold such proceeds as cash, until they are used for their stated purpose. We have not determined the amount of net proceeds to be used specifically for such purposes. As a result, management will retain broad discretion over the allocation of net proceeds.

SECURITIES WE MAY OFFER

This prospectus contains summary descriptions of the securities we may offer from time to time. These summary descriptions are not meant to be complete descriptions of each security. The particular terms of any security will be described in the applicable prospectus supplement. This prospectus provides you with a general description of the securities we may offer. Each time we sell securities described herein, we will provide prospective investors with a supplement to this prospectus that will contain specific information about the terms of that offering, including the specific amounts, prices and terms of the securities offered.

We may sell the securities to or through underwriters, dealers or agents, directly to purchasers or through a combination of any of these methods of sale or as otherwise set forth below under “Plan of Distribution.” We, as well as any agents acting on our behalf, reserve the sole right to accept and to reject in whole or in part any proposed purchase of securities. Any 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.

DESCRIPTION OF CAPITAL STOCK

The following description of our common stock and preferred stock, together with the additional information we include in any applicable prospectus supplements, summarizes the material terms and provisions of the common stock and preferred stock that we may offer under this prospectus. The following description of our capital stock does not purport to be complete and is subject to, and qualified in its entirety by, our third amended and restated certificate of incorporation and amended and restated bylaws, as amended, which are exhibits to the registration statement of which this prospectus forms a part, and by applicable law. The terms of our common stock and preferred stock may also be affected by Delaware law.

Authorized Capital Stock

Our authorized capital stock consists of (i) 150,000,000 shares of common stock, par value \$0.00001 per share, of which (x) 143,590,481 are designated as voting common stock, and (y) 6,409,519 are designated as non-voting common stock, and (ii) 10,000,000 shares of preferred stock, par value \$0.00001 per share, all of which are undesignated preferred stock. As of December 31, 2024, we had 50,743,101 shares of voting common stock outstanding, no shares of non-voting common stock outstanding and no shares of preferred stock outstanding.

Common Stock

The holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of the stockholders, and the holders of our non-voting common stock are not entitled to any votes per share of non-voting common stock. The holders of our common stock do not have any cumulative voting rights. Holders of our common stock and non-voting common stock are entitled to receive ratably any dividends declared by our board of directors out of funds legally available for that purpose, subject to any preferential dividend rights of any outstanding preferred stock. Our common stock and non-voting common stock have no preemptive rights, conversion rights or other subscription rights or redemption or sinking fund provisions. Holders of our non-voting common stock have the right to convert each share of our non-voting common stock into one share of common stock at such holder's election, provided that as a result of such conversion, such holder, together with its affiliates and any members of a Schedule 13(d) group with such holder, would not beneficially own in excess of 4.99% of our common stock immediately prior to and following such conversion, unless otherwise as expressly provided for in our certificate of incorporation. However, this ownership limitation may be increased or decreased to any other percentage designated by such holder of non-voting common stock upon 61 days' notice to us.

In the event of our liquidation, dissolution or winding up, holders of our common stock and non-voting common stock will be entitled to share ratably in all assets remaining after payment of all debts and other liabilities and any liquidation preference of any outstanding preferred stock. All outstanding shares are fully paid and nonassessable.

When we issue shares of common stock under this prospectus, the shares will fully be paid and nonassessable and will not have, or be subject to, any preemptive or similar rights.

Pre-funded Warrants

In December 2022, we issued 126,815 shares of our common stock at a price of \$5.52 per share and to certain investors in lieu of common stock, pre-funded warrants to purchase 6,213,776 shares of our common stock at a price of \$5.51999 per pre-funded warrant. The purchase price per share of each pre-funded warrant represents the per share offering price for the common stock, minus the \$0.00001 per share exercise price of such pre-funded warrant. At the time of this filing, no pre-funded warrants remain outstanding.

Table of Contents

A holder of the pre-funded warrants will not be entitled to exercise any portion of any pre-funded warrant, which, upon giving effect to such exercise, would cause (i) the aggregate number of shares of our Common Stock beneficially owned by the holder (together with its affiliates) to exceed 4.99% (or, at the election of the holder, 9.99%) of the number of shares of our Common Stock outstanding immediately after giving effect to the exercise, or (ii) the combined voting power of our securities beneficially owned by the holder (together with its affiliates) to exceed 4.99% (or, at the election of the holder, 9.99%) of the combined voting power of all of our securities then outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the pre-funded warrants. However, any holder may increase or decrease such percentage to any other percentage not in excess of 19.99% upon at least 61 days' prior notice from the holder to us.

The exercise price of the pre-funded warrants and the number of shares of our common stock issuable upon exercise of the pre-funded warrants is subject to appropriate adjustment in the event of certain stock dividends and distributions, stock splits, stock combinations, reclassifications or similar events affecting our common stock. The exercise price will not be adjusted below the par value of our common stock. The pre-funded warrants will not expire.

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

Listing

Our common stock is listed on the Nasdaq Global Select Market under the symbol "CABA." On March 26, 2025, the closing price for our common stock, as reported on the Nasdaq Global Select Market, was \$1.57 per share.

Transfer Agent and Registrar

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

Undesignated Preferred Stock

Our board of directors is authorized to issue up to 10,000,000 shares of undesignated preferred stock in one or more series without stockholder approval. Our board of directors may determine the rights, preferences, privileges and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences, of each series of preferred stock.

The purpose of authorizing our board of directors to issue preferred stock in one or more series and determine the number of shares in the series and its rights and preferences is to eliminate delays associated with a stockholder vote on specific issuances. Examples of rights and preferences that the Board may fix are:

- dividend rights;
- conversion rights;
- voting rights;
- terms of redemption;
- liquidation preferences;
- sinking fund terms; and
- the number of shares constituting, or the designation of, such series, any or all of which may be greater than the rights of common stock.

Table of Contents

The existence of authorized but unissued shares of undesignated preferred stock may enable our board of directors to render more difficult or to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise. For example, if in the due exercise of its fiduciary obligations, our board of directors were to determine that a takeover proposal is not in the best interests of us or our stockholders, our board of directors could cause shares of preferred stock to be issued without stockholder approval in one or more private offerings or other transactions that might dilute the voting or other rights of the proposed acquirer, stockholder or stockholder group. The rights of holders of our common stock described above will be subject to, and may be adversely affected by, the rights of any preferred stock that we may designate and issue in the future. The issuance of shares of undesignated preferred stock could decrease the amount of earnings and assets available for distribution to holders of shares of common stock. The issuance may also adversely affect the rights and powers, including voting rights, of these holders and may have the effect of delaying, deterring or preventing a change in control of us.

We will incorporate by reference as an exhibit to the registration statement, which includes this prospectus, the form of any certificate of designation that describes the terms of the series of preferred stock we are offering. This description and the applicable prospectus supplement will include:

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

When we issue shares of preferred stock under this prospectus, the shares will fully be paid and nonassessable and will not be subject to any preemptive or similar rights.

Antitakeover Effects of Delaware Law and Provisions of our Third Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws

Certain provisions of the Delaware General Corporation Law and of our third amended and restated certificate of incorporation and amended and restated bylaws could have the effect of delaying, deferring or discouraging another party from acquiring control of us. These provisions, which are summarized below, are expected to discourage certain types of coercive takeover practices and inadequate takeover bids and, as a consequence, they might also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored hostile takeover attempts. These provisions are also designed in part to encourage anyone seeking to acquire control of us to first negotiate with our board of directors. These provisions might also have the effect of preventing changes in our management. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders might otherwise deem to be in their best interests. However, we believe that the advantages gained by protecting our ability to negotiate with any unsolicited and potentially unfriendly acquirer outweigh the disadvantages of discouraging such proposals, including those priced above the then-current market value of our common stock, because, among other reasons, the negotiation of such proposals could improve their terms.

Delaware Takeover Statute

We are subject to the provisions of Section 203 of the Delaware General Corporation Law. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a “business combination” with an “interested stockholder” for a three-year period following the time that this stockholder becomes an interested stockholder, unless the business combination is approved in a prescribed manner. Under Section 203, a business combination between a corporation and an interested stockholder is prohibited unless it satisfies one of the following conditions:

- before the stockholder became interested, our board of directors 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 voting stock outstanding, shares owned by persons who are directors and also officers, and employee stock plans, in some instances, but not the outstanding voting stock owned by the interested stockholder; or
- at or after the time the stockholder became interested, the business combination was approved by our board of directors and authorized at an annual or special meeting of the stockholders 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 and the interested stockholder;
- any sale, transfer, lease, pledge, exchange, mortgage or other disposition involving the interested stockholder of 10% or more of the assets of the corporation;
- subject to exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- subject to exceptions, any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; or

Table of Contents

- 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.

In general, Section 203 defines an interested stockholder as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by the entity or person.

Provisions of our Third Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws

Our third amended and restated certificate of incorporation and amended and restated bylaws include a number of provisions that may have the effect of delaying, deferring or discouraging another party from acquiring control of us and encouraging persons considering unsolicited tender offers or other unilateral takeover proposals to negotiate with our board of directors rather than pursue non-negotiated takeover attempts. These provisions include the items described below.

Board composition and filling vacancies. In accordance with our third amended and restated certificate of incorporation, our board is divided into three classes serving staggered three-year terms, with one class being elected each year. Our third amended and restated certificate of incorporation also provides that directors may be removed only for cause and then only by the affirmative vote of the holders of 75% or more of the shares then entitled to vote at an election of directors. Furthermore, any vacancy on our board of directors, however occurring, including a vacancy resulting from an increase in the size of our board, may only be filled by the affirmative vote of a majority of our directors then in office even if less than a quorum. The classification of directors, together with the limitations on removal of directors and treatment of vacancies, has the effect of making it more difficult for stockholders to change the composition of our board of directors.

No written consent of stockholders. Our third amended and restated certificate of incorporation provides that all stockholder actions are required to be taken by a vote of the stockholders at an annual or special meeting, and that stockholders may not take any action by written consent in lieu of a meeting. This limit may lengthen the amount of time required to take stockholder actions and would prevent the amendment of our bylaws or removal of directors by our stockholder without holding a meeting of stockholders.

Meetings of stockholders. Our bylaws provide that only a majority of the members of our board of directors then in office may call special meetings of stockholders and only those matters set forth in the notice of the special meeting may be considered or acted upon at a special meeting of stockholders. Our bylaws limit the business that may be conducted at an annual meeting of stockholders to those matters properly brought before the meeting.

Advance notice requirements. Our bylaws establish advance notice procedures with regard to stockholder proposals relating to the nomination of candidates for election as directors or new business to be brought before meetings of our stockholders. These procedures provide that notice of stockholder proposals must be timely given in writing to our corporate secretary prior to the meeting at which the action is to be taken. Generally, to be timely, notice must be received at our principal executive offices not less than 90 days or more than 120 days prior to the first anniversary date of the annual meeting for the preceding year. The notice must contain certain information specified in our bylaws. These requirements may preclude stockholders from bringing matters before the stockholders at an annual or special meeting.

Amendment to certificate of incorporation and bylaws. As required by the Delaware General Corporation Law, any amendment of our third amended and restated certificate of incorporation must first be approved by a majority of our board of directors, and if required by law or our third amended and restated certificate of incorporation, must thereafter be approved by a majority of the outstanding shares entitled to vote on the amendment, and a majority of the outstanding shares of each class entitled to vote thereon as a class, except that the amendment of the provisions relating to stockholder action, directors, limitation of liability and the

amendment of our third amended and restated certificate of incorporation must be approved by not less than 75% of the outstanding shares entitled to vote on the amendment, and not less than 75% of the outstanding shares of each class entitled to vote thereon as a class. Our bylaws may be amended by the affirmative vote of a majority vote of the directors then in office, subject to any limitations set forth in the bylaws; and may also be amended by the affirmative vote of at least 75% of the outstanding shares entitled to vote on the amendment, or, if the board of directors recommends that the stockholders approve the amendment, by the affirmative vote of the majority of the outstanding shares entitled to vote on the amendment, in each case voting together as a single class.

Undesignated preferred stock. Our third amended and restated certificate of incorporation provides for authorized shares of preferred stock. The existence of authorized but unissued shares of preferred stock may enable our board of directors to render more difficult or to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise. For example, if in the due exercise of its fiduciary obligations, our board of directors were to determine that a takeover proposal is not in the best interests of us or our stockholders, our board of directors could cause shares of preferred stock to be issued without stockholder approval in one or more private offerings or other transactions that might dilute the voting or other rights of the proposed acquirer or insurgent stockholder or stockholder group. In this regard, our third amended and restated certificate of incorporation grants our board of directors broad power to establish the rights and preferences of authorized and unissued shares of preferred stock. The issuance of shares of preferred stock could decrease the amount of earnings and assets available for distribution to holders of shares of common stock. The issuance may also adversely affect the rights and powers, including voting rights, of these holders and may have the effect of delaying, deterring or preventing a change in control of us.

Choice of forum

Our bylaws provide that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for any state law claim 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 to us or our stockholders; (3) any action asserting a claim arising pursuant to any provision of the DGCL or our certificate of incorporation or bylaws (including the interpretation, validity or enforceability thereof); or (4) any action asserting a claim governed by the internal affairs doctrine, or the Delaware Forum Provision. The choice of forum provision does not apply to any actions arising under the Securities Act or the Exchange Act. Our bylaws further provide that, unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States of America are the sole and exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act, or the rules and regulations promulgated thereunder, or the Federal Forum Provision. In addition, our bylaws provide that any person or entity purchasing or otherwise acquiring any interest in shares of our common stock is deemed to have notice of and consented to the foregoing Delaware Forum Provision and Federal Forum Provision; provided, however, that stockholders cannot and will not be deemed to have waived our compliance with the U.S. federal securities laws and the rules and regulations thereunder.

The Delaware Forum Provision and the Federal Forum Provision may impose additional litigation costs on stockholders in pursuing any such claims. Additionally, these forum selection clauses may limit our stockholders' ability to bring a claim in a judicial forum that they find favorable for disputes with us or our directors, officers or employees, which may discourage the filing of lawsuits against us and our directors, officers and employees even though an action, if successful, might benefit our stockholders. In addition, Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder. While the Delaware Supreme Court and other states have upheld the validity of federal forum selection provisions purporting to require claims under the Securities Act be brought in federal court, there is uncertainty as to whether other courts will enforce our Federal Forum Provision. If the Federal Forum Provision is found to be unenforceable, we may incur additional costs with resolving such matters. The Federal Forum Provision may also impose additional litigation costs on us and/or our stockholders who assert that the provision is invalid or unenforceable. The Court

[Table of Contents](#)

of Chancery of the State of Delaware or the federal district courts of the United States of America may also reach different judgments or results than would other courts, including courts where a stockholder considering an action may be located or would otherwise choose to bring the action, and such judgments may be more or less favorable to us than our stockholders.

DESCRIPTION OF DEBT SECURITIES

We may offer debt securities which may be senior or subordinated. We refer to senior debt securities and subordinated debt securities collectively as debt securities. Each series of debt securities may have different terms. The following description summarizes the general terms and provisions of the debt securities. We will describe the specific terms of the debt securities and the extent, if any, to which the general provisions summarized below apply to any series of debt securities in the prospectus supplement relating to the series and any applicable free writing prospectus that we authorize to be delivered.

We may issue senior debt securities from time to time, in one or more series under a senior indenture to be entered into between us and a senior trustee to be named in a prospectus supplement, which we refer to as the senior trustee. We may issue subordinated debt securities from time to time, in one or more series, under a subordinated indenture to be entered into between us and a subordinated trustee to be named in a prospectus supplement, which we refer to as the subordinated trustee. The forms of senior indenture and subordinated indenture are filed as exhibits to the registration statement of which this prospectus forms a part. Together, the senior indenture and the subordinated indenture are referred to as the indentures and, together, the senior trustee and the subordinated trustee are referred to as the trustees. This prospectus briefly outlines some of the provisions of the indentures. The following summary of the material provisions of the indentures is qualified in its entirety by the provisions of the indentures, including definitions of certain terms used in the indentures. Wherever we refer to particular sections or defined terms of the indentures, those sections or defined terms are incorporated by reference in this prospectus or the applicable prospectus supplement. You should review the indentures that are filed as exhibits to the registration statement of which this prospectus forms a part for additional information. As used in this prospectus, the term “debt securities” includes the debt securities being offered by this prospectus and all other debt securities issued by us under the indentures.

General

The indentures:

- do not limit the amount of debt securities that we may issue;
- allow us to issue debt securities in one or more series;
- do not require us to issue all of the debt securities of a series at the same time; and
- allow us to reopen a series to issue additional debt securities without the consent of the holders of the debt securities of such series.

Unless otherwise provided in the applicable prospectus supplement, the senior debt securities will be unsubordinated obligations and will rank equally with all of our other unsecured and unsubordinated indebtedness. Payments on the subordinated debt securities will be subordinated to the prior payment in full of all of our senior indebtedness, as described under “—Subordination” and in the applicable prospectus supplement.

Each indenture provides that we may, but need not, designate more than one trustee under an indenture. Any trustee under an indenture may resign or be removed and a successor trustee may be appointed to act with respect to the series of debt securities administered by the resigning or removed trustee. If two or more persons are acting as trustee with respect to different series of debt securities, each trustee shall be a trustee of a trust under the applicable indenture separate and apart from the trust administered by any other trustee. Except as otherwise indicated in this prospectus, any action described in this prospectus to be taken by each trustee may be taken by each trustee with respect to, and only with respect to, the one or more series of debt securities for which it is trustee under the applicable indenture.

The prospectus supplement for each offering will provide the following terms, where applicable:

- the title of the debt securities and whether they are senior or subordinated;

Table of Contents

- any limit upon the aggregate principal amount of the debt securities of that series;
- the date or dates on which the principal of the debt securities of the series is payable;
- the price at which the debt securities will be issued, expressed as a percentage of the principal and, if other than the principal amount thereof, the portion of the principal amount thereof payable upon declaration of acceleration of the maturity thereof or, if applicable, the portion of the principal amount of such debt securities that is convertible into another security of ours or the method by which any such portion shall be determined;
- the rate or rates at which the debt securities of the series shall bear interest or the manner of calculation of such rate or rates, if any;
- the date or dates from which interest will accrue, the interest payment dates on which such interest will be payable or the manner of determination of such interest payment dates, the place(s) of payment, and the record date for the determination of holders to whom interest is payable on any such interest payment dates or the manner of determination of such record dates;
- the right, if any, to extend the interest payment periods and the duration of such extension;
- the period or periods within which, the price or prices at which and the terms and conditions upon which debt securities of the series may be redeemed, converted or exchanged, in whole or in part;
- our obligation, if any, to redeem or purchase debt securities of the series pursuant to any sinking fund, mandatory redemption, or analogous provisions (including payments made in cash in satisfaction of future sinking fund obligations) or at the option of a holder thereof and the period or periods within which, the price or prices at which, and the terms and conditions upon which, debt securities of the series shall be redeemed or purchased, in whole or in part, pursuant to such obligation;
- the form of the debt securities of the series including the form of the Certificate of Authentication for such series;
- if other than minimum denominations of one thousand U.S. dollars (\$1,000) or any integral multiple of \$1,000 thereof, the denominations in which the debt securities of the series shall be issuable;
- whether the debt securities of the series shall be issued in whole or in part in the form of a global debt security or global debt securities; the terms and conditions, if any, upon which such global debt security or global debt securities may be exchanged in whole or in part for other individual debt securities; and the depositary for such global debt security or global debt securities;
- whether the debt securities will be convertible into or exchangeable for common stock or other securities of ours or any other person and, if so, the terms and conditions upon which such debt securities will be so convertible or exchangeable, including the conversion or exchange price, as applicable, or how it will be calculated and may be adjusted, any mandatory or optional (at our option or the holders' option) conversion or exchange features, and the applicable conversion or exchange period;
- any additional or alternative events of default to those set forth in the indenture;
- any additional or alternative covenants to those set forth in the indenture;
- the currency or currencies including composite currencies, in which payment of the principal of (and premium, if any) and interest, if any, on such debt securities shall be payable (if other than the currency of the United States of America), which unless otherwise specified shall be the currency of the United States of America as at the time of payment is legal tender for payment of public or private debts;
- if the principal of (and premium, if any), or interest, if any, on such debt securities is to be payable, at our election or at the election of any holder thereof, in a coin or currency other than that in which such debt securities are stated to be payable, then the period or periods within which, and the terms and conditions upon which, such election may be made;

Table of Contents

- whether interest will be payable in cash or additional debt securities at our or the holders' option and the terms and conditions upon which the election may be made;
- the terms and conditions, if any, upon which we will pay amounts in addition to the stated interest, premium, if any and principal amounts of the debt securities of the series to any holder that is not a "United States person" for federal tax purposes;
- additional or alternative provisions, if any, related to defeasance and discharge of the offered debt securities than those set forth in the indenture;
- the applicability of any guarantees;
- any restrictions on transfer, sale or assignment of the debt securities of the series; and
- any other terms of the debt securities (which may supplement, modify or delete any provision of the indenture insofar as it applies to such series).

We may issue debt securities that provide for less than the entire principal amount thereof to be payable upon declaration of acceleration of the maturity of the debt securities. We refer to any such debt securities throughout this prospectus as "original issue discount securities."

We will provide you with more information in the applicable prospectus supplement regarding any deletions, modifications, or additions to the events of default or covenants that are described below, including any addition of a covenant or other provision providing event risk or similar protection.

Payment

Unless otherwise provided in the applicable prospectus supplement, the principal of, and any premium or make-whole amount, and interest on, any series of the debt securities will be payable by mailing a check to the address of the person entitled to it as it appears in the applicable register for the debt securities or by wire transfer of funds to that person at an account maintained within the United States.

All monies that we pay to a paying agent or a trustee for the payment of the principal of, and any premium, or interest on, any debt security will be repaid to us if unclaimed at the end of two years after the obligation underlying payment becomes due and payable. After funds have been returned to us, the holder of the debt security may look only to us for payment, without payment of interest for the period which we hold the funds.

Merger, Consolidation or Sale of Assets

The indentures provide that we may, without the consent of the holders of any outstanding debt securities, (i) consolidate with, (ii) sell, lease or convey all or substantially all of our assets to, or (iii) merge with or into, any other entity provided that:

- either we are the continuing entity, or the successor entity, if other than us, assumes the obligations (a) to pay the principal of, and any premium, and interest on, all of the debt securities and (b) to duly perform and observe all of the covenants and conditions contained in the applicable indenture; and in the event the debt securities are convertible into or exchangeable for common stock or other securities of ours, such successor entity will, by such supplemental indenture, make provision so that the holders of debt securities of that series shall thereafter be entitled to receive upon conversion or exchange of such debt securities the number of securities or property to which a holder of the number of common stock or other securities of ours deliverable upon conversion or exchange of those debt securities would have been entitled had such conversion or exchange occurred immediately prior to such consolidation, merger, sale, conveyance, transfer or other disposition; and
- an officers' certificate and legal opinion covering such conditions are delivered to each applicable trustee.

Events of Default, Notice and Waiver

Unless the applicable prospectus supplement states otherwise, when we refer to “events of default” as defined in the indentures with respect to any series of debt securities, we mean:

- default in the payment of any installment of interest on any debt security of such series continuing for 90 days unless such date has been extended or deferred;
- default in the payment of principal of, or any premium on, any debt security of such series when due and payable unless such date has been extended or deferred;
- default in the performance or breach of any covenant or warranty in the debt securities or in the indenture by us continuing for 90 days after written notice described below;
- bankruptcy, insolvency or reorganization, or court appointment of a receiver, liquidator or trustee of us; and
- any other event of default provided with respect to a particular series of debt securities.

If an event of default (other than an event of default described in the fourth bullet point above) occurs and is continuing with respect to debt securities of any series outstanding, then the applicable trustee or the holders of 25% or more in principal amount of the debt securities of that series will have the right to declare the principal amount of, and accrued interest on, all the debt securities of that series to be due and payable. If an event of default described in the fourth bullet point above occurs, the principal amount of, and accrued interest on, all the debt securities of that series will automatically become and will be immediately due and payable without any declaration or other act on the part of the trustee or the holders of the debt securities. However, at any time after such a declaration of acceleration has been made, but before a judgment or decree for payment of the money due has been obtained by the applicable trustee, the holders of at least a majority in principal amount of outstanding debt securities of such series or of all debt securities then outstanding under the applicable indenture may rescind and annul such declaration and its consequences if:

- we have deposited with the applicable trustee all required payments of the principal, any premium, interest and, to the extent permitted by law, interest on overdue installment of interest, plus applicable fees, expenses, disbursements and advances of the applicable trustee; and
- all events of default, other than the non-payment of accelerated principal, or a specified portion thereof, and any premium, have been cured or waived.

The indentures provide that holders of debt securities of any series may not institute any proceedings, judicial or otherwise, with respect to such indenture or for any remedy under the indenture, unless the trustee fails to act for a period of 90 days after the trustee has received a written request to institute proceedings in respect of an event of default from the holders of 25% or more in principal amount of the outstanding debt securities of such series, as well as an offer of indemnity reasonably satisfactory to the trustee. However, this provision will not prevent any holder of debt securities from instituting suit for the enforcement of payment of the principal of, and any premium, and interest on, such debt securities at the respective due dates thereof.

The indentures provide that, subject to provisions in each indenture relating to its duties in the case of a default, a trustee has no obligation to exercise any of its rights or powers at the request or direction of any holders of any series of debt securities then outstanding under the indenture, unless the holders have offered to the trustee reasonable security or indemnity. The holders of at least a majority in principal amount of the outstanding debt securities of any series or of all debt securities then outstanding under an indenture shall have the right to direct the time, method and place of conducting any proceeding for any remedy available to the applicable trustee, or of exercising any trust or power conferred upon such trustee. However, a trustee may refuse to follow any direction which:

- is in conflict with any law or the applicable indenture;
- may involve the trustee in personal liability; or
- may be unduly prejudicial to the holders of debt securities of the series not joining the proceeding.

Within 120 days after the close of each fiscal year, we will be required to deliver to each trustee a certificate, signed by one of our several specified officers, stating whether or not that officer has knowledge of any default under the applicable indenture. If the officer has knowledge of any default, the notice must specify the nature and status of the default.

Modification of the Indentures

Subject to certain exceptions, the indentures may be amended with the consent of the holders of a majority in aggregate principal amount of the outstanding debt securities of all series affected by such amendment (including consents obtained in connection with a tender offer or exchange for the debt securities of such series).

We and the applicable trustee may make modifications and amendments of an indenture without the consent of any holder of debt securities for any of the following purposes:

- to cure any ambiguity, defect, or inconsistency in the applicable indenture or in the Securities of any series;
- to comply with the covenant described above under “—Merger, Consolidation or Sale of Assets”;
- to provide for uncertificated debt securities in addition to or in place of certificated debt securities;
- to add events of default for the benefit of the holders of all or any series of debt securities;
- to add the covenants, restrictions, conditions or provisions relating to us for the benefit of the holders of all or any series of debt securities (and if such covenants, restrictions, conditions or provisions are to be for the benefit of less than all series of debt securities, stating that such covenants, restrictions, conditions or provisions are expressly being included solely for the benefit of such series), to make the occurrence, or the occurrence and the continuance, of a default in any such additional covenants, restrictions, conditions or provisions an event of default, or to surrender any right or power in the applicable indenture conferred upon us;
- to add to, delete from, or revise the conditions, limitations, and restrictions on the authorized amount, terms, or purposes of issue, authentication, and delivery of debt securities, as set forth in the applicable indenture;
- to make any change that does not adversely affect the rights of any holder of notes under the applicable indenture in any material respect;
- to provide for the issuance of and establish the form and terms and conditions of the debt securities of any series as provided in the applicable indenture, to establish the form of any certifications required to be furnished pursuant to the terms of the applicable indenture or any series of debt securities under the applicable indenture, or to add to the rights of the holders of any series of debt securities;
- to evidence and provide for the acceptance of appointment under the applicable indenture by a successor trustee or to appoint a separate trustee with respect to any series;
- to comply with any requirements of the SEC or any successor in connection with the qualification of the indenture under the Trust Indenture Act of 1939, as amended, or the Trust Indenture Act; or
- to conform the applicable indenture to this “—Description of Debt Securities” or any other similarly titled section in any prospectus supplement or other offering document relating to a series of debt securities.

Subordination

Payment by us of the principal of, premium, if any, and interest on any series of subordinated debt securities issued under the subordinated indenture will be subordinated to the extent set forth in an indenture supplemental to the subordinated indenture relating to such series.

Discharge, Defeasance and Covenant Defeasance

Unless otherwise provided in the applicable prospectus supplement, the indentures allow us to discharge our obligations to holders of any series of debt securities issued under any indenture when:

- either (i) all securities of such series have already been delivered to the applicable trustee for cancellation; or (ii) all securities of such series have not already been delivered to the applicable trustee for cancellation but (a) have become due and payable, (b) will become due and payable within one year, or (c) if redeemable at our option, are to be redeemed within one year, and we have irrevocably deposited with the applicable trustee, in trust, funds in such currency or currencies, or governmental obligations in an amount sufficient to pay the entire indebtedness on such debt securities in respect of principal and any premium, and interest to the date of such deposit if such debt securities have become due and payable or, if they have not, to the stated maturity or redemption date; and
- we have paid or caused to be paid all other sums payable.

Unless otherwise provided in the applicable prospectus supplement, the indentures provide that, upon our irrevocable deposit with the applicable trustee, in trust, of an amount, in such currency or currencies in which such debt securities are payable at stated maturity, or government obligations, or both, applicable to such debt securities, which through the scheduled payment of principal and interest in accordance with their terms will provide money in an amount sufficient to pay the principal of, and any premium or make-whole amount, and interest on, such debt securities, and any mandatory sinking fund or analogous payments thereon, on the scheduled due dates therefor, the issuing company shall be released from its obligations with respect to such debt securities under the applicable indenture or, if provided in the applicable prospectus supplement, its obligations with respect to any other covenant, and any omission to comply with such obligations shall not constitute an event of default with respect to such debt securities.

The applicable prospectus supplement may further describe the provisions, if any, permitting such defeasance or covenant defeasance, including any modifications to the provisions described above, with respect to the debt securities of or within a particular series.

Conversion Rights

The terms and conditions, if any, upon which the debt securities are convertible into common stock or other securities of ours will be set forth in the applicable prospectus supplement. The terms will include whether the debt securities are convertible into shares of common stock or other securities of ours, the conversion price, or manner of calculation thereof, the conversion period, provisions as to whether conversion will be at the issuing company's option or the option of the holders, the events requiring an adjustment of the conversion price and provisions affecting conversion in the event of the redemption of the debt securities and any restrictions on conversion.

Governing Law

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

DESCRIPTION OF WARRANTS

The following description, together with the additional information we may include in any applicable prospectus supplements, summarizes the material terms and provisions of the warrants that we may offer under this prospectus and the related warrant agreements and warrant certificates. While the terms summarized below will apply generally to any warrants that we may offer, we will describe the particular terms of any series of warrants in more detail in the applicable prospectus supplement. If we indicate in the prospectus supplement, the terms of any warrants offered under that prospectus supplement may differ from the terms described below. Specific warrant agreements will contain additional important terms and provisions and will be incorporated by reference as an exhibit to the registration statement, which includes this prospectus.

General

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

We will evidence each series of warrants by warrant certificates that we will issue under a separate warrant agreement. We will enter into the warrant agreement with a warrant agent. We will indicate the name and address of the warrant agent in the applicable prospectus supplement relating to a particular series of warrants.

We will describe in the applicable prospectus supplement the terms of the series of warrants, including:

- the offering price and aggregate number of warrants offered;
- the currency for which the warrants may be purchased;
- if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security or each principal amount of such security;
- if applicable, the date on and after which the warrants and the related securities will be separately transferable;
- in the case of warrants to purchase debt securities, the principal amount of debt securities purchasable upon exercise of one warrant and the price at, and currency in which, this principal amount of debt securities may be purchased upon such exercise;
- in the case of warrants to purchase common stock or preferred stock, the number of shares of common stock or preferred stock, as the case may be, purchasable upon the exercise of one warrant and the price at which these shares may be purchased upon such exercise;
- the effect of any merger, consolidation, sale or other disposition of our business on the warrant agreement and the warrants;
- the terms of any rights to redeem or call the warrants;
- any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants;
- the periods during which, and places at which, the warrants are exercisable;
- the manner of exercise;
- the dates on which the right to exercise the warrants will commence and expire;
- the manner in which the warrant agreement and warrants may be modified;
- federal income tax consequences of holding or exercising the warrants;
- the terms of the securities issuable upon exercise of the warrants; and
- any other specific terms, preferences, rights or limitations of or restrictions on the warrants.

DESCRIPTION OF UNITS

We may issue units comprised of shares of common stock, shares of preferred stock, debt securities and warrants in any combination. We may issue units in such amounts and in as many distinct series as we wish. This section outlines certain provisions of the units that we may issue. If we issue units, they will be issued under one or more unit agreements to be entered into between us and a bank or other financial institution, as unit agent. The information described in this section may not be complete in all respects and is qualified entirely by reference to the unit agreement with respect to the units of any particular series. The specific terms of any series of units offered will be described in the applicable prospectus supplement. If so described in a particular supplement, the specific terms of any series of units may differ from the general description of terms presented below. We urge you to read any prospectus supplement related to any series of units we may offer, as well as the complete unit agreement and unit certificate that contain the terms of the units. If we issue units, forms of unit agreements and unit certificates relating to such units will be incorporated by reference as exhibits to the registration statement, which includes this prospectus.

Each unit that we may issue will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date. The applicable prospectus supplement may describe:

- the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;
- any provisions of the governing unit agreement;
- the price or prices at which such units will be issued;
- the applicable United States federal income tax considerations relating to the units;
- any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units; and
- any other terms of the units and of the securities comprising the units.

The provisions described in this section, as well as those described under “Description of Capital Stock,” “Description of Debt Securities” and “Description of Warrants” will apply to the securities included in each unit, to the extent relevant and as may be updated in any prospectus supplements.

Issuance in Series

We may issue units in such amounts and in as many distinct series as we wish. This section summarizes terms of the units that apply generally to all series. Most of the financial and other specific terms of a particular series of units will be described in the applicable prospectus supplement.

Unit Agreements

We will issue the units under one or more unit agreements to be entered into between us and a bank or other financial institution, as unit agent. We may add, replace or terminate unit agents from time to time. We will identify the unit agreement under which each series of units will be issued and the unit agent under that agreement in the applicable prospectus supplement.

The following provisions will generally apply to all unit agreements unless otherwise stated in the applicable prospectus supplement:

Modification without Consent

We and the applicable unit agent may amend any unit or unit agreement without the consent of any holder:

- to cure any ambiguity, including modifying any provisions of the governing unit agreement that differ from those described below;
- to correct or supplement any defective or inconsistent provision; or
- to make any other change that we believe is necessary or desirable and will not adversely affect the interests of the affected holders in any material respect.

We do not need any approval to make changes that affect only units to be issued after the changes take effect. We may also make changes that do not adversely affect a particular unit in any material respect, even if they adversely affect other units in a material respect. In those cases, we do not need to obtain the approval of the holder of the unaffected unit; we need only obtain any required approvals from the holders of the affected units.

Modification with Consent

We may not amend any particular unit or a unit agreement with respect to any particular unit unless we obtain the consent of the holder of that unit, if the amendment would:

- impair any right of the holder to exercise or enforce any right under a security included in the unit if the terms of that security require the consent of the holder to any changes that would impair the exercise or enforcement of that right; or
- reduce the percentage of outstanding units or any series or class the consent of whose holders is required to amend that series or class, or the applicable unit agreement with respect to that series or class, as described below.

Any other change to a particular unit agreement and the units issued under that agreement would require the following approval:

- If the change affects only the units of a particular series issued under that agreement, the change must be approved by the holders of a majority of the outstanding units of that series; or
- If the change affects the units of more than one series issued under that agreement, it must be approved by the holders of a majority of all outstanding units of all series affected by the change, with the units of all the affected series voting together as one class for this purpose.

These provisions regarding changes with majority approval also apply to changes affecting any securities issued under a unit agreement, as the governing document.

In each case, the required approval must be given by written consent.

Unit Agreements Will Not Be Qualified under Trust Indenture Act

No unit agreement will be qualified as an indenture, and no unit agent will be required to qualify as a trustee, under the Trust Indenture Act. Therefore, holders of units issued under unit agreements will not have the protections of the Trust Indenture Act with respect to their units.

Mergers and Similar Transactions Permitted; No Restrictive Covenants or Events of Default

The unit agreements will not restrict our ability to merge or consolidate with, or sell our assets to, another corporation or other entity or to engage in any other transactions. If at any time we merge or consolidate with, or sell our assets substantially as an entirety to, another corporation or other entity, the successor entity will succeed to and assume our obligations under the unit agreements. We will then be relieved of any further obligation under these agreements.

Table of Contents

The unit agreements will not include any restrictions on our ability to put liens on our assets, nor will they restrict our ability to sell our assets. The unit agreements also will not provide for any events of default or remedies upon the occurrence of any events of default.

Governing Law

The unit agreements and the units will be governed by Delaware law.

Form, Exchange and Transfer

We will issue each unit in global—i.e., book-entry—form only. Units in book-entry form will be represented by a global security registered in the name of a depository, which will be the holder of all the units represented by the global security. Those who own beneficial interests in a unit will do so through participants in the depository's system, and the rights of these indirect owners will be governed solely by the applicable procedures of the depository and its participants. We will describe book-entry securities, and other terms regarding the issuance and registration of the units in the applicable prospectus supplement.

Each unit and all securities comprising the unit will be issued in the same form.

If we issue any units in registered, non-global form, the following will apply to them. The units will be issued in the denominations stated in the applicable prospectus supplement. Holders may exchange their units for units of smaller denominations or combined into fewer units of larger denominations, as long as the total amount is not changed.

- Holders may exchange or transfer their units at the office of the unit agent. Holders may also replace lost, stolen, destroyed or mutilated units at that office. We may appoint another entity to perform these functions or perform them ourselves.
- Holders will not be required to pay a service charge to transfer or exchange their units, but they may be required to pay for any tax or other governmental charge associated with the transfer or exchange. The transfer or exchange, and any replacement, will be made only if our transfer agent is satisfied with the holder's proof of legal ownership. The transfer agent may also require an indemnity before replacing any units.
- If we have the right to redeem, accelerate or settle any units before their maturity, and we exercise our right as to less than all those units or other securities, we may block the exchange or transfer of those units during the period beginning 15 days before the day we mail the notice of exercise and ending on the day of that mailing, in order to freeze the list of holders to prepare the mailing. We may also refuse to register transfers of or exchange any unit selected for early settlement, except that we will continue to permit transfers and exchanges of the unsettled portion of any unit being partially settled. We may also block the transfer or exchange of any unit in this manner if the unit includes securities that are or may be selected for early settlement.

Only the depository will be entitled to transfer or exchange a unit in global form, since it will be the sole holder of the unit.

Payments and Notices

In making payments and giving notices with respect to our units, we will follow the procedures as described in the applicable prospectus supplement.

PLAN OF DISTRIBUTION

We may sell securities:

- through underwriters;
- through dealers;
- through agents;
- directly to purchasers; or
- through a combination of any of these methods or any other method permitted by law.

In addition, we may issue the securities as a dividend or distribution or in a subscription rights offering to our existing security holders.

We may directly solicit offers to purchase securities, or agents may be designated to solicit such offers. In the prospectus supplement relating to such offering, we will name any agent that could be viewed as an underwriter under the Securities Act and describe any commissions that we must pay to any such agent. Any such agent will be acting on a best efforts basis for the period of its appointment or, if indicated in the applicable prospectus supplement, on a firm commitment basis. This prospectus may be used in connection with any offering of our securities through any of these methods or other methods described in the applicable prospectus supplement.

The distribution of the securities may be effected from time to time in one or more transactions:

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

Each prospectus supplement will describe the method of distribution of the securities and any applicable restrictions.

The prospectus supplement with respect to the securities of a particular series will describe the terms of the offering of the securities, including the following:

- the name of the agent or any underwriters;
- the public offering or purchase price;
- any discounts and commissions to be allowed or paid to the agent or underwriters;
- all other items constituting underwriting compensation;
- any discounts and commissions to be allowed or paid to dealers; and
- any exchanges on which the securities will be listed.

If any underwriters or agents are used in the sale of the securities in respect of which this prospectus is delivered, we will enter into an underwriting agreement, sales agreement or other agreement with them at the time of sale to them, and we will set forth in the prospectus supplement relating to such offering the names of the underwriters or agents and the terms of the related agreement with them.

In connection with the offering of securities, we may grant to the underwriters an option to purchase additional securities with an additional underwriting commission, as may be set forth in the accompanying

prospectus supplement. If we grant any such option, the terms of such option will be set forth in the prospectus supplement for such securities.

If a dealer is used in the sale of the securities in respect of which the prospectus is delivered, we will sell such securities to the dealer, as principal. The dealer, who may be deemed to be an “underwriter” as that term is defined in the Securities Act, may then resell such securities to the public at varying prices to be determined by such dealer at the time of resale.

If we offer securities in a subscription rights offering to our existing security holders, we may enter into a standby underwriting agreement with dealers, acting as standby underwriters. We may pay the standby underwriters a commitment fee for the securities they commit to purchase on a standby basis. If we do not enter into a standby underwriting arrangement, we may retain a dealer-manager to manage a subscription rights offering for us. Agents, underwriters, dealers and other persons may be entitled under agreements which they may enter into with us to indemnification by us against certain civil liabilities, including liabilities under the Securities Act, and may be customers of, engage in transactions with or perform services for us in the ordinary course of business.

Each underwriter, dealer and agent participating in the distribution of any of the securities that are issuable in bearer form will agree that it will not offer, sell or deliver, directly or indirectly, securities in bearer form in the United States or to United States persons, other than qualifying financial institutions, during the restricted period, as defined in United States Treasury Regulations Section 1.163-5(c)(2)(i)(D)(7).

If so indicated in the applicable prospectus supplement, we will authorize underwriters or other persons acting as our agents to solicit offers by certain institutions to purchase securities from us pursuant to delayed delivery contracts providing for payment and delivery on the date stated in the prospectus supplement. Each contract will be for an amount not less than, and the aggregate amount of securities sold pursuant to such contracts shall not be less nor more than, the respective amounts stated in the prospectus supplement. Institutions with whom the contracts, when authorized, may be made include commercial and savings banks, insurance companies, pension funds, investment companies, educational and charitable institutions and other institutions, but shall in all cases be subject to our approval. Delayed delivery contracts will not be subject to any conditions except that:

- the purchase by an institution of the securities covered under that contract shall not at the time of delivery be prohibited under the laws of the jurisdiction to which that institution is subject; and
- if the securities are also being sold to underwriters acting as principals for their own account, the underwriters shall have purchased such securities not sold for delayed delivery. The underwriters and other persons acting as our agents will not have any responsibility in respect of the validity or performance of delayed delivery contracts.

Offered securities may also be offered and sold, if so indicated in the prospectus supplement, in connection with a remarketing upon their purchase, in accordance with a redemption or repayment pursuant to their terms, or otherwise, by one or more remarketing firms, acting as principals for their own accounts or as agents for us. Any remarketing firm will be identified and the terms of its agreement, if any, with us and its compensation will be described in the applicable prospectus supplement. Remarketing firms may be deemed to be underwriters in connection with their remarketing of offered securities.

Certain agents, underwriters and dealers, and their associates and affiliates, may be customers of, have borrowing relationships with, engage in other transactions with, or perform services, including investment banking services, for us or one or more of our respective affiliates in the ordinary course of business.

If any securities are offered by us through underwriters, the underwriters will acquire the securities for their own account and may resell them from time to time in one or more transactions, including negotiated

Table of Contents

transactions, at a fixed public offering price or at varying prices determined at the time of sale. Underwriters may offer and sell securities to the public either through underwriting syndicates represented by one or more If any securities are offered by us through underwriters, the underwriters will acquire the securities for their own account and may resell them from time to time in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. Underwriters may offer and sell securities to the public either through underwriting syndicates represented by one or more managing underwriters or directly by one or more firms acting as underwriters. Unless otherwise provided in the applicable prospectus supplement, the obligations of the underwriters to purchase the securities will be subject to certain conditions, and the underwriters will be obligated to purchase all of the offered securities if they purchase any of them. In connection with the sale of securities, underwriters may be deemed to have received compensation from us in the form of underwriting discounts or commissions and dealers may receive compensation from the underwriters in the form of discounts or concessions. The underwriters may change from time to time any initial public offering price and any discounts or concessions allowed or reallocated or paid to dealers.

In order to facilitate the offering of the securities, any underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the securities or any other securities the prices of which may be used to determine payments on such securities. Specifically, any underwriters may overallocate in connection with the offering, creating a short position for their own accounts. In addition, to cover overallocations or to stabilize the price of the securities or of any such other securities, the underwriters may bid for, and purchase, the securities or any such other securities in the open market. Finally, in any offering of the securities through a syndicate of underwriters, the underwriting syndicate may reclaim selling concessions allowed to an underwriter or a dealer for distributing the securities in the offering if the syndicate repurchases previously distributed securities in transactions to cover syndicate short positions, in stabilization transactions or otherwise. Any of these activities may stabilize or maintain the market price of the securities above independent market levels. Any such underwriters are not required to engage in these activities and may end any of these activities at any time.

We may engage in at the market offerings into an existing trading market in accordance with Rule 415(a)(4) under the Securities Act. To the extent that we make sales through one or more underwriters or agents in at the market offerings, we will do so pursuant to the terms of a sales agency financing agreement or other at the market offering arrangement between us and the underwriters or agents. If we engage in at the market sales pursuant to any such agreement, we will issue and sell our securities through one or more underwriters or agents, which may act on an agency basis or a principal basis. During the term of any such agreement, we may sell securities on a daily basis in exchange transactions or otherwise as we agree with the underwriters or agents. Any such agreement will provide that any securities sold will be sold at prices related to the then prevailing market prices for our securities. Therefore, exact figures regarding proceeds that will be raised or commissions to be paid cannot be determined at this time. Pursuant to the terms of the agreement, we may agree to sell, and the relevant underwriters or agents may agree to solicit offers to purchase blocks of our securities. The terms of any such agreement will be set forth in more detail in the applicable prospectus supplement.

In addition, we may enter into derivative transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement so indicates, in connection with those derivatives, the third parties may sell securities covered by this prospectus and the applicable prospectus supplement, including in short sale transactions. If so, the third party may use securities pledged by us or borrowed from us or others to settle those sales or to close out any related open borrowings of stock, and may use securities received from us in settlement of those derivatives to close out any related open borrowings of stock. The third party in such sale transactions will be an underwriter and, if not identified in this prospectus, will be named in the applicable prospectus supplement (or a post-effective amendment). In addition, we may otherwise loan or pledge securities to a financial institution or other third party that in turn may sell the securities short using this prospectus and an applicable prospectus supplement. Such financial institution or other third party may transfer its economic short position to investors in our securities or in connection with a concurrent offering of other securities.

[Table of Contents](#)

Under Rule 15c6-1 of the Exchange Act, trades in the secondary market generally are required to settle in one business day, unless the parties to any such trade expressly agree otherwise. The applicable prospectus supplement may provide that the original issue date for your securities may be more than one scheduled business day after the trade date for your securities. Accordingly, in such a case, if you wish to trade securities on any date prior to the first business day before the original issue date for your securities, you will be required, by virtue of the fact that your securities initially are expected to settle in more than one scheduled business day after the trade date for your securities, to make alternative settlement arrangements to prevent a failed settlement. The securities may be new issues of securities and may have no established trading market. Any underwriters to whom we sell securities for public offering and sale may make a market in those securities, but they will not be obligated to do so and they may discontinue any market making at any time without notice. The securities may or may not be listed on a national securities exchange. We can make no assurance as to the liquidity of or the existence of trading markets for any of the securities.

The specific terms of any lock-up provisions in respect of any given offering will be described in the applicable prospectus supplement.

The underwriters, dealers and agents may engage in transactions with us, or perform services for us, in the ordinary course of business for which they receive compensation.

The anticipated date of delivery of offered securities will be set forth in the applicable prospectus supplement relating to each offering.

LEGAL MATTERS

Certain legal matters in connection with this offering will be passed upon for us by Goodwin Procter LLP, Boston, Massachusetts. Any underwriters will also be advised about the validity of the securities and other legal matters by their own counsel, which will be named in the prospectus supplement.

EXPERTS

The consolidated financial statements of Cabaletta Bio, Inc. appearing in Cabaletta Bio, Inc.'s Annual Report (Form 10-K) for the year ended December 31, 2024, have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon (which contains an explanatory paragraph describing conditions that raise substantial doubt about the Company's ability to continue as a going concern as described in Note 1 to the consolidated financial statements), included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus is part of a registration statement that we have filed with the SEC. Certain information in the registration statement has been omitted from this prospectus in accordance with the rules of the SEC. We are subject to the information requirements of the Exchange Act and, in accordance therewith, file annual, quarterly and special reports, proxy statements and other information with the SEC. These documents also may be accessed through the SEC's electronic data gathering, analysis and retrieval system, or EDGAR, via electronic means, including the SEC's home page on the Internet (www.sec.gov).

We have the authority to designate and issue more than one class or series of stock having various preferences, conversion and other rights, voting powers, restrictions, limitations as to dividends, qualifications, and terms and conditions of redemption. See "Description of Capital Stock." We will furnish a full statement of the relative rights and preferences of each class or series of our stock which has been so designated and any restrictions on the ownership or transfer of our stock to any stockholder upon request and without charge. Written requests for such copies should be directed to Cabaletta Bio, Inc., 2929 Arch Street, Suite 600, Philadelphia, Pennsylvania 19104, Attention: Investor Relations / Corporate Secretary; telephone: (267) 759-3100. Information contained on our website is not incorporated by reference into this prospectus and you should not consider any information on, or that can be accessed from, our website as part of this prospectus or any accompanying prospectus supplement.

INCORPORATION BY REFERENCE

The SEC allows us to incorporate by reference the information and reports we file with it, which means that we can disclose important information to you by referring you to these documents. The information incorporated by reference is an important part of this prospectus, and information that we file later with the SEC will automatically update and supersede the information already incorporated by reference. We are incorporating by reference the documents listed below, which we have already filed with the SEC (SEC File No. 001-39103), and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, including all filings made after the date of the filing of this registration statement and prior to the effectiveness of this registration statement, except as to any portion of any future report or document that is not deemed filed under such provisions until we sell all of the securities:

- Annual Report on [Form 10-K](#) for the year ended December 31, 2024, filed with the SEC on March 31, 2025;
- Current Reports on Form 8-K filed with the SEC on [January 13, 2025](#), [February 18, 2025](#) and [February 18, 2025](#) (to the extent the information in such reports is filed and not furnished); and
- The description of our common stock contained in our registration statement on [Form 8-A](#) filed with the SEC on October 23, 2019 under Section 12(b) of the Exchange Act, including any amendments or reports filed for the purpose of updating such description.

Upon request, we will provide, without charge, to each person, including any beneficial owner, to whom a copy of this prospectus is delivered, a copy of the documents incorporated by reference into this prospectus but not delivered with the prospectus. You may request a copy of these filings, and any exhibits we have specifically incorporated by reference as an exhibit in this prospectus, at no cost by writing or telephoning us at the following address: Cabaletta Bio, Inc., 2929 Arch Street, Suite 600, Philadelphia, Pennsylvania 19104, Attention: Investor Relations / Corporate Secretary; telephone: (267) 759-3100.

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

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

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

Caballetta Bio[™]

Shares of Common Stock

Pre-funded Warrants to Purchase up to	Shares of Common Stock
Warrants to Purchase up to	Shares of Common Stock (or Pre-Funded Warrants)

PROSPECTUS SUPPLEMENT

Joint Book-Running Managers

Jefferies

TD Cowen

Cantor

, 2025
