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

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

RALLYBIO CORPORATION
(Exact name of registrant as specified in its Charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

2834
(Primary Standard Industrial
Classification Code Number)

85-1083789
(I.R.S. Employer
Identification No.)

**234 Church Street, Suite 1020
New Haven, CT 06510
(203) 859-3820**

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Martin W. Mackay, Ph.D.
Chief Executive Officer
Rallybio Corporation
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New Haven, CT 06510
(203) 859-3820

(Name, address, including zip code, and telephone number, including area code, of agent for service)

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Approximate date of commencement of proposed sale to the public:

From time to time after this Registration Statement becomes effective.

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

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

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

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

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

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

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

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

Emerging growth company

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

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

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

PRELIMINARY PROSPECTUS

Subject to completion, dated May 9, 2023



Rallybio Corporation

12,351,600 Shares of Common Stock

This prospectus relates to the disposition from time to time, in one or more offerings, of up to 12,351,600 shares of our common stock, par value \$0.0001 per share, by the selling stockholders, including their transferees, pledgees, donees or successors. We are registering the resale of the shares of our common stock to satisfy certain of our obligations under the Registration Rights Agreement, dated as of July 28, 2021, to which we and the selling stockholders are parties (the "Registration Rights Agreement").

The selling stockholders may, from time to time, sell, transfer, or otherwise dispose of any or all of their securities on any stock exchange, market, or trading facility on which the securities are traded or in private transactions. These dispositions may be at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices. See "Plan of Distribution" which begins on page 17.

We are not offering any shares of our common stock for sale under this prospectus. All expenses of registration incurred in connection with this offering are being borne by us. All selling and other expenses incurred by the selling stockholders will be borne by the selling stockholders.

General Information

Our common stock is traded on The Nasdaq Global Select Market under the symbol "RLYB." On May 8, 2023, the closing price of our common stock was \$6.00 per share.

Investing in our securities involves certain risks. See "[Risk Factors](#)" beginning on page 8 of this prospectus for a discussion of the factors you should carefully consider before deciding to purchase our securities.

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

The date of this prospectus is , 2023.

TABLE OF CONTENTS

	<u>Page</u>
ABOUT THIS PROSPECTUS	1
SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS	2
SUMMARY	4
RISK FACTORS	8
USE OF PROCEEDS	9
SELLING STOCKHOLDERS	10
DESCRIPTION OF COMMON STOCK	13
PLAN OF DISTRIBUTION	17
LEGAL MATTERS	19
EXPERTS	19
WHERE YOU CAN FIND MORE INFORMATION	19
INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE	19

ABOUT THIS PROSPECTUS

This prospectus is part of a shelf registration statement that we filed with the Securities and Exchange Commission (the “SEC”). Under the shelf registration statement, the selling stockholders may, from time to time, sell any of the securities described in this prospectus in one or more offerings. You should read carefully this prospectus, together with the additional information incorporated by reference in this prospectus described below under “Where You Can Find More Information” beginning on page 19 of this prospectus before making an investment in our securities.

We have not authorized anyone to give you any additional information different from that contained in this prospectus, any accompanying prospectus supplement or any free writing prospectus provided in connection with an offering. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you.

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 since that date.

This prospectus is not an offer to sell or solicitation of an offer to buy our securities in any circumstances under which or jurisdiction in which the offer or solicitation is unlawful. Unless the context otherwise indicates, the terms “Rallybio,” “Company,” “we,” “us,” and “our” as used in this prospectus refer to Rallybio Corporation and its subsidiaries. The phrase “this prospectus” refers to this prospectus and any applicable prospectus supplement, unless the context otherwise requires.

TRADEMARKS

We use Rallybio as a trademark in the United States and/or in other countries. This prospectus and documents incorporated by reference herein and therein contain references to our trademark and to those belonging to other entities, including Affibody®. Solely for convenience, trademarks and trade names referred to in this prospectus and documents incorporated by reference herein and therein, including logos, artwork and other visual displays, may appear without the ® or TM symbols, but such references are not intended to indicate in any way that we will not assert, to the fullest extent under applicable law, our rights or the rights of the applicable licensor to these trademarks and trade names. We do not intend our use or display of other entities’ trade names, trademarks or service marks to imply a relationship with, or endorsement or sponsorship of us by, any other entity.

MARKET AND INDUSTRY DATA

Unless otherwise indicated, information contained in this prospectus, and documents incorporated by reference herein and therein, concerning our industry and the markets in which we operate, including our general expectations, market position and market opportunity, is based on our management’s estimates and research, as well as industry and general publications and research and studies conducted by third parties. We believe that the information from these third-party publications, research and studies included in this prospectus, and documents incorporated by reference herein and therein, is reliable. Management’s estimates are derived from publicly available information, their knowledge of our industry and their assumptions based on such information and knowledge, which we believe to be reasonable. This data involves a number of assumptions and limitations which are necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those described in “Risk Factors.” These and other factors could cause our future performance to differ materially from our assumptions and estimates.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and any information incorporated by reference into this prospectus may contain forward-looking statements that are based on management's beliefs and assumptions and on information then currently available to management. All statements other than statements of historical facts contained in this prospectus supplement, the accompanying prospectus and any information incorporated by reference into this prospectus supplement or the accompanying prospectus are forward-looking statements. In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "expect," "plan," "anticipate," "could," "intend," "target," "project," "contemplate," "believe," "estimate," "predict," "potential" or "continue" or the negative of these terms or other similar expressions, although not all forward-looking statements contain these words. Forward-looking statements include, but are not limited to, statements concerning:

- the initiation, timing, progress, results, and cost of our research and development programs, and our current and future preclinical and clinical studies, including statements regarding the timing of initiation and completion of our clinical trials for RLYB212, RLYB116 and RLYB331, and the natural history study for our fetal and neonatal alloimmune thrombocytopenia prevention program, and related preparatory work, and the period during which the results of the trials will become available;
- the success, cost and timing of our clinical development of our product candidates, including RLYB212, RLYB116, RLYB 114 and RLYB331;
- our ability to initiate, recruit and enroll patients in and conduct our clinical trials at the pace that we project;
- our ability to obtain and maintain regulatory approval of our product candidates, and any related restrictions, limitations or warnings in the label of any of our product candidates, if approved;
- our ability to compete with companies currently marketing or engaged in the development of treatments for diseases that our product candidates are designed to target, including paroxysmal nocturnal hemoglobinuria and generalized myasthenia gravis;
- our reliance on third parties to conduct our clinical trials;
- our reliance on third parties to manufacture drug substance for use in our clinical trials;
- the size and growth potential of the markets for RLYB212, RLYB116, RLYB114, RLYB331 and any of our current product candidates or other product candidates we may identify and pursue, and our ability to serve those markets;
- our ability to enter into collaborations, partnerships and other transactions with third parties;
- our ability to identify and advance through clinical development any additional product candidates;
- the commercialization of our current product candidates and any other product candidates we may identify and pursue, if approved, including our ability to successfully build commercial infrastructure or enter into collaborations with third parties to market our current product candidates and any other product candidates we may identify and pursue;
- our ability to retain and recruit key personnel;
- our ability to obtain and maintain adequate intellectual property rights;
- our expectations regarding government and third-party payor coverage and reimbursement;

Table of Contents

- our estimates of our expenses, ongoing losses, capital requirements and our needs for or ability to obtain additional financing;
- our expected uses of the net proceeds from our initial public offering and any subsequent offerings;
- the potential benefits of strategic collaboration agreements and arrangements, including our agreements with Exscientia Limited and AbCellera Biologics Inc. and our research and collaboration with EyePoint Pharmaceuticals, Inc., our ability to enter into strategic collaborations or arrangements, including potential business development opportunities and potential licensing partnerships, and our ability to attract collaborators with development, regulatory and commercialization expertise;
- our expectations regarding the time during which we will be an emerging growth company under the Jumpstart Our Business Startups Act of 2012;
- our financial performance;
- developments and projections relating to our competitors or our industry; and
- other risks and uncertainties, including those listed under the section titled “Risk Factors”, which are incorporated by reference from our most recent Quarterly Report on Form 10-Q.

The forward-looking statements in this prospectus and any information incorporated by reference into this prospectus are only predictions and are based largely on our current expectations and projections about future events and financial trends that we believe may affect our business, financial condition and results of operations. These forward-looking statements included in this prospectus speak only as of the date of this prospectus and are subject to a number of known and unknown risks, uncertainties and assumptions, including 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, our Quarterly Reports on Form 10-Q and our Current Reports on Form 8-K. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified and some of which are beyond our control, you should not rely on these forward-looking statements as guarantees of future events. The events and circumstances reflected in our forward-looking statements may not be achieved or occur and actual future results, levels of activity, performance and events and circumstances could differ materially from those projected in the forward-looking statements. Moreover, we operate in an evolving environment. New risks and uncertainties may emerge from time to time, and it is not possible for management to predict all risks and uncertainties. Except as required by applicable law, we are not obligated to publicly update or revise any forward- looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise.

SUMMARY

The following is a summary of selected information contained elsewhere or incorporated by reference in this prospectus. It does not contain all of the information that you should consider before buying our securities. You should read this entire prospectus carefully, the documents incorporated by reference into this prospectus, and any free writing prospectus we have prepared, including the material referenced under the heading "Risk Factors".

Overview

We are a clinical-stage biotechnology company with a mission to develop and commercialize life-transforming therapies for patients with severe and rare diseases. Rallybio has built a broad pipeline of promising product candidates aimed at addressing diseases with unmet medical need in areas of maternal fetal health, complement dysregulation, hematology, and metabolic disorders. We have two clinical stage programs: RLYB212, an anti-HPA-1a antibody for the prevention of fetal and neonatal alloimmune thrombocytopenia ("FNAIT") and RLYB116, a complement component 5 ("C5") inhibitor with the potential to treat several diseases of complement dysregulation, as well as additional programs in preclinical development.

RLYB212 is a monoclonal anti-HPA-1a antibody for the prevention of FNAIT, a potentially life-threatening rare hematological disease that impacts fetuses and newborns. We are currently conducting multiple clinical trials as part of the development program for RLYB212.

In the first quarter of 2023, we announced proof-of-concept was achieved for RLYB212. Results from this Phase 1b study showed that one week after a single subcutaneous dose, RLYB212 was able to rapidly and completely eliminate transfused, HPA-1a positive platelets in HPA-1a negative subjects with a reduction in mean platelet elimination half-life that was greater than 90% in both RLYB212 dose groups compared to placebo and was dose related. We believe that the broad range of pharmacokinetic ("PK") and pharmacodynamic ("PD") data from this Phase 1b study allows for substantive modeling to inform dose selection for a future registrational study. In April 2023 we announced that an abstract for RLYB212 reporting results from the Phase 1b proof-of-concept was accepted for presentation at the 31st Congress of the International Society on Thrombosis and Haemostasis, which will take place in Montreal from June 24-28, 2023.

In the first quarter of 2023, we also initiated dosing in the multiple dose cohort of the single-center Phase 1 trial in Europe. This portion of the Phase 1 study will evaluate safety and PK of RLYB212 based on repeat subcutaneous dosing over 12 weeks in healthy HPA-1a negative subjects. The Company expects results from this cohort of subjects in the fourth quarter of 2023.

In April 2023, we also announced that clinical proof-of-concept results for RLYB211, an anti-HPA-1a polyclonal antibody for the prevention of FNAIT were published in the April issue of the peer-reviewed journal, *Journal of Thrombosis and Haemostasis*. The results demonstrated the prophylactic potential of an HPA-1a antibody in preventing HPA-1a alloimmunization and occurrence of FNAIT. Given the advantages of small volume subcutaneous dosing of RLYB212 as compared to RLYB211 and the expected manufacturing and supply efficiencies for RLYB212, Rallybio announced in March 2023 that the Company will not continue development of RLYB211.

Additionally, we are currently conducting a FNAIT natural history alloimmunization study. This prospective, non-interventional, multinational natural history study is designed to screen up to 30,000 expectant mothers presenting at Gestation Week 10 to 14 prenatal visit to determine the frequency of women at higher FNAIT risk among expectant mothers of different racial and ethnic characteristics, as well as the frequency of HPA-1a alloimmunization and pregnancy outcomes among these women. Subject to discussion with regulatory authorities, we expect that data from this study will contribute to a control dataset for a future single-arm Phase 2/3 registration trial for RLYB212. The FNAIT natural history study will operationalize de novo the laboratory test paradigm for FNAIT risk and generate FNAIT laboratory test performance data that we plan to use for future regulatory discussions.

We are also focused on developing therapies that address diseases of complement dysregulation, including paroxysmal nocturnal hemoglobinuria, generalized myasthenia gravis, severe dermatologic indications, and ophthalmic disorders. RLYB116 is a novel, potentially long-acting, subcutaneously administered inhibitor of C5 in development for the treatment of patients with complement-related diseases and RLYB114 is a pegylated C5 inhibitor in development for complement-mediated ophthalmic disorders.

We continue to advance the Phase 1 multiple ascending dose study of RLYB116. This single-blind, dose escalation, placebo-controlled study is designed to evaluate the safety, PK, and PD of RLYB116 in healthy participants. We currently expect initial multiple dose data from this Phase 1 study in the fourth quarter of 2023. In parallel with ongoing clinical activities, we are evaluating potential indications for which RLYB116 could be developed and intend to provide our initial plans in conjunction with the release of the Phase 1 data, currently expected in the fourth quarter of 2023.

We continue to advance the preclinical development of RLYB114, formulated for intravitreal injection, for the treatment of ophthalmic disorders with a goal to partner this program with a company that specializes in ophthalmology drug development. In February 2023, Rallybio and EyePoint Pharmaceuticals, Inc. (“EyePoint”) announced a research collaboration to explore and assess the viability of utilizing Rallybio’s inhibitor of C5 in EyePoint’s Durasert® technology for sustained intraocular delivery. The initial focus will be on geographic atrophy, an advanced form of age-related macular degeneration that leads to irreversible vision loss.

In May 2022, we obtained worldwide exclusive rights to Kymab Limited’s KY1066, now referred to as RLYB331, a preclinical antibody. We believe RLYB331 has the potential to address a significant unmet need for patients with severe anemias with ineffective erythropoiesis and iron overload, including beta thalassemia and a subset of lower risk myelodysplastic syndromes. We believe these patients are currently underserved by the existing standard of care. RLYB331 is a preclinical therapeutic monoclonal antibody that inhibits Matriptase-2 (“MTP-2”). The inhibition of MTP-2 significantly increases levels of hepcidin, decreases iron load and treats ineffective erythropoiesis. We are continuing to conduct investigational new drug (“IND”)-enabling activities for RLYB331 to support transition of the asset into clinical development.

Additionally, in collaboration with Exscientia Limited, we continue to work toward the selection of a small molecule development candidate to advance into the clinic targeting an Ectonucleotide Pyrophosphatase/Phosphodiesterase 1 inhibitor for the treatment of patients with hypophosphatasia (“HPP”). Significant progress has been made to identify a lead compound and generate mouse in vivo biomarker evidence to support modulation of on-target activity. Through our collaboration with a leading global HPP expert, preclinical in vivo efficacy data is expected in the second half of 2023. Following those results, both companies expect to commence IND-enabling studies.

In December 2022, the Company entered into a strategic alliance with AbCellera Biologics Inc. (“AbCellera”) to discover, develop, and commercialize novel antibody-based therapeutics for rare diseases. This multi-year, multi-target collaboration will combine AbCellera’s antibody discovery engine with Rallybio’s clinical and commercial expertise in rare diseases to identify optimal clinical candidates and ultimately deliver therapies to patients. The partnership’s first program will focus on addressing the significant unmet therapeutic needs of patients with rare metabolic diseases.

Under the terms of the agreement, AbCellera and Rallybio will co-develop up to five rare disease therapeutic targets, which will be chosen together by both companies. The collaboration will allow Rallybio to add product candidates to our existing pipeline with the option for AbCellera to conduct process development and clinical manufacturing activities. The partnership’s first program will focus on addressing the significant unmet therapeutic needs of patients with rare metabolic diseases.

Since inception, we have devoted substantially all of our resources to raising capital, organizing and staffing the Company, business planning, conducting discovery and research activities, acquiring or discovering product candidates, establishing and protecting our intellectual property portfolio, developing and progressing our product candidates, preparing for clinical trials and establishing arrangements with third parties for the manufacture of our product candidates and component materials, including activities relating to our preclinical development and manufacturing activities for each of our programs. We do not have any product candidates approved for sale and have not generated any revenue from product sales.

Implications of being an emerging growth company and a smaller reporting company

We are an “emerging growth company,” as defined in the Jumpstart Our Business Startups Act of 2012. We will remain an emerging growth company until the earlier of (1) the last day of the fiscal year following the fifth anniversary of our initial public offering, (2) the last day of the fiscal year in which we have total annual gross revenue of at least \$1.235 billion, (3) the last day of the fiscal year in which we are deemed to be a large accelerated filer, which means the market value of our common stock that is held by non-affiliates exceeds \$700 million as of the last business day of our second fiscal quarter, and (4) the date on which we have issued more than \$1.0 billion in non-convertible debt during the prior three-year period. For so long as we remain an emerging growth company, we are permitted and intend to rely on exemptions from certain disclosure and other requirements that are applicable to other public companies that are not emerging growth companies. Accordingly, the information contained or incorporated by reference herein may be different than the information you receive from other public companies in which you hold stock.

We are also a “smaller reporting company” as defined in Item 10(f)(1) of Regulation S-K. We may continue to be a smaller reporting company even after we are no longer an emerging growth company. Smaller reporting companies may take advantage of certain scaled disclosure obligations. We will remain a smaller reporting company until the last day of the fiscal year in which (1) the aggregate value of our voting and non-voting common stock held by non-affiliates equaled or exceeded \$250 million on the last business day of our second fiscal quarter, or (2) our annual revenues equaled or exceeded \$100 million during such completed fiscal year and the value of our voting and non-voting common stock held by non-affiliates equaled or exceeded \$700 million measured on the last business day of our second fiscal quarter.

Corporate Information and Reorganization

Our predecessor, Rallybio Holdings, LLC (“Rallybio Holdings”), was formed in Delaware in March 2018. In June 2021, Rallybio IPD, LLC, which was formed in May 2020, was converted from a Delaware limited liability company into a Delaware Corporation and was renamed Rallybio Corporation. On June 30, 2021, prior to our initial public offering, we completed a liquidation and corporate reorganization (the “Reorganization”), whereby Rallybio Holdings liquidated and the unitholders of Rallybio Holdings became the holders of common stock of Rallybio Corporation. Rallybio Corporation became the operating entity, with four direct, wholly-owned subsidiaries.

Our principal executive offices are located at 234 Church Street, Suite 1020, New Haven, CT 06510 and our telephone number is (203) 859-3820. Our corporate website address is www.rallybio.com. Information contained on or accessible through our website is not part of this prospectus or any prospectus supplement.

The Offering

Common Stock offered by the selling stockholders

12,351,600 shares

Use of Proceeds

We will not receive any proceeds from the sale of the shares of our common stock held by any of the selling stockholders.

Risk Factors

An investment in our common stock involves a high degree of risk. See “Risk Factors” beginning on page 8 for a discussion of certain factors that you should consider before making an investment in our stock.

Nasdaq Global Select Market Symbol

“RLYB”

RISK FACTORS

Investing in our securities involves a high degree of risk. You should carefully consider the risks and uncertainties described under “Item 1A. Risk Factors” in our most recent Annual Report on Form 10-K, as amended and revised or supplemented by any subsequent Quarterly Reports on Form 10-Q, each of which is on file with the SEC and incorporated by reference in this prospectus. If any of the events or developments described therein were to occur, our business, prospects, operating results and financial condition could suffer materially, the trading price of our common stock or other securities could decline, and you could lose all or part of your investment. Additional risks and uncertainties not presently known to us or that we currently believe to be immaterial may also adversely affect our business.

USE OF PROCEEDS

The selling stockholders will receive all of the net proceeds from the sale of any shares of common stock under this prospectus. We are not selling any shares of common stock under this prospectus and we will not receive any proceeds from the sale of any shares of common stock by the selling stockholders. We will, however, bear certain costs associated with the registration of shares of common stock by the selling stockholders.

SELLING STOCKHOLDERS

Pursuant to the rights of the selling stockholders under the Registration Rights Agreement, we have prepared this prospectus to allow the selling stockholders or their pledgees, donees, transferees or other successors in interest, to sell or otherwise dispose of, from time to time, up to an aggregate amount of 12,351,600 shares of common stock.

The table below presents information regarding the selling stockholders, the shares of common stock beneficially owned by them as of May 4, 2023, the shares of common stock that they may sell or otherwise dispose of from time to time under this prospectus and the number and percentage of our common stock each of the selling stockholders will own assuming all of the shares covered by this prospectus are sold by the selling stockholders.

The information in the table is based on 37,747,433 shares outstanding as of May 4, 2023 and was prepared based on information supplied to us by the selling stockholders. As used in this prospectus, the term “selling stockholders” includes the selling stockholders set forth below and any donees, pledgees, transferees or other successors-in-interest selling shares received after the date of this prospectus from the selling stockholders as a gift, pledge, or other non-sale related transfer. Beneficial ownership is determined in accordance with Rule 13d-3(d) promulgated by the SEC under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and includes shares of common stock with respect to which the selling stockholders have voting and investment power. Shares of common stock subject to options, restricted stock units or other rights to purchase which are now exercisable or are exercisable within 60 days after May 4, 2023 are considered outstanding for purposes of computing the beneficial ownership and percentage ownership of the persons holding these options or other rights but not considered outstanding for the purpose of computing the percentage ownership of any other person. The shares underlying the pre-funded warrants issued by the Company in November 2022, which are exercisable for 3,333,388 shares of common stock, are not considered outstanding for the purpose of computing the beneficial ownership or percentage ownership of any person.

The number of shares in the column “Common Stock That May Be Offered Pursuant to This Prospectus” represents all of the shares of common stock that the selling stockholders may offer under this prospectus. The column “Beneficial Ownership of Common Stock After the Offering” assumes the sale of all the shares offered by the selling stockholders pursuant to this prospectus and that the selling stockholders do not acquire any additional shares of common stock before the completion of this offering. However, because the selling stockholders may sell all or some of their shares under this prospectus from time to time, or in another permitted manner, we cannot assure you as to the actual number of shares that will be sold by the selling stockholders or that will be held by the selling stockholders after completion of any sales. The selling stockholders may sell some, all or none of their shares in this offering. We do not know how long the selling stockholders will hold the shares before selling them. Other than as described in the Registration Rights Agreement we currently have no agreements, arrangements or understandings with the selling stockholders regarding the sale of any of the shares.

Table of Contents

Name of Selling Stockholder	Beneficial Ownership of Common Stock Prior to the Offering		Common Stock That May Be Offered Pursuant to This Prospectus	Beneficial Ownership of Common Stock After the Offering	
	Number of Shares	Percent of Class (%)		Number of Shares(1)	Percent of Class (%)
Viking Global Opportunities Illiquid Investments Sub-Master LP	4,194,777(2)	11.1%	3,388,777	806,000	2.1%
Entities affiliated with 5AM Ventures	3,630,724(3)	9.6%	3,015,340	615,384	1.6%
The Rise Fund Rascal, L.P.	3,028,414(4)	8.0%	2,259,184	769,230	2.0%
Pivotal bioVenture Partners Fund I L.P.	2,404,644(5)	6.4%	1,694,388	710,256	1.9%
New Leaf Ventures III, L.P.	2,147,757(6)	5.7%	1,993,911	153,846	*

* Represents less than 1%

- (1) Assumes that all the shares of the selling stockholders covered by this prospectus are sold, and that the selling stockholders do not acquire any additional shares of common stock before the completion of this offering. However, as each selling stockholder can offer all, some, or none of its common stock, no definitive estimate can be given as to the number of shares that any selling stockholder will ultimately offer or sell under this prospectus.
- (2) Viking Global Opportunities Illiquid Investments Sub-Master LP (“Opportunities Fund”) has the authority to dispose of and vote the shares directly owned by it, which power may be exercised by its general partner, Viking Global Opportunities Portfolio GP LLC (“Opportunities GP”), and by Viking Global Investors LP (“VGI”), which provides managerial services to Opportunities Fund. O. Andreas Halvorsen, David C. Ott and Rose Shabet, as Executive Committee members of Viking Global Partners LLC (the general partner of VGI) and Viking Global Opportunities Parent GP LLC, the sole member of Viking Global Opportunities GP LLC (which is the sole member of Opportunities GP, which is the general partner of Opportunities Fund), have shared authority to direct the voting and disposition of investments beneficially owned by VGI and Opportunities GP. The business address of the Opportunities Fund is c/o Viking Global Investors LP, 55 Railroad Avenue, Greenwich, Connecticut 06830.
- (3) Represents beneficial ownership of 5AM Opportunities I, L.P. (“Opportunities I”) and 5AM Ventures V, L.P. (“Ventures V”) (together, the “5AM Selling Stockholders”). Opportunities I is the beneficial owner of 1,251,755 shares and Ventures V is the beneficial owner of 2,378,969 shares. Andrew J. Schwab and Kush M. Parmar, M.D., Ph.D., a member of our Board of Directors, are Managing Members of each of 5AM Opportunities I (GP), LLC and 5AM Partners V, LLC (“Partners V”), the general partners of Opportunities I and Ventures V, respectively, and have shared voting and dispositive power over the securities held by the 5AM Selling Stockholders. Scott Rocklage, Ph.D. is a Managing Member of Partners V and has shared voting and dispositive power over the securities held by Ventures V. The address of each of the 5AM Selling Stockholders is 501 2nd Street, Suite 350, San Francisco, California 94107.
- (4) Represents shares of common stock directly held by The Rise Fund Rascal, L.P., a Delaware limited partnership (“Rise Fund Rascal”), whose general partner is The Rise Fund SPV GP, LLC, a Delaware limited liability company, whose managing member is The Rise Fund GenPar, L.P., a Delaware limited partnership, whose general partner is The Rise Fund GenPar Advisors, LLC, a Delaware limited liability company, whose sole member is TPG Operating Group I, L.P., a Delaware limited partnership, whose general partner is TPG Holdings I-A, LLC, a Delaware limited liability company, whose managing member is TPG GPCo, LLC, a Delaware limited liability company, whose sole member is TPG Inc., a Delaware corporation (“TPG”), whose shares of Class B common stock (which represents a majority of the combined voting power of the common stock) are held by TPG Group Holdings (SBS), L.P., a Delaware limited partnership, whose general partner is TPG Group Holdings (SBS) Advisors, LLC, a Delaware limited liability company, whose managing member is TPG GP A, LLC, a Delaware limited liability company, which is owned by entities owned by David Bonderman, James G. Coulter and Jon Winkelried. Messrs. Bonderman, Coulter and Winkelried may therefore be deemed to beneficially own the shares of common stock directly held by Rise Fund Rascal. Messrs. Bonderman, Coulter and Winkelried disclaim beneficial ownership of the shares of common stock held by Rise Fund Rascal except to the extent of their pecuniary interest therein. The address of Rise Fund Rascal and each of Messrs. Bonderman, Coulter and Winkelried is c/o TPG Inc., 301 Commerce Street, Suite 3300, Fort Worth, Texas 76102.
- (5) Robert Hopfner, R.Ph., Ph.D., MBA a member of our Board of Directors, is a General Partner at Pivotal bioVenture Partners, and may be deemed to have shared voting and dispositive power over all shares held by Pivotal bioVenture Partners Fund I L.P. (“Pivotal”). The address of Pivotal is 501 Second Street, Suite 200, San Francisco, CA 94107.

Table of Contents

- (6) Ronald M. Hunt, M.B.A., a member of our board of directors, is a Managing Member of New Leaf Venture Management III, L.L.C., the general partner of New Leaf Venture Associates III, L.P., which is the general partner of New Leaf Ventures III, L.P. (“NLV-III”), and has shared voting and dispositive power with regard to the securities held by NLV-III. The address of NLV-III is 156 Fifth Avenue, Suite 820, New York, NY 10010.

Material Relationships

We previously operated as Rallybio Holdings, LLC, a Delaware limited liability company (“Holdings”). Each of the selling stockholders was a party to the operating agreement of Holdings (the “Operating Agreement”) In connection with our initial public offering, we completed a reorganization (the “Reorganization”) such that we now operate as Rallybio Corporation. Holdings was liquidated (the “Liquidation”) and the Operating Agreement was terminated prior to the consummation of our initial public offering.

In May 2020, Holdings completed the sale of Series B Preferred Units (the “Units”) to certain investors. Viking Global Opportunities Illiquid Investments Sub-Master LP purchased 21,578,387 Units for an aggregate purchase price of \$30,000,000. The Rise Fund Rascal L.P. purchased 14,385,591 Units for an aggregate purchase price of \$19,999,999. In connection with the Liquidation, holders of the Units received shares of our common stock.

Following the Reorganization and prior to the consummation of our initial public offering, we entered into the Registration Rights Agreement with certain investors, including the selling stockholders, for the resale of shares of our common stock owned by such investors from time to time. Pursuant to the Registration Rights Agreement, we are registering the resale of 12,351,600 shares of our common stock under the registration statement on Form S-3 of which this prospectus is a part.

Certain of our directors are affiliated with certain of the selling stockholders. Dr. Parmar is a Managing Member of 5AM Opportunities I (GP), LLC and 5AM Partners V, LLC, the general partners of 5AM Opportunities I, L.P. (“Opportunities I”) and 5AM Ventures V, L.P, respectively. Mr. Hunt is a Managing Director at New Leaf Venture Partners, an affiliate of New Leaf Ventures III, L.P., and is a Managing Member of New Leaf Venture Management III, L.L.C., the general partner of New Leaf Venture Associates III, L.P., which is the general partner of New Leaf Ventures III, L.P. Mr. Hopfner is a Managing Partner at Pivotal bioVenture Partners LLC, an affiliate of Pivotal bioVenture Partners Fund I L.P. Lucian Iancovici, M.D., is a Managing Director at TPG Growth, an entity affiliated with The Rise Fund Rascal, L.P.

DESCRIPTION OF COMMON STOCK

The following description of our common stock and certain provisions of our amended and restated certificate of incorporation and amended and restated bylaws is a summary and is qualified by reference to our amended and restated certificate of incorporation and our amended and restated bylaws, copies of which are included as exhibits to the registration statement on Form S-3 of which this prospectus is a part. Please refer to “Where You Can Find More Information” below for directions on obtaining these documents.

General

Under the terms of our amended and restated certificate of incorporation, our board of directors is authorized to issue up to 200,000,000 shares of our common stock, par value \$0.0001 per share. As of May 4, 2023, we had 37,747,433 shares of common stock outstanding.

Holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders and do not have cumulative voting rights. An election of directors by our stockholders shall be determined, in an uncontested election, by a majority of the votes cast by the stockholders entitled to vote on the election and, in a contested election, by a plurality of the votes cast by the stockholders entitled to vote on the election. Holders of common stock are entitled to receive proportionately any dividends as may be declared by our board of directors, subject to any preferential dividend rights of any series of preferred stock that we may designate and issue in the future.

In the event of our liquidation or dissolution, the holders of common stock are entitled to receive an amount of our net assets available for distribution to stockholders after the payment of all debts and other liabilities and subject to the prior rights of any outstanding preferred stock. Holders of common stock have no preemptive, subscription, redemption or conversion rights. Our outstanding shares of common stock are validly issued, fully paid and nonassessable. The rights, preferences and privileges of holders of common stock are subject to and may be adversely affected by the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future.

Anti-takeover Effects of Our Certificate of Incorporation and Our Bylaws

Our amended and restated certificate of incorporation and amended and restated bylaws contain certain provisions that are intended to enhance the likelihood of continuity and stability in the composition of our board of directors, but which may have the effect of delaying, deferring or preventing a future takeover or change in control of us unless such takeover or change in control is approved by our board of directors.

These provisions include:

Classified board. Our amended and restated certificate of incorporation provides that our board of directors is divided into three classes of directors, with the classes as nearly equal in number as possible. As a result, approximately one-third of our board of directors will be elected each year. The classification of directors will have the effect of making it more difficult for stockholders to change the composition of our board of directors. Our amended and restated certificate of incorporation also provides that, subject to any rights of holders of preferred stock to elect additional directors under specified circumstances, the number of directors will be fixed exclusively pursuant to a resolution adopted by our board of directors.

Action by written consent; special meetings of stockholders. Our amended and restated certificate of incorporation provides that stockholder action can be taken only at an annual or special meeting of stockholders and cannot be taken by written consent in lieu of a meeting. Our amended and restated certificate of incorporation and our amended and restated bylaws also provide that, except as otherwise required by law, special meetings of the stockholders can only be called pursuant to a resolution adopted by a majority of our board of directors. Except as described above, stockholders will not be permitted to call a special meeting or to require our board of directors to call a special meeting.

[Table of Contents](#)

Removal of directors. Our amended and restated certificate of incorporation provides that our directors may be removed only for cause by the affirmative vote of at least 75% of the voting power of our outstanding shares of capital stock, voting together as a single class. This requirement of a supermajority vote to remove directors could enable a minority of our stockholders to prevent a change in the composition of our board of directors.

Advance notice procedures. Our amended and restated bylaws establish an advance notice procedure for stockholder proposals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to our board of directors. Stockholders at an annual meeting will only be able to consider proposals or nominations specified in the notice of meeting or brought before the meeting by or at the direction of our board of directors or by a stockholder who was a stockholder of record on the record date for the meeting, who is entitled to vote at the meeting and who has given our Secretary timely written notice, in proper form, of the stockholder's intention to bring that business before the meeting.

Although our amended and restated bylaws do not give our board of directors the power to approve or disapprove stockholder nominations of candidates or proposals regarding other business to be conducted at a special or annual meeting, our amended and restated bylaws may have the effect of precluding the conduct of certain business at a meeting if the proper procedures are not followed or may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect its own slate of directors or otherwise attempting to obtain control of us.

Supermajority approval requirements. The Delaware General Corporation Law (the "DGCL") generally provides that the affirmative vote of a majority of the shares entitled to vote on any matter is required to amend a corporation's certificate of incorporation or bylaws, unless either a corporation's certificate of incorporation or bylaws requires a greater percentage. Our amended and restated certificate of incorporation and our amended and restated bylaws provide that the affirmative vote of holders of at least 75% of the total votes eligible to be cast in the election of directors will be required to amend, alter, change or repeal specified provisions. This requirement of a supermajority vote to approve amendments to our amended and restated certificate of incorporation and our amended and restated bylaws could enable a minority of our stockholders to exercise veto power over any such amendments.

Authorized but unissued shares. Our authorized but unissued shares of common stock and preferred stock are available for future issuance without stockholder approval. These additional shares may be utilized for a variety of corporate purposes, including future public offerings to raise additional capital, corporate acquisitions and employee benefit plans. The existence of authorized but unissued shares of common stock and preferred stock could render more difficult or discourage an attempt to obtain control of a majority of our common stock by means of a proxy contest, tender offer, merger or otherwise.

Exclusive forum. Our amended and restated certificate of incorporation provides that, subject to limited exceptions, the state or federal courts within the State of Delaware will be exclusive forums 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 against us arising pursuant to any provision of the DGCL, our amended and restated certificate of incorporation or our amended and restated bylaws, (4) any action to interpret, apply, enforce or determine the validity of our amended and restated certificate of incorporation or our amended and restated bylaws or (5) any other action asserting a claim against us that is governed by the internal affairs doctrine; provided that, the exclusive forum provision does not apply to suits brought to enforce any liability or duty created by the Securities Exchange Act, or to any claim for which the federal courts have exclusive jurisdiction. Our amended and restated certificate of incorporation also provides that, unless we consent in writing to the selection of an alternative forum, the U.S. federal district courts shall be the exclusive forum for the resolution of any claims arising under the Securities Act of 1933, as amended (the "Securities Act"). Although we believe these provisions benefit us by providing increased consistency in the application of Delaware and certain federal securities law, these provisions may have the effect of discouraging lawsuits against our directors and officers.

Section 203 of the DGCL

We are subject to the provisions of Section 203 of the DGCL. 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. A “business combination” includes, among other things, a merger, asset or stock sale or other transaction resulting in a financial benefit to the interested stockholder. An “interested stockholder” is a person who, together with affiliates and associates, owns, or did own within three years prior to the determination of interested stockholder status, 15% or more of the corporation’s voting stock.

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, the corporation’s 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; or at or after the time the stockholder became interested, the business combination was approved by the board of directors of the corporation 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.

A Delaware corporation may “opt out” of these provisions with an express provision in its original certificate of incorporation or an express provision in its certificate of incorporation or bylaws resulting from a stockholders’ amendment approved by at least a majority of the outstanding voting shares. We have not opted out of these provisions. As a result, mergers or other takeover or change in control attempts of us may be discouraged or prevented.

Registration Rights

The Registration Rights Agreement grants the parties thereto, including the selling stockholders, certain registration rights in respect of the “registrable securities” held by them, which securities include (i) the shares of our common stock held by such stockholders following the Reorganization and prior to the consummation of our initial public offering and (ii) any common stock issued as (or issuable upon the conversion or exercise of any warrant, right, or other security that is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of, the shares referenced in clause (i) above. The registration of shares of our common stock pursuant to the exercise of these registration rights would enable the holders thereof to sell such shares without restriction under the Securities Act when the applicable registration statement is declared effective. Under the Registration Rights Agreement, we will pay all expenses relating to such registrations, including the fees of one counsel for the participating holders, and the holders will pay all underwriting discounts and commissions relating to the sale of their shares. The Registration Rights Agreement also includes customary indemnification and procedural terms.

Pursuant to the Registration Rights Agreement, we are registering the resale of 12,351,600 shares of our common stock under the registration statement on Form S-3 of which this prospectus is a part. As to any particular registrable securities, such securities shall cease to be registrable securities when (x) a registration statement with respect to the sale of such securities shall have become effective under the Securities Act and such securities shall have been disposed of in accordance with such registration statement, (y) such securities have been transferred pursuant to Rule 144, promulgated under the Securities Act (“Rule 144”), or (z) such securities shall have ceased to be outstanding.

Demand Registration Rights

Holders of at least 30% of the registrable securities then outstanding may request that we file a registration statement on Form S-1 with respect to at least 20% of the registrable securities then outstanding, if the aggregate offering price of the registrable securities requested to be registered would exceed \$20 million.

Holders of not less than 25% of the registrable shares then outstanding may request that we file a registration statement on Form S-3 with respect to such holders’ registrable securities then outstanding, if the aggregate offering price of the registrable securities requested to be registered would exceed \$3 million.

Piggyback Registration Rights

In the event that we propose to register any of our securities under the Securities Act, either for our own account or for the account of other security holders, the stockholders party to the Registration Rights Agreement will be entitled to certain “piggyback” registration rights allowing them to include their registrable securities in such registration, subject to certain marketing and other limitations. As a result, whenever we propose to file a registration statement under the Securities Act other than with respect to a demand registration or a registration statement on Form S-4 or S-8, these holders will be entitled to notice of the registration and will have the right to include their registrable securities in the registration subject to certain limitations.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Computershare Trust Company, N.A.

PLAN OF DISTRIBUTION

The selling stockholders, including their pledgees, donees, transferees or other successors in interest, may from time to time offer some or all of the shares of common stock covered by this prospectus. We will not receive any proceeds from the sale of the shares of our common stock held by any of the selling stockholders. We will bear all fees and expenses incident to our obligation to register the shares of our common stock covered by this prospectus.

The selling stockholders may sell all or a portion of the shares of common stock beneficially owned by them and offered hereby from time to time directly or through one or more underwriters, broker-dealers or agents. If the shares of common stock are sold through underwriters or broker-dealers, the selling stockholders will be responsible for underwriting discounts or commissions or agent's commissions. The shares of common stock may be sold on any national securities exchange, market, trading facility or quotation service on which the securities may be listed or quoted at the time of sale, in the over-the-counter market or in transactions other than on these exchanges or systems or in the over-the-counter market and in one or more transactions at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale, or at privately negotiated prices. These sales may be effected in transactions, which may involve crosses or block transactions.

The selling stockholders may use any one or more of the following methods when disposing of shares or interests therein:

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

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

Table of Contents

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

Broker-dealers engaged by a selling stockholder may arrange for other broker-dealers to participate in sales. If a selling stockholder effects certain transactions by selling shares of common stock to or through underwriters, broker-dealers or agents, such underwriters, broker-dealers or agents may receive commissions in the form of discounts, concessions or commissions from the selling stockholder or commissions from purchasers of the shares of common stock for whom they may act as agent or to whom they may sell as principal. Such commissions will be in amounts to be negotiated, but, except as set forth in a supplement to this prospectus, in the case of an agency transaction may be in excess of a customary brokerage commission in compliance with applicable rules of the Financial Industry Regulatory Authority ("FINRA"); and in the case of a principal transaction a markup or markdown in compliance with applicable FINRA rules.

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

The selling stockholders also may resell all or a portion of the shares in open market transactions in reliance upon Rule 144, provided that they meet the criteria and conform to the requirements of that rule.

Each selling stockholder and any underwriters, broker-dealers or agents that participate in the sale of the common stock or interests therein may be deemed to be "underwriters" within the meaning of Section 2(11) of the Securities Act. Any discounts, commissions, concessions or profit they earn on any resale of the shares may be underwriting discounts and commissions under the Securities Act. The selling stockholders are subject to the prospectus delivery requirements of the Securities Act.

To the extent required pursuant to Rule 424(b) under the Securities Act, the shares of our common stock to be sold, the name of each selling stockholder, the purchase price and public offering price, the names of any agents, dealer or underwriter, and any applicable commissions or discounts with respect to a particular offer will be set forth in an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement that includes this prospectus.

In order to comply with the securities laws of some states, if applicable, the common stock may be sold in these jurisdictions only through registered or licensed brokers or dealers. In addition, in some states the common stock may not be sold unless it has been registered or qualified for sale or an exemption from registration or qualification requirements is available and is complied with.

Each selling stockholder and any other person participating in a sale of the common stock registered under this prospectus will be subject to applicable provisions of the Exchange Act, and the rules and regulations thereunder, including, without limitation, to the extent applicable, Regulation M of the Exchange Act, which may limit the timing of purchases and sales of any of the shares of common stock by the selling stockholders and any other participating person. All of the foregoing may affect the marketability of the shares of common stock and the ability of any person or entity to engage in market-making activities with respect to the shares of common stock. In addition, we will make copies of this prospectus (as it may be supplemented or amended from time to time) available to the selling stockholders for the purpose of satisfying the prospectus delivery requirements of the Securities Act. The selling stockholders may indemnify any broker-dealer that participates in transactions involving the sale of the shares against certain liabilities, including liabilities arising under the Securities Act.

LEGAL MATTERS

The validity of any securities offered from time to time by this prospectus will be passed upon for us by Ropes & Gray LLP, Boston, Massachusetts.

EXPERTS

The financial statements of Rallybio Corporation incorporated by reference in this prospectus, have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report. Such financial statements are incorporated by reference in reliance upon the report of such firm, given their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed a registration statement on Form S-3 with the SEC for the securities offered by this prospectus. This prospectus does not include all of the information contained in the registration statement. You should refer to the registration statement and its exhibits for additional information.

We are required to file annual and quarterly reports, current reports, proxy statements, and other information with the SEC. We make these documents publicly available, free of charge, on our website at www.rallybio.com as soon as reasonably practicable after filing such documents with the SEC. The information contained on our website is not part of this prospectus. You can read our SEC filings, including the registration statement, on the SEC's website at www.sec.gov.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to “incorporate by reference” certain information into this prospectus, which means that we can disclose important information about us by referring you to another document filed separately with the SEC. The information incorporated by reference is considered to be a part of this prospectus, and information in documents that we file later with the SEC will automatically update and supersede information in this prospectus. We incorporate by reference into this prospectus the documents listed below and any future filings, including all filings made after the date of the filing of the registration statement of which this prospectus is part and prior to the effectiveness of such registration statement, made by us with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, except for information “furnished” under Items 2.02, 7.01 or 9.01 on Form 8-K or other information “furnished” to the SEC which is not deemed filed and not incorporated in this prospectus, in each case, until the offering described under the registration statement is terminated or completed:

- our Annual Report on [Form 10-K](#) for the fiscal year ended December 31, 2022, as filed with the SEC on March 6, 2023;
- our Quarterly Report on [Form 10-Q](#) for the period ended March 31, 2023 filed with the SEC on May 9, 2023;
- our Current Report on [Form 8-K](#), as filed with the SEC on January 31, 2023;
- portions of the Definitive Proxy Statement on [Schedule 14A](#), as filed with the SEC on April 10, 2023, that are incorporated by reference into Part III of our Annual Report on Form 10-K for the year December 31, 2022, as filed with the SEC on March 6, 2023; and
- the description of capital stock contained in the Registration Statement on [Form 8-A](#), as filed with the SEC on July 29, 2021, as supplemented by the description of capital stock filed contained in [Exhibit 4.4](#) to our Annual Report on Form 10-K for the fiscal year ended December 31, 2022, as filed with the SEC on March 6, 2023, including any amendment or report filed for the purpose of updating such description.

Any statement contained in a document incorporated or deemed to be incorporated by reference in this prospectus or the prospectus supplement will be deemed modified, superseded or replaced for purposes of this prospectus to the extent that a statement contained in this prospectus modifies, supersedes or replaces such statement.

Upon request, either orally or in writing, 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 to us at the following address: Rallybio Corporation, 234 Church Street, Suite 1020, New Haven CT, 06510, United States, Attention: Investor Relations, or via telephone at (203) 859-3820.

Copies of these filings are also available, without charge, on the SEC's website at www.sec.gov and on our website at investors.rallybio.com/financial-information/sec-filings as soon as reasonably practicable after they are filed electronically with the SEC. The information contained on our website is not part of this prospectus

Rallybio Corporation



PROSPECTUS

12,351,600 Shares of Common Stock

, 2023

PART II**Information Not Required in Prospectus****Item 14. Other Expenses of Issuance and Distribution.**

The following table sets forth the various expenses to be incurred in connection with the issuance and distribution of the offered securities, other than underwriting discounts and commissions. All amounts are estimated except for the SEC registration fee.

Item	Amount to be paid
SEC registration fee	\$ 7,364.00
Printing and related expenses	20,000.00*
Legal fees and expenses	30,000.00*
Accounting fees and expenses	35,000.00*
Total	\$ 92,364.00*

* Estimated

Item 15. Indemnification of Directors and Officers.

As permitted by Section 102(b)(7) of the DGCL, our amended and restated certificate of incorporation includes a provision to eliminate the personal liability of our directors for monetary damages for breach of their fiduciary duties as directors, subject to certain exceptions. In addition, our amended and restated certificate of incorporation and amended and restated bylaws provide that we are required to indemnify our officers and directors under certain circumstances, including those circumstances in which indemnification would otherwise be discretionary, and we are required to advance expenses to our officers and directors as incurred in connection with proceedings against them for which they may be indemnified, in each case except to the extent that the DGCL prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty.

Section 145(a) of the DGCL provides that a corporation shall have the power to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him in connection with such action, suit or proceeding if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interest of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction or upon a plea of nolo contendere or its equivalent shall not, of itself, create a presumption that the person did not act in good faith and in a manner which the person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had reasonable cause to believe that his conduct was unlawful.

Section 145(b) of the DGCL provides that a corporation shall have the power to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses (including attorneys' fees) actually and reasonably incurred by him in connection with the defense or settlement of such action or suit if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation and except that no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Delaware Court of Chancery (the "Court of Chancery") or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

Table of Contents

We have entered into indemnification agreements with our directors and certain of our officers. These indemnification agreements provide broader indemnity rights than those provided under the DGCL and our amended and restated certificate of incorporation. These indemnification agreements are not intended to deny or otherwise limit third-party or derivative suits against us or our directors or officers, but to the extent a director or officer were entitled to indemnity or contribution under the indemnification agreement, the financial burden of a third-party suit would be borne by us, and we would not benefit from derivative recoveries against the director or officer. Such recoveries would accrue to our benefit but would be offset by our obligations to the director or officer under the indemnification agreement.

We maintain directors' and officers' liability insurance for the benefit of our directors and officers.

Item 16. Exhibits.

The following is a list of exhibits filed as part of this registration statement.

<u>Exhibit Number</u>	<u>Exhibit</u>
1.1+	Form of Underwriting Agreement.
4.1	<u>Amended and Restated Certificate of Incorporation of Rallybio Corporation (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 001-40693) filed with the SEC on August 2, 2021).</u>
4.2	<u>Amended and Restated Bylaws of Rallybio Corporation (incorporated by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K (File No. 001-40693) filed with the SEC on August 2, 2021).</u>
4.3	<u>Specimen stock certificate evidencing shares of common stock (incorporated by reference to Exhibit 4.1 to the Company's Registration Statement on Form S-1 (File No. 333-257655), as amended, filed with the SEC on July 22, 2021).</u>
4.4	<u>Form of Pre-Funded Warrant (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K (File No. 001-40693), filed with the SEC on November 14, 2022).</u>
4.5	<u>Registration Rights Agreement, dated as of July 28, 2021, among Rallybio Corporation and certain of its stockholders (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K (File No. 001-40693) filed with the SEC on August 2, 2021).</u>
5.1*	<u>Opinion of Ropes & Gray LLP.</u>
23.1*	<u>Consent of Deloitte & Touche LLP Independent Registered Public Accounting Firm.</u>
23.2*	<u>Consent of Ropes & Gray LLP (included in Exhibit 5.1).</u>
24.1*	<u>Powers of Attorney (included on signature page to this Registration Statement).</u>
107*	<u>Filing Fee Table.</u>

+ To be filed if necessary, subsequent to the effectiveness of this registration statement by an amendment to this registration statement or incorporated by reference pursuant to a Current Report on Form 8-K in connection with the offering of securities.

* Filed herewith

Item 17. Undertakings.

The undersigned registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

Table of Contents

provided, however, that the undertakings set forth in paragraphs (1)(i), (1)(ii) and (1)(iii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement or is contained in a form of prospectus filed pursuant to Rule 424(b) that is a part of the registration statement.

- (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:
 - (i) If the registrant is relying on Rule 430B:
 - (A) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and
 - (B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.
- (5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser: (i) any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424; (ii) any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant; (iii) the portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and (iv) any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.
- (6) The undersigned hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (7) That, for purposes of determining any liability under the Securities Act of 1933:
 - (i) the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective; and
 - (ii) each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

[Table of Contents](#)

- (8) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of New Haven, Connecticut, on May 9, 2023.

RALLYBIO CORPORATION

By: /s/ Martin W. Mackay

Martin W. Mackay, Ph.D.

Chief Executive Officer

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Martin W. Mackay, Ph.D., Jonathan I. Lieber and Michael Greco, as his or her true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him or her and in his or her name, place, and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement on Form S-3, and to file the same, with all exhibits thereto, and other documents in connection therewith with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933 this Registration Statement has been signed below by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Martin W. Mackay</u> Martin W. Mackay, Ph.D.	Chief Executive Officer and Director (Principal Executive Officer)	May 9, 2023
<u>/s/ Jonathan I. Lieber</u> Jonathan I. Lieber	Chief Financial Officer and Treasurer (Principal Accounting and Principal Financial Officer)	May 9, 2023
<u>/s/ Helen M. Boudreau</u> Helen M. Boudreau, M.B.A.	Director	May 9, 2023
<u>/s/ Wendy K. Chung</u> Wendy K. Chung, M.D., Ph.D.	Director	May 9, 2023
<u>/s/ Rob Hopfner</u> Rob Hopfner, R.Ph., Ph.D., MBA	Director	May 9, 2023
<u>/s/ Ronald M. Hunt</u> Ronald M. Hunt, M.B.A.	Director	May 9, 2023
<u>/s/ Lucian Iancovici</u> Lucian Iancovici, M.D.	Director	May 9, 2023
<u>/s/ Hui Liu</u> Hui Liu, Ph.D., M.B.A.	Director	May 9, 2023

Table of Contents

<u>/s/ Christine A. Nash</u> Christine A. Nash, M.B.A.	Director	May 9, 2023
<u>/s/ Kush M. Parmar</u> Kush M. Parmar, M.D., Ph.D.	Director	May 9, 2023
<u>/s/ Paula Soteropoulos</u> Paula Soteropoulos	Director	May 9, 2023



ROPES & GRAY LLP
PRUDENTIAL TOWER
800 BOYLSTON STREET
BOSTON, MA 02199-3600
WWW.ROPESGRAY.COM

May 9, 2023

Rallybio Corporation
234 Church Street, Suite 1020
New Haven, CT 06510

Re: Registration of Securities by Rallybio Corporation

Ladies and Gentlemen:

We have acted as counsel to Rallybio Corporation, a Delaware corporation (the "Company"), in connection with the registration statement on Form S-3 (the "Registration Statement") filed on the date hereof by the Company with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"), relating to the registration under the Securities Act and the proposed offer and sale from time to time pursuant to Rule 415 under the Securities Act, by certain stockholders of the Company identified in the Registration Statement, of up to 12,351,600 shares of common stock, \$0.0001 par value per share, of the Company (the "Common Stock").

In connection with this opinion letter, we have examined such certificates, documents and records and have made such investigation of fact and such examination of law as we have deemed appropriate in order to enable us to render the opinions set forth herein. In conducting such investigation, we have relied, without independent verification, upon certificates of officers of the Company, public officials and other appropriate persons.

The opinions expressed below are limited to the Delaware General Corporation Law.

Based upon and subject to the foregoing and the assumptions, qualifications and limitations set forth below, we are of the opinion that the shares of Common Stock have been duly authorized and are validly issued, fully paid and non-assessable.

In rendering the opinions set forth above, we have assumed that (i) the Registration Statement will have become effective under the Securities Act, and no stop order suspending the Registration Statement's effectiveness will have been issued and remain in effect each time the Common Stock is offered and sold as contemplated by the Registration Statement, and (ii) all Common Stock will be offered and sold in compliance with applicable federal and state securities laws and in the manner stated in the Registration Statement and the applicable prospectus supplement.

Rallybio Corporation

We hereby consent to the filing of this opinion letter as an exhibit to the Registration Statement and to the use of our name therein and in the related prospectus under the caption "Legal Matters." In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission thereunder.

Very truly yours,

/s/ Ropes & Gray LLP

Ropes & Gray LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement on Form S-3 of our report dated March 6, 2023, relating to the financial statements of Rallybio Corporation, appearing in the Annual Report on Form 10-K of Rallybio Corporation for the year ended December 31, 2022. We also consent to the reference to us under the heading “Experts” in such Registration Statement.

/s/ Deloitte & Touche LLP

Hartford, Connecticut
May 9, 2023

Calculation of Filing Fee Tables

Form S-3
(Form Type)

Rallybio Corporation
(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered and Carry Forward Securities

	Security Type	Security Class Title	Fee Calculation or Carry Forward Rule	Amount Registered	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee	Carry Forward Form Type	Carry Forward File Number	Carry Forward Initial effective date	Filing Fee Previously Paid In Connection with Unsold Securities to be Carried Forward
Newly Registered Securities												
Fees to Be Paid	Equity	Common Stock, \$0.0001 par value per share (1)	457(c)	12,351,600	\$5.41(2)	\$66,822,156.00	0.00011020	\$7,364.00				
Fees Previously Paid	N/A	N/A	N/A	N/A	N/A	N/A		N/A				
Carry Forward Securities												
Carry Forward Securities	N/A	N/A	N/A	N/A		N/A			N/A	N/A	N/A	N/A
	Total Offering Amounts					\$66,822,156.00		\$7,364.00				
	Total Fees Previously Paid							N/A				
	Total Fee Offsets							N/A				
	Net Fee Due							\$7,364.00				

- (1) The Registrant is hereby registering for resale from time to time by selling stockholders up to an aggregate of 12,351,600 shares of the Registrant's common stock. Pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement also covers such additional number of shares of common stock that may be issued as a result of stock splits, stock dividends or similar transactions.
- (2) The registration fee is calculated in accordance with Rule 457(c) under the Securities Act, based on the average high and low prices per share of the common stock as reported on the Nasdaq Global Select Market on May 4, 2023.