Filed Pursuant to Rule 424(b)(5) Registration Statement No. 333-266668

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

Subject to completion, dated November 10, 2022.

Preliminary prospectus supplement (To prospectus dated August 15, 2022)



\$75,000,000

Common stock

Pre-funded warrants to purchase common stock

We are offering shares of our common stock in this offering and, in lieu of common stock to certain investors, pre-funded warrants to purchase shares of our common stock. The purchase price of each pre-funded warrant will equal the price per share at which shares of our common stock are being sold to the public in this offering, minus \$0.0001, which is the exercise price of each pre-funded warrant. This prospectus supplement also relates to the offering of shares of our common stock issuable upon the exercise of such pre-funded warrants.

Our common stock is traded on The Nasdaq Global Select Market under the symbol "RLYB." On November 9, 2022, the last reported sale price of our common stock was \$8.03 per share. There is no established market for the pre-funded warrants, and we do not expect a market to develop. We do not intend to list the pre-funded warrants on the Nasdaq Global Select Market or any other national securities exchange or nationally recognized trading system.

Our business and an investment in our common stock and pre-funded warrants involve significant risks. These risks are described under the caption "Risk Factors" beginning on page S-7 of this prospectus supplement and in the documents incorporated by reference into this prospectus supplement and the accompanying prospectus.

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

	Per share	Per pre-funded warrant	Total
Public offering price	\$	\$	\$
Underwriting discounts and commissions(1)	\$	\$	\$
Proceeds, before expenses, to us	\$	\$	\$

⁽¹⁾ We have agreed to reimburse the underwriters for certain FINRA-related expenses. See "Underwriting" for additional information regarding the underwriters' compensation.

We have granted the underwriters an option to purchase up to an additional shares of our common stock from us at the public offering price, less the underwriting discounts and commissions, for a period of up to 30 days after the date of this prospectus supplement.

The underwriters expect to deliver the shares and pre-funded warrants against payment on or about , 2022

Joint book-running managers

J.P. Morgan Cowen Evercore ISI

The date of this prospectus supplement is , 2022

Description of units

Plan of distribution

Where you can find more information

Incorporation of certain documents by reference

Legal matters

Experts

Table of contents

Prospectus supplement

	Page
About this prospectus supplement	S-1
Prospectus supplement summary	S-2
The offering	S-5
Risk factors	S-7
Special note regarding forward-looking statements	S-13
Use of proceeds	S-15
Dilution	S-16
Discription of pre-funded warrants	S-18
	S-10
Dividend policy	
Material U.S. federal income and estate tax considerations for non-U.S. holders of common stock	S-21
<u>Underwriting</u>	S-26
<u>Legal matters</u>	S-34
<u>Experts</u>	S-34
Where you can find more information	S-34
Incorporation of certain documents by reference	S-35
Prospectus	
•	Page
About this prospectus	1
Summary	3
Risk factors	5
Use of proceeds	6
General description of securities	7
Description of common stock	,
Description of preferred stock	12
Description of warrants	13
<u>DESCRIPTION OF WARTANTS</u>	13

14

15

17

17

17

18

About this prospectus supplement

This document is in two parts. The first part is this prospectus supplement, including the documents incorporated by reference, which describes the specific terms of this offering. The second part, the accompanying prospectus, including the documents incorporated by reference, provides more general information. This prospectus supplement and the accompanying prospectus are part of a registration statement that we filed with the Securities and Exchange Commission (the "SEC"). Before you invest, you should carefully read this prospectus supplement, the accompanying prospectus, all information incorporated by reference herein and therein, as well as the additional information described under "Where You Can Find More Information" and "Incorporation of Certain Documents by Reference." These documents contain information you should consider when making your investment decision. This prospectus supplement may add, update or change information contained in the accompanying prospectus. To the extent that any statement that we make in this prospectus supplement is inconsistent with statements made in the accompanying prospectus or any documents incorporated by reference therein filed before the date of this prospectus supplement, the statements made in this prospectus supplement will be deemed to modify or supersede those made in the accompanying prospectus and such documents incorporated by reference therein.

You should rely only on the information contained or incorporated by reference in this prospectus supplement, the accompanying prospectus and in any free writing prospectuses we may provide to you in connection with this offering. We have not, and the underwriters have not, authorized any other person to provide any information other than that contained or incorporated by reference in this prospectus supplement or in any free writing prospectus prepared by or on behalf of us. Neither we nor the underwriters take any responsibility for. and can provide no assurance as to the reliability of, any information that others may give you. We are offering to sell, and seeking offers to buy, shares of our common stock and pre-funded warrants only in jurisdictions where offers and sales are permitted. The distribution of this prospectus supplement and the offering of the common stock and pre-funded warrants in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus supplement must inform themselves about, and observe any restrictions relating to, the offering of the common stock and pre-funded warrants and the distribution of this prospectus supplement outside the United States. This prospectus supplement does not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities offered by this prospectus supplement by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation. Neither the delivery of this prospectus supplement and the accompanying prospectus, nor any sale made hereunder, shall under any circumstances create any implication that there has been no change in our affairs since the date of this prospectus supplement, or that the information contained or incorporated by reference in this prospectus supplement or the accompanying prospectus is correct as of any time after the date of that information. Our business, financial condition, results of operations, cash flows or prospects may have changed since those dates.

Unless the context otherwise indicates, the terms "Rallybio," "Company," "we," "us," and "our" as used in this prospectus supplement refer to Rallybio Corporation and its subsidiaries.

Prospectus supplement summary

The following is a summary of selected information contained elsewhere or incorporated by reference in this prospectus supplement and the accompanying prospectus. It does not contain all of the information that you should consider before buying our common stock or pre-funded warrants. You should read this entire prospectus supplement and the accompanying prospectus carefully, as well as any documents incorporated by reference into this prospectus supplement or the accompanying 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 built around a team of seasoned industry experts with a shared purpose and a track record of success in discovering, developing, manufacturing and delivering therapies that meaningfully improve the lives of patients suffering from severe and rare diseases. Our mission at Rallybio is aligned with our expertise, and we believe we have assembled the best people, partners and science to forge new paths to life-changing therapies. Since our launch in January 2018, we have acquired a portfolio of promising product candidates and we are focused on further expanding our portfolio with the goal of making a profound impact on the lives of even more patients. We are drawing on our decades of knowledge and experience with a determination to tackle the undone, the too difficult, the inaccessible – and change the odds for rare disease patients.

Our most advanced program is for the prevention of fetal and neonatal alloimmune thrombocytopenia ("FNAIT"), a potentially life-threatening rare hematological disease that impacts fetuses and newborns. We are evaluating RLYB211, a polyclonal anti-HPA-1a antibody, in a Phase 1/2 clinical trial, which we believe has established proof-of-concept for RLYB211 and provides support for our proposed mechanism of action. Our lead product candidate is RLYB212, a monoclonal anti-HPA-1a antibody. We submitted a clinical trial application ("CTA") for RLYB212 in July 2021 and initiated a Phase 1 first-in-human trial in Germany in the fourth quarter of 2021. In January 2022, we announced that the first subjects were dosed in the Phase 1 study of RLYB212. This ongoing single-blind, placebo-controlled Phase 1 study is designed to evaluate the safety and pharmacokinetics ("PK") of single and repeat subcutaneous doses of RLYB212 in HPA-1a negative healthy subjects. In the second quarter of 2022, we initiated a Phase 1b proof-of-concept study to evaluate the ability of RLYB212 to rapidly eliminate transfused HPA-1a positive platelets from the circulation of HPA-1a negative healthy subjects.

In the third quarter of 2022, we amended the protocol to expand the dose range of our ongoing Phase 1b proof-of-concept study of subcutaneous RLYB212 in order to further characterize the potential advantages associated with subcutaneous dosing. We then announced preliminary platelet elimination results from our ongoing Phase 1b proof-of-concept study for RLYB212 in the third quarter of 2022. These data demonstrated that one week after a single subcutaneous dose, RLYB212 eliminated transfused HPA-1a positive platelets rapidly compared to placebo in a challenge model of a catastrophic fetal maternal hemorrhage. Further, these data showed rapid and complete elimination of transfused platelets in all subjects to date, with a greater than 90% reduction of the mean platelet elimination half-life compared to placebo, which is consistent with our proof-of-concept criteria. In September 2022, we then announced that dosing under the amended protocol, which increases the dose of RLYB212, had commenced. We expect the broader range of PK and pharmacodynamics ("PD") data to enable substantive modeling of the concentration-effect relationship that further informs dosing for a future registrational study. We expect to discuss these proof-of-concept data in the first quarter of 2023.

Additionally, in the third quarter of 2021, we initiated 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. Screening of expectant mothers is currently underway.

We are also focused on developing therapies that address diseases of complement dysregulation, including paroxysmal nocturnal hemoglobinuria ("PNH"), generalized myasthenia gravis ("gMG"), and ophthalmic disorders. RLYB116 is a novel, potentially long-acting, subcutaneously administered inhibitor of complement factor 5 ("C5") in development for the treatment of patients with PNH and gMG. We received approval in the fourth quarter of 2021 for a Human Research Ethics Committee submission to support the Phase 1 trial of RLYB116 in healthy participants and in the first quarter of 2022, we initiated the Phase 1 trial in Australia. The single-blind, placebo-controlled dose escalation study is designed to evaluate the safety, PK, and PD of single dose RLYB116 in healthy volunteers. In November 2022, we announced positive topline results from our Phase 1 single ascending dose study of RLYB116. These preliminary data showed that all study participants that were administered a single 1 mL subcutaneous injection of 100 mg of RLYB116 (n=6) demonstrated a reduction in free C5 greater than 99% within 24 hours of dosing. The terminal elimination half-life of RLYB116 was greater than 300 hours. Subcutaneously administered RLYB116 was observed to be generally well-tolerated at the 100 mg dose, with mild or moderate adverse events and no drug-related serious adverse events reported. We currently expect to initiate the multiple ascending dose Phase 1 study of RLYB116 in the first quarter of 2023.

RLYB114 is a pegylated C5 inhibitor in preclinical development for the treatment of complement-mediated ophthalmic diseases.

In May 2022, we obtained worldwide exclusive rights to Sanofi's KY1066, now referred to as RLYB331, a preclinical potentially first-in-class 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. Currently these patients are underserved by the existing standard of care. RLYB331 is a monoclonal antibody that is designed to inhibit 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 ENPP1 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, in vivo efficacy data is expected in the second half of 2023. Following those results, both companies expect to commence IND-enabling studies.

Since inception, we have devoted substantially all of our resources to raising capital, organizing and staffing our 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 Act of 2012 (the "JOBS Act"). 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 supplement or the accompanying prospectus.

The offering

Common stock offered by us

shares of our common stock.

Pre-funded warrants offered by us We are also offering, in lieu of common stock to certain investors, prefunded warrants to

shares of our common stock. The purchase price of each pre-funded purchase warrant equals the price per share at which the shares of our common stock are being sold to the public in this offering, minus \$0.0001, which is the exercise price per share of each prefunded warrant. Each pre-funded warrant will be exercisable at any time after the date of issuance of such pre-funded warrant, subject to an ownership limitation. See "Description of prefunded warrants" on page S-18. This prospectus supplement also relates to the offering of the shares of our common stock issuable upon exercise of the pre-funded warrants.

Underwriters' option to purchase additional shares of our common stock from us

We have granted the underwriters an option to purchase up to an additional

shares of our common stock from us, at the public offering price, less

the underwriting discounts and commissions, for a period of 30 days after the date of this

prospectus supplement.

Common stock to be outstanding

shares (or exercise their option to purchase additional shares in full). shares if the underwriters

after this offering

Use of proceeds

Risk factors

We estimate that the net proceeds from the sale of our common stock and pre-funded warrants

by us in this offering will be approximately \$ (or approximately

if the underwriters exercise their option to purchase additional shares in full), after deducting estimated underwriting discounts and commissions and estimated

offering expenses payable by us.

We intend to use the net proceeds from this offering to fund ongoing clinical, regulatory and manufacturing development of our product candidates RLYB212 and RLYB116 and the research and development of additional product candidates. We intend to use any remaining net

proceeds for working capital needs and other general corporate purposes, including business

development opportunities. See "Use of Proceeds" on page S-15.

See "Risk Factors" beginning on page S-7 of this prospectus supplement for a discussion of

factors that you should read and consider before investing in our securities.

Nasdaq Global Select Market"RLYB". We do not intend to list the pre-funded warrants on the Nasdaq Global Select Market or ticker symbol of common stock any other national securities exchange or nationally recognized trading system.

The number of shares of our common stock that will be outstanding immediately after this offering as shown above is based on 32,091,398 shares outstanding as of September 30, 2022 and excludes, each as of September 30, 2022:

- 534,872 shares of common stock issuable upon the exercise of outstanding stock options under the Rallybio Corporation 2021 Equity Incentive Plan (the "2021 Plan") at a weighted-average exercise price of \$13.38 per share;
- 139,500 shares of common stock issuable upon the vesting of restricted stock units under the 2021 Plan;
- 1,817,719 shares of common stock reserved for future issuance under our 2021 Plan;
- 612,633 shares of common stock reserved for future issuance under the Rallybio Corporation 2021 Employee Stock Purchase Plan (the "2021 ESPP"); and
- shares of our common stock that are issuable upon exercise of the pre-funded warrants being offered pursuant to this prospectus supplement.

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 Report on Form 10-Q and Current Reports on Form 8-K, as filed with the SEC and incorporated by reference in this prospectus supplement and the accompanying prospectus and the "Risk Factors" section in this prospectus supplement. If any of the events or developments described therein or below were to occur, our business, prospects, operating results and financial condition could suffer materially, the trading price of our common stock 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.

Risks related to our securities and this offering

The market price of our common stock may be volatile, which could result in substantial losses for investors.

Shares of our common stock were offered in our initial public offering ("IPO") in July 2021 at a price of \$13.00 per share and between the date of our IPO and November 9, 2022, the closing price per share of our common stock has ranged from as low as \$6.26 to as high as \$23.40. Some of the factors that may cause the market price of our common stock to fluctuate include:

- · the success of existing or new competitive product candidates or technologies;
- · the timing and results of preclinical studies for any product candidates that we may develop;
- · failure or discontinuation of any of our product development and research programs;
- the success of the development of companion diagnostics, if required, for use with our product candidates;
- results of preclinical studies, clinical trials, or regulatory approvals of product candidates of our competitors, or announcements about new research programs or product candidates of our competitors;
- · commencement or termination of collaborations for our product development and research programs;
- · regulatory or legal developments in the United States and other countries;
- · developments or disputes concerning patent applications, issued patents, or other proprietary rights;
- · the recruitment or departure of key personnel;
- the level of expenses related to any of our research programs or product candidates that we may develop;
- the results of our efforts to develop additional product candidates or products;
- · actual or anticipated changes in estimates as to financial results, development timelines, or recommendations by securities analysts;
- announcement or expectation of additional financing efforts;
- · sales of our common stock by us, our insiders or other stockholders;
- · expiration of market stand-off or lock-up agreement;
- effects of public health crises, pandemics and epidemics, such as COVID-19;

- variations in our financial results or those of companies that are perceived to be similar to us;
- · changes in estimates or recommendations by securities analysts, if any, that cover our stock;
- · changes in the structure of healthcare payment systems;
- · market conditions in the pharmaceutical and biotechnology sectors;
- · general economic, industry, and market conditions; and
- · the other factors described in this "Risk Factors" section and elsewhere in this prospectus supplement.

In recent years, the stock market in general, and the market for pharmaceutical and biotechnology companies in particular, has experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to changes in the operating performance of the companies whose stock is experiencing those price and volume fluctuations. Broad market and industry factors may seriously affect the market price of our common stock, regardless of our actual operating performance. Following periods of such volatility in the market price of a company's securities, securities class action litigation has often been brought against that company. Because of the potential volatility of our stock price, we may become the target of securities litigation in the future.

If you purchase securities in this offering, you will suffer immediate dilution of your investment.

If you invest in our securities in this offering, your ownership interest will be diluted to the extent of the difference between the public offering price per share and the as adjusted net tangible book value (deficit) per share of our common stock immediately after this offering. shares of common stock at the public offering price of \$ per share and pre-After giving effect to the sale by us of per share (which equals the \$ funded warrants to purchase shares of our common stock for \$ per prefunded warrant being sold to the public in this offering, plus the \$0.0001 per share exercise price of each such pre-funded warrant), less the underwriting discounts and commissions and estimated offering expenses payable by us in each case, if you purchase shares of our common stock in this offering, you will incur immediate dilution of \$ per share in the as adjusted net tangible book value of the common stock that you purchase based on the net tangible book value (deficit) as of September 30, 2022 and assuming no exercise of the underwriters' option to purchase additional shares, because the price that you pay will be substantially greater than the net tangible book value per share of the shares you acquire. In addition, we have entered into a sales Agreement with Cowen and Company, LLC to offer and sell shares of our common stock having an aggregate offering price of up to \$100,000,000, from time to time, through an at-themarket offering program. Investors will experience further dilution as a result of any such sales. See "Dilution" beginning on page S-16.

We have broad discretion in the use of the net proceeds from this offering and may not use them effectively.

We cannot specify with certainty the particular uses of the net proceeds we will receive from this offering. Our management will have broad discretion in the application of the net proceeds, including for any of the purposes described in "Use of Proceeds." Accordingly, you will have to rely upon the judgment of our management with respect to the use of the proceeds, with only limited information concerning management's specific intentions. Our management may spend a portion or all of the net proceeds from this offering in ways that our stockholders may not desire or that may not yield a favorable return. The amounts and timing of our actual expenditures may vary significantly depending on numerous factors, including the progress of our development efforts and the status of and results from preclinical and clinical trials, as well as any third party intellectual property or other assets that we may opportunistically identify and seek to license or acquire or any collaborations that we may enter into with third parties for our product candidates, and any unforeseen cash needs. Because the number and variability of factors that will determine our use of any proceeds from this

offering, their ultimate use may vary substantially from their currently intended use. The failure by our management to apply these funds effectively could harm our business, financial condition, results of operations and prospects. Pending their use, we may invest the net proceeds from this offering in a manner that does not produce income or that loses value.

If securities analysts stop publishing research or reports about our business or if they publish negative evaluations of our stock, the price of our stock could decline.

The trading market for our common stock is influenced in part on the research and reports that industry or financial analysts publish about us or our business. If one or more of these analysts ceases coverage of our company or fails to publish reports on us regularly, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline. Moreover, if one or more of the analysts covering our business downgrade their evaluations of our stock, the price of our stock could decline.

A significant portion of our total outstanding shares may be sold into the market, which could cause the market price of our common stock to decline significantly, even if our business is doing well.

Sales of a substantial number of shares of our common stock in the public market could occur at any time. These sales, or the perception in the market that the holders of a large number of shares of common stock intend to sell shares, could reduce the market price of our common stock. As of September 30, 2022, we have 32,091,398 shares of common stock outstanding. All of these shares may be resold in the public market immediately, unless held by our affiliates who are subject to volume limitations under Rule 144. Moreover, as of September 30, 2022, certain holders of our common stock have rights, subject to conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders. In addition, we have entered into a sales Agreement with Cowen and Company, LLC to offer and sell shares of our common stock having an aggregate offering price of up to \$100,000,000, from time to time, through an at-the-market offering program. We also registered an aggregate of 7,659,526 shares of common stock that we may issue under our equity compensation plans or that are issuable upon exercise of outstanding options. These shares can be freely sold in the public market upon issuance and once vested, subject to volume limitations applicable to affiliates. If any of these additional shares are sold, or if it is perceived that they will be sold, in the public market, the market price of our common stock could decline.

An active trading market for our common stock may not be sustained.

If a market for our common stock is not sustained, it may be difficult for you to sell your shares of common stock at an attractive price or at all. We cannot predict the prices at which our common stock will trade. It is possible that in one or more future periods our results of operations may be below the expectations of public market analysts and investors, and, as a result of these and other factors, the price of our common stock may fall.

Insiders have substantial influence over us, which could limit your ability to affect the outcome of key transactions, including a change of control.

Our directors and executive officers and their affiliates beneficially own shares representing approximately 44% of our outstanding common stock as of September 30, 2022. As a result, these stockholders, if they act together, will be able to influence our management and affairs and all matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions. The interests of these holders may not always coincide with our corporate interests or the interests of other stockholders, and they may act in a manner with which you may not agree or that may not be in the best interests of our other stockholders. This concentration of ownership may have the effect of delaying or preventing a change in control of our company and might affect the market price of our common stock.

Because we do not anticipate paying any cash dividends on our common stock in the foreseeable future, capital appreciation, if any, will be your sole source of gain.

We have never declared or paid any cash dividends on our common stock. We currently anticipate that we will retain future earnings for the development, operation and expansion of our business and do not anticipate declaring or paying any cash dividends in the foreseeable future. As a result, capital appreciation, if any, of our common stock will be your sole source of gain on an investment in our common stock in the foreseeable future.

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

We are an "emerging growth company," as defined in the JOBS Act and we may remain an emerging growth company until December 31, 2026. For so long as we remain an emerging growth company, we are permitted and plan to rely on exemptions from certain disclosure requirements that are applicable to other public companies that are not emerging growth companies. These exemptions include not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002 ("SOX Section 404"), not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements, reduced disclosure obligations regarding executive compensation, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. As a result, the information we provide stockholders will be different than the information that is available with respect to other public companies. We cannot predict whether investors will find our common stock less attractive if we rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock, and our stock price may be more volatile.

In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This allows an emerging growth company to delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have elected not to "opt out" of such extended transition period, which means that when a standard is issued or revised and it has different application dates for public or private companies, we will adopt the new or revised standard at the time private companies adopt the new or revised standard and will do so until such time that we either (i) irrevocably elect to "opt out" of such extended transition period, or (ii) no longer qualify as an emerging growth company. Therefore, the reported results of operations contained in our financial statements may not be directly comparable to those of other public companies.

Provisions in our amended and restated certificate of incorporation, our amended and restated bylaws and Delaware law may have anti-takeover effects that could discourage an acquisition of us by others, even if an acquisition would be beneficial to our stockholders, and may prevent attempts by our stockholders to replace or remove our current management.

Our amended and restated certificate of incorporation and amended and restated bylaws and Delaware law contain provisions that may have the effect of discouraging, delaying or preventing a change in control of us or changes in our management that stockholders may consider favorable, including transactions in which you might otherwise receive a premium for your shares. Our amended and restated certificate of incorporation and bylaws include provisions that:

- authorize "blank check" preferred stock, which could be issued by our board of directors without stockholder approval and may contain voting, liquidation, dividend and other rights superior to our common stock;
- create a classified board of directors whose members serve staggered three-year terms;

- specify that special meetings of our stockholders can be called only by our board of directors;
- · prohibit stockholder action by written consent;
- establish an advance notice procedure for stockholder approvals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to our board of directors;
- provide that vacancies on our board of directors may be filled only by a majority of directors then in office, even though less than a
 quorum;
- · provide that our directors may be removed only for cause;
- specify that no stockholder is permitted to cumulate votes at any election of directors;
- · expressly authorize our board of directors to modify, alter or repeal our amended and restated bylaws; and
- require supermajority votes of the holders of our common stock to amend specified provisions of our amended and restated certificate
 of incorporation and amended and restated bylaws.

These provisions, alone or together, could delay or prevent hostile takeovers and changes in control or changes in our management. These provisions could also limit the price that investors might be willing to pay in the future for shares of our common stock, thereby depressing the market price of our common stock.

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

Any provision of our amended and restated certificate of incorporation, amended and restated bylaws or Delaware law that has the effect of delaying or deterring a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our common stock, and could also affect the price that some investors are willing to pay for our common stock.

Our amended and restated certificate of incorporation designates the state or federal courts within the State of Delaware as the exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.

Our amended and restated certificate of incorporation provides that, subject to limited exceptions, the state or federal courts (as appropriate) within the State of Delaware are 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) action against us or any of our directors or officers involving a claim or defense arising pursuant to the Securities Exchange Act of 1934, as amended (the "Exchange Act") or the Securities Act of 1933, as amended (the "Securities Act"), or (5) any other action asserting a claim against us that is governed by the internal affairs doctrine. Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock shall be deemed to have notice of and to have consented to the provisions of our amended and restated certificate of incorporation described above. This exclusive forum provision does not apply to claims which are vested in the exclusive jurisdiction of a court or forum other than the Court of Chancery of the State of Delaware, or for which the Court of Chancery of the State of Delaware does not have subject matter jurisdiction. For instance, the provision does not apply to actions arising under federal securities laws, including suits brought to enforce any liability or duty created by the Exchange Act or the rules and

regulations thereunder. This choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage such lawsuits against us and our directors, officers and employees. Alternatively, if a court were to find these provisions of our amended and restated certificate of incorporation inapplicable to, or unenforceable in respect of, one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could adversely affect our business and financial condition. In addition, while the Delaware Supreme Court ruled in March 2020 that federal forum selection provisions purporting to require claims under the Securities Act be brought in federal court are "facially valid" under Delaware law, there is uncertainty as to whether other courts will enforce our federal forum provision. If the federal forum provision is found to be unenforceable, we may incur additional costs associated with resolving such matters. The federal forum provision may also impose additional litigation costs on stockholders who assert that the provision is not enforceable or invalid.

There is no public market for the pre-funded warrants in this offering.

There is no established public trading market for the pre-funded warrants being offered in this offering, and we do not expect a market to develop. In addition, we do not intend to apply for listing of the pre-funded warrants on any national securities exchange or other nationally recognized trading system. Without an active market, the liquidity of the prefunded warrants will be limited.

Any holder of the pre-funded warrants will have no rights as common stockholder until such holder exercises its prefunded warrant and acquires our common stock.

Until the holder of each pre-funded warrants exercises its pre-funded warrant and acquires shares of our common stock, such holder will have no rights with respect to the shares of our common stock underlying such pre-funded warrant. Upon exercise of their respective pre-funded warrant, the holder will be entitled to exercise the rights of a common stockholder only as to matters for which the record date occurs after the exercise date.

A significant holder or beneficial holder of our common stock may not be permitted to exercise the pre-funded warrant that it holds.

A holder of a pre-funded warrant will not be entitled to exercise any portion of the pre-funded warrant that, upon giving effect to such exercise, would cause the aggregate number of shares of our common stock beneficially owned by such holder (together with its affiliates and any other persons whose beneficial ownership of common stock would be aggregated with the holder for purposes of Section 13(d) of the Exchange Act) to exceed 9.99% of the total number of then issued and outstanding shares of common stock, as such percentage ownership is determined in accordance with the terms of the pre-funded warrant and subject to such holder's rights under the pre-funded warrant to increase or decrease such percentage to any other percentage not in excess of 19.99% upon at least 61 days' prior notice from such holder to us. As a result, you may not be able to exercise your prefunded warrant for shares of our common stock at a time when it would be financially beneficial for you to do so. In such a circumstance, you could seek to sell your pre-funded warrant to realize value, but you may be unable to do so in the absence of an established trading market.

Special note regarding forward-looking statements

This prospectus supplement, the accompanying prospectus and any information incorporated by reference into this prospectus supplement or the accompanying 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 RLYB211, RLYB212, RLYB116 and RLYB331, and the natural history study for our FNAIT 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, RLYB114, 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 PNH and gMG;
- · 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 expand our pipeline through 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;

- 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, this offering or any subsequent offerings;
- the potential benefits of strategic collaboration agreements, 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 JOBS Act;
- · 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."

The forward-looking statements in this prospectus supplement and any information incorporated by reference into this prospectus supplement 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 supplement speak only as of the date of this prospectus supplement 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.

Use of proceeds

We estimate that the net proceeds from the sale of our common stock and pre-funded warrants by us in this offering will be approximately \$\), or approximately \$\) if the underwriters exercise in full their option to purchase additional shares from us in this offering, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. In addition, we will receive nominal proceeds upon any exercise of pre-funded warrants.

We currently estimate that we will use any net proceeds from this offering together with our existing cash, cash equivalents and marketable securities as follows:

- to fund ongoing clinical, regulatory and manufacturing development of our product candidates RLYB212 and RLYB116;
- · to fund the ongoing research and development of additional product candidates; and
- any remaining net proceeds for working capital needs and other general corporate purposes, including business development
 opportunities.

We believe that the net proceeds from this offering, together with our existing we had cash, cash equivalents and marketable securities will be sufficient to fund our operating expenses and capital expenditure requirements into the first quarter of 2025. This estimate and our expectation to advance the preclinical and clinical development of RLYB212, RLYB116, and any other product candidates are based on assumptions that may prove to be wrong, and we could exhaust our available capital resources sooner than we expect, or our clinical trials may be more expensive, time consuming or difficult to design or implement than we currently anticipate. We will require additional capital to complete the clinical development of, or commercialize, any of our product candidates or programs. Additional financing may not be available to us on acceptable terms or at all. Our failure to raise capital as and when needed would have a negative impact on our financial condition and our ability to pursue our business strategy.

This expected use of the net proceeds from this offering represents our intentions based upon our current plans and business conditions. The amounts and timing of our actual expenditures may vary significantly depending on numerous factors, including the progress of our development efforts and the status of and results from preclinical and clinical trials, as well as any third party intellectual property or other assets that we may opportunistically identify and seek to license or acquire or any collaborations that we may enter into with third parties for our product candidates, and any unforeseen cash needs. As a result, our management will retain broad discretion over the allocation of the net proceeds from this offering.

Pending the uses described above, we plan to invest the net proceeds from this offering in short-term, interest-bearing obligations, investment grade instruments, certificates of deposit or direct or guaranteed obligations of the U.S. government.

Dilution

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

Our net tangible book value (deficit) as of September 30, 2022 was approximately \$131.4 million, or \$4.09 per share. Our net tangible book value (deficit) is the amount of our total tangible assets less our total liabilities and the carrying value of our preferred stock, which is not included within stockholders' equity (deficit). Net tangible book value (deficit) per share represents net tangible book value (deficit) divided by the 32,091,398 shares of common stock outstanding as of September 30, 2022.

After giving effect to the issuance and sale of an aggregate of shares of our common stock in this offering at the public offering price of \$ per share, and pre-funded warrants to purchase shares of our common stock for \$ per share (which equals the \$ per pre-funded warrant being sold to the public in this offering, plus the \$0.0001 per share exercise price of each such pre-funded warrant), and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, our as adjusted net tangible book value as of September 30, 2022 would have been \$ or \$ per share of common stock. This represents an immediate increase in the net tangible book value of \$ per share to our existing stockholders and an immediate dilution in net tangible book value of \$ per share to new investors in this offering. Dilution per share to new investors is determined by subtracting as adjusted net tangible book value per share after this offering from the public offering price per share paid by new investors. The following table illustrates this dilution on a per share basis:

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

Public offering price per share	\$
Historical net tangible book value per share as of September 30, 2022	\$ 4.09
Increase in net tangible book value per share attributable to new investors purchasing common stock and	
pre-funded warrants in this offering	\$
As adjusted net tangible book value per share as of September 30, 2022 after giving effect to this offering	
Dilution per share to new investors purchasing common stock in this offering	\$

The table and discussion above are based on the number of shares of our common stock outstanding on September 30, 2022, and exclude, each as of September 30, 2022:

- 534,872 shares of common stock issuable upon the exercise of outstanding stock options under the 2021 Plan, at a weighted-average exercise price of \$13.38 per share;
- 139,500 shares of common stock issuable upon the vesting of restricted stock units under the 2021 Plan;
- 1,817,719 shares of common stock reserved for future issuance under the 2021 Plan;

- · 612,633 shares of common stock reserved for future issuance under the 2021 ESPP; and
- shares of our common stock that are issuable upon exercise of the pre-funded warrants being offered pursuant to this prospectus supplement.

If holders of the pre-funded warrants exercise the pre-funded warrants in full, our as adjusted net tangible book value per share of common stock after giving effect to this offering (but not the exercise of the underwriters' option to purchase additional shares) would have been \$ per share, and the dilution in as adjusted net tangible book value per share to new investors participating in this offering would have been \$ per share.

To the extent that outstanding stock options are exercised, new stock options are issued, or we issue additional shares of common stock in the future, there will be further dilution to investors. In addition, we have entered into a sales Agreement with Cowen and Company, LLC to offer and sell shares of our common stock having an aggregate offering price of up to \$100,000,000, from time to time, through an atthe-market offering program. Investors will experience further dilution as a result of any such sales. Furthermore, we may choose to raise additional capital because of market conditions or strategic considerations, even if we believe that we have sufficient funds for our current or future operating plans. If we raise additional capital through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

Description of pre-funded warrants

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

Form

The pre-funded warrants will be issued as individual warrant agreements to the investors that choose to purchase pre-funded warrants in lieu of common stock. The form of pre-funded warrant will be filed as an exhibit to a Current Report on Form 8-K that we expect to file with the SEC.

Term

The pre-funded warrants will not expire.

Exercisability

Each pre-funded warrant will be exercisable immediately upon issuance and will be exercisable until such pre-funded warrant is exercised in full. The pre-funded warrants will be exercisable, at the option of each holder, in whole or in part, by delivering to us a duly executed exercise notice accompanied by a payment of the nominal exercise price in cash or by means of a cashless exercise, in which case the holder would receive upon such exercise the net number of shares of our common stock determined according to the formula set forth in the pre-funded warrant. No fractional shares of our common stock will be issued in connection with the exercise of a pre-funded warrant. In lieu of fractional shares, we will, at our option, pay the holder an amount in cash equal to the fractional amount multiplied by the exercise price, or round up to the next whole share. A holder will not be entitled to the return or refund of all, or any portion, of such pre-paid aggregate exercise price under any circumstance.

Exercise limitations

We may not effect the exercise of any pre-funded warrant, and a holder will not be entitled to exercise any portion of any such warrant if, upon giving effect to such exercise, the aggregate number of shares of common stock beneficially owned by the holder (together with its affiliates, any other persons acting as a group together with the holder or any of the holder's affiliates, and any other persons whose beneficial ownership of common stock would or could be aggregated with the holder's for purposes of Section 13(d) or Section 16 of the Exchange Act) would exceed 9.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of such pre-funded warrant, which percentage may be increased or decreased at the holder's election upon 61 days' notice to us subject to the terms of such pre-funded warrants, provided that such percentage may in no event exceed 19.99%.

Exercise price

The exercise price of the pre-funded warrants is \$0.0001 per share of common stock. The exercise price of the pre-funded warrants and the number of shares of our common stock issuable upon exercise of the pre-funded warrants is subject to appropriate adjustment in the event of certain stock dividends and distributions, stock splits, stock combinations, reclassifications or similar events affecting our common stock, as well as upon any distribution of assets, including cash, stock or other property, to our stockholders. The exercise price of the pre-funded warrants will not be adjusted below the par value of our common stock.

Transferability

Subject to applicable laws, the pre-funded warrants may be offered for sale, sold, transferred or assigned without our consent.

Exchange listing

There is no established public trading market for the pre-funded warrants, and we do not expect a market to develop. We do not intend to list the pre-funded warrants on the Nasdaq Global Select Market or any other national securities exchange or nationally recognized trading system.

Fundamental transactions

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

No rights as a stockholder

Except by virtue of such holder's ownership of shares of our common stock, and except for the right to participate in certain dividends, distributions, and rights offerings, the holder of a pre-funded warrant does not have the rights or privileges of a holder of our common stock, including any voting rights, until such holder exercises the pre-funded warrant.

Dividend policy

We have never declared or paid any cash dividends on our capital stock. We intend to retain future earnings, if any, to finance the operation and expansion of our business and do not anticipate paying any cash dividends in the foreseeable future. Any future determination related to our dividend policy will be made at the discretion of our board of directors after considering our financial condition, results of operations, capital requirements, business prospects and other factors our board of directors deems relevant, and subject to the restrictions contained in any future financing instruments. Our ability to pay cash dividends on our capital stock in the future may also be limited by the terms of any preferred securities we may issue or agreements governing any indebtedness we may incur.

Material U.S. federal income and estate tax considerations for non-U.S. holders of common stock

The following is a summary of the material U.S. federal income and estate tax considerations relating to the purchase, ownership and disposition of our common stock by Non-U.S. Holders (defined below). This summary does not purport to be a complete analysis of all the potential tax considerations relevant to Non-U.S. Holders. This summary is based upon the Internal Revenue Code of 1986, as amended (the "Internal Revenue Code"), the Treasury regulations promulgated or proposed thereunder and administrative and judicial interpretations thereof, all as of the date hereof and all of which are subject to change at any time, possibly on a retroactive basis.

This summary assumes that shares of our common stock are held as "capital assets" within the meaning of Section 1221 of the Internal Revenue Code. This summary does not purport to deal with all aspects of U.S. federal income and estate taxation that might be relevant to particular Non-U.S. Holders in light of their particular investment circumstances or status, nor does it address specific tax considerations that may be relevant to particular persons (including, for example, financial institutions, broker-dealers, taxpayers subject to special tax accounting rules under Section 451(b) of the Internal Revenue Code, insurance companies, partnerships or other pass-through entities, certain U.S. expatriates, tax-exempt organizations, pension plans, "controlled foreign corporations", "passive foreign investment companies", corporations that accumulate earnings to avoid U.S. federal income tax, persons in special situations, such as those who have elected to mark securities to market or those who hold common stock as part of a straddle, hedge, conversion transaction, synthetic security or other integrated investment, or holders subject to the alternative minimum tax). In addition, except as explicitly addressed herein with respect to estate tax, this summary does not address estate and gift tax considerations, the Medicare contribution tax on net investment income, or considerations under the tax laws of any state, local or non-U.S. jurisdiction.

For purposes of this summary, a "Non-U.S. Holder" means a beneficial owner of common stock that for U.S. federal income tax purposes is not classified as a partnership and that, for U.S. federal income tax purposes, is not:

- · an individual who is a citizen or resident of the United States;
- a corporation or any other organization taxable as a corporation for U.S. federal income tax purposes, created or organized in or under the laws of the United States, any state thereof or the District of Columbia;
- · an estate, the income of which is included in gross income for U.S. federal income tax purposes regardless of its source; or
- a trust if (1) a U.S. court is able to exercise primary supervision over the trust's administration and one or more U.S. persons have the
 authority to control all of the trust's substantial decisions or (2) the trust has a valid election in effect under applicable U.S. Treasury
 regulations to be treated as a U.S. person.

If an entity that is classified as a partnership for U.S. federal income tax purposes holds our common stock, the tax treatment of persons treated as its partners for U.S. federal income tax purposes will generally depend upon the status of the partner and the activities of the partnership. Partnerships and other entities that are classified as partnerships for U.S. federal income tax purposes and persons holding our common stock through a partnership or other entity classified as a partnership for U.S. federal income tax purposes are urged to consult their own tax advisors.

There can be no assurance that the Internal Revenue Service ("IRS") will not challenge one or more of the tax consequences described herein, and we have not obtained, nor do we intend to obtain a ruling from the IRS

with respect to the U.S. federal income or estate tax consequences to a Non-U.S. Holder of the purchase, ownership or disposition of our common stock.

THIS SUMMARY IS FOR GENERAL INFORMATION ONLY AND IS NOT INTENDED TO BE TAX ADVICE. NON-U.S. HOLDERS ARE URGED TO CONSULT THEIR TAX ADVISORS CONCERNING THE U.S. FEDERAL INCOME AND ESTATE TAXATION, STATE, LOCAL AND NON-U.S. TAXATION AND OTHER TAX CONSEQUENCES TO THEM OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF OUR COMMON STOCK.

Distributions on our common stock

As discussed under "Dividend Policy" above, we may retain future earnings, if any, for future operations, expansion and debt repayment and may not pay any special or regular dividends for the foreseeable future. However, we expect to reevaluate our dividend policy on a regular basis following this offering and may, subject to compliance with the covenants contained in our senior secured credit facilities and other considerations, determine to pay dividends in the future. In the event that we make a distribution of cash or property with respect to our common stock, any such distributions generally will constitute dividends for U.S. federal income tax purposes to the extent of our current and accumulated earnings and profits, as determined under U.S. federal income tax principles. If a distribution exceeds our current and accumulated earnings and profits, the excess will constitute a return of capital and will first reduce the holder's adjusted tax basis in our common stock, but not below zero. Any remaining excess will be treated as capital gain, subject to the tax treatment described below in "—Gain on Sale, Exchange or Other Taxable Disposition of Our Common Stock." Any such distribution would also be subject to the discussions below under the sections titled "—Additional Withholding and Reporting Requirements" and "—Backup Withholding and Information Reporting."

Dividends paid to a Non-U.S. Holder generally will be subject to a 30% U.S. federal withholding tax unless such Non-U.S. Holder provides us or the applicable withholding agent, as the case may be, with the appropriate IRS Form W-8, such as:

- IRS Form W-8BEN or IRS Form W-8BEN-E (or successor forms) certifying, under penalties of perjury, a reduction in, or exemption from, withholding under an applicable income tax treaty, or
- IRS Form W-8ECI (or successor form) certifying, under penalties of perjury, that a dividend paid on common stock is not subject to withholding tax because it is effectively connected with a trade or business in the United States of the Non-U.S. Holder (in which case such dividend generally will be subject to regular graduated U.S. tax rates as described below).

The certification requirement described above must be provided to us or the applicable withholding agent prior to the payment of dividends and may be required to be updated periodically. The certification also may require a Non-U.S. Holder that provides an IRS form or that claims treaty benefits to provide its U.S. taxpayer identification number. Special certification and other requirements apply in the case of certain Non-U.S. Holders that hold shares of our common stock through intermediaries or are pass-through entities for U.S. federal income tax purposes.

Each Non-U.S. Holder is urged to consult its own tax advisor about the specific methods for satisfying these requirements. A claim for exemption will not be valid if the person receiving the applicable form has actual knowledge or reason to know that the statements on the form are false.

If dividends are effectively connected with a trade or business in the United States of a Non-U.S. Holder (and, if required by an applicable income tax treaty, are attributable to a U.S. permanent establishment), the Non-U.S. Holder, although exempt from the withholding tax described above (provided that the certification requirements described above are satisfied), generally will be subject to U.S. federal income tax on such

dividends on a net income basis in the same manner as if it were a United States person, as defined under the Internal Revenue Code. In addition, if a Non-U.S. Holder is treated as a corporation for U.S. federal income tax purposes, the Non-U.S. Holder may be subject to an additional "branch profits tax" equal to 30% (unless reduced by an applicable income treaty) of its earnings and profits in respect of such effectively connected dividend income.

Non-U.S. Holders that do not timely provide us or the applicable withholding agent with the required certification, but which are eligible for a reduced rate of U.S. federal withholding tax pursuant to an income tax treaty, may obtain a refund or credit of any excess amount withheld by timely filing an appropriate claim for refund with the IRS.

Gain on sale, exchange or other taxable disposition of our common stock

Subject to the discussions below under the sections titled "—Additional Withholding and Reporting Requirements" and "—Backup Withholding and Information Reporting", in general, a Non-U.S. Holder will not be subject to U.S. federal income tax or withholding tax on gain realized upon such holder's sale, exchange or other taxable disposition of shares of our common stock unless (i) such Non-U.S. Holder is an individual who is present in the United States for 183 days or more in the taxable year of disposition, and certain other conditions are met, (ii) we are or have been a "United States real property holding corporation", as defined in the Internal Revenue Code (a "USRPHC"), at any time within the shorter of the five-year period preceding the disposition and the Non-U.S. Holder's holding period in the shares of our common stock, and certain other requirements are met, or (iii) such gain is effectively connected with the conduct by such Non-U.S. Holder of a trade or business in the United States (and, if required by an applicable income tax treaty, is attributable to a permanent establishment maintained by such Non-U.S. Holder in the United States).

If the first exception applies, the Non-U.S. Holder generally will be subject to U.S. federal income tax at a rate of 30% (or at a reduced rate under an applicable income tax treaty) on the amount by which such Non-U.S. Holder's capital gains allocable to U.S. sources exceed capital losses allocable to U.S. sources during the taxable year of the disposition. If the third exception applies, the Non-U.S. Holder generally will be subject to U.S. federal income tax with respect to such gain on a net income basis in the same manner as if it were a resident of the United States and a Non-U.S. Holder that is a corporation for U.S. federal income tax purposes may also be subject to a branch profits tax with respect to any earnings and profits attributable to such gain at a rate of 30% (or at a reduced rate under an applicable income tax treaty).

Generally, a corporation is a USRPHC only if the fair market value of its United States real property interests (as defined in the Internal Revenue Code) equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests plus its other assets used or held for use in a trade or business. Although there can be no assurance in this regard, we believe that we are not, and do not anticipate becoming, a USRPHC. However, because the determination of whether we are a USRPHC depends on the fair market value of our United States real property interests relative to the fair market value of other business assets, there can be no assurance that we will not become a USRPHC in the future. Even if we are or were to become a USRPHC, a Non-U.S. Holder would not be subject to U.S. federal income tax on a sale, exchange or other taxable disposition of our common stock by reason of our status as USRPHC so long as our common stock is "regularly traded" (as defined by applicable Treasury regulations) on an established securities market at any time during the calendar year in which the disposition occurs and such Non-U.S. Holder does not own and is not deemed to own (directly, indirectly or constructively) more than 5% of our common stock at any time during the shorter of the five-year period ending on the date of disposition and the holder's holding period. However, no assurance can be provided that our common stock will be regularly traded on an established securities market for purposes of the rules described above. Prospective investors are encouraged to consult their own tax advisors regarding the possible consequences to them if we are, or were to become, a USRPHC.

Additional withholding and reporting requirements

Sections 1471 through 1474 of the Internal Revenue Code and the related Treasury regulations, together with other U.S. Treasury and IRS guidance issued thereunder and intergovernmental agreements, legislation, rules and other official guidance adopted pursuant to such intergovernmental agreements (collectively, "FATCA") generally impose U.S. federal withholding at a rate of 30% on payments of dividends on our common stock on certain non-U.S. entities (including certain intermediaries) unless such persons establish that they are compliant with or exempt from FATCA. This regime requires, among other things, a broad class of persons to enter into agreements with the IRS to obtain, disclose and report information about their investors and account holders. An intergovernmental agreement between the U.S. and an applicable foreign country may, however, modify these requirements.

Under the applicable Treasury regulations and administrative guidance, withholding under FATCA generally applies to payments of dividends on shares of our common stock to such applicable non-U.S. entities that fail to establish they are compliant with or exempt from FATCA. While withholding under FATCA would have also applied to payments of gross proceeds from the sale or other disposition of stock on or after January 1, 2019 by such applicable non-U.S. entities, proposed Treasury regulations (on which taxpayers may currently rely) eliminate FATCA withholding on payments of gross proceeds from the sale or other disposition of stock entirely. Taxpayers generally may rely on these proposed Treasury regulations until final Treasury regulations are issued.

Prospective investors should consult their own tax advisors regarding the possible impact of these rules on their investment in our common stock, and the entities through which they hold our common stock, including, without limitation, the process and deadlines for meeting the applicable requirements to prevent the imposition of this 30% withholding tax under FATCA.

Backup withholding and information reporting

In general, information reporting will apply to distributions on our common stock paid to a Non-U.S. Holder and the tax withheld, if any, with respect to the distributions. Non-U.S. Holders may have to comply with specific certification procedures to establish that the holder is not a United States person (as defined in the Internal Revenue Code) in order to avoid backup withholding at the applicable rate, currently 24%, with respect to dividends on our common stock. Dividends paid to Non-U.S. Holders subject to the U.S. withholding tax, as described above under the section titled "—Distributions on Our Common Stock," generally will be exempt from U.S. backup withholding.

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

Copies of information returns may be made available to the tax authorities of the country in which the Non-U.S. Holder resides or in which the Non-U.S. Holder is incorporated, under the provisions of a specific treaty or agreement.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules from a payment to a Non-U.S. Holder may be refunded or credited against the Non-U.S. Holder's U.S. federal income tax liability, if any, provided that an appropriate claim is timely filed with the IRS.

Federal estate tax

Shares of our common stock that are owned (or treated as owned) by an individual who is not a citizen or resident of the United States (as specially defined for U.S. federal estate tax purposes) at the time of death will be included in such individual's gross estate for U.S. federal estate tax purposes, unless an applicable estate or other tax treaty provides otherwise, and therefore may be subject to U.S. federal estate tax.

Underwriting

We are offering the shares of common stock and pre-funded warrants described in this prospectus through a number of underwriters. J.P. Morgan Securities LLC, Cowen and Company, LLC and Evercore Group L.L.C. are acting as joint book-running managers of the offering and as representatives of the underwriters. We have entered into an underwriting agreement with the underwriters. Subject to the terms and conditions of the underwriting agreement, we have agreed to sell to the underwriters, and each underwriter has severally agreed to purchase, at the public offering price less the underwriting discounts and commissions set forth on the cover page of this prospectus, the number of shares of common stock and pre-funded warrants listed next to its name in the following table:

Name	Number of shares	Number of pre-funded warrants
J.P. Morgan Securities LLC		
Cowen and Company, LLC		
Evercore Group L.L.C.		
Total		

The underwriters are committed to purchase all the common stock and pre-funded warrants offered by us if they purchase any securities. The underwriting agreement also provides that if an underwriter defaults, the purchase commitments of non-defaulting underwriters may also be increased or the offering may be terminated.

The underwriters propose to offer the common stock and pre-funded warrants directly to the public at the initial public offering price set forth on the cover page of this prospectus and to certain dealers at that price less a concession not in excess of \$ per share. After the initial offering of the securities to the public, if all of the securities are not sold at the initial public offering price, the underwriters may change the offering price and the other selling terms. Sales of any shares made outside of the United States may be made by affiliates of the underwriters.

The underwriters have an option to buy up to additional shares of common stock from us to cover sales of shares by the underwriters which exceed the number of securities specified in the table above. The underwriters have 30 days from the date of this prospectus to exercise this option to purchase additional shares. If any shares are purchased with this option to purchase additional shares, the underwriters will purchase shares in approximately the same proportion as shown in the table above. If any additional shares of common stock are purchased, the underwriters will offer the additional shares on the same terms as those on which the shares are being offered.

The underwriting fee is equal to the public offering price per share of common stock or pre-funded warrant, less the amount paid by the underwriters to us per share of common stock or pre-funded warrant, as applicable. The underwriting fee is \$ per share and pre-funded warrant. The following table shows the per share and total underwriting discounts and commissions to be paid to the underwriters assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

	Without exercise of option to purchase additional shares	With full exercise of option to purchase additional shares
Per Share	\$	\$
Per pre-funded warrant	\$	\$
Total	\$	\$

We estimate that the total expenses of this offering, including registration, filing and listing fees, printing fees and legal and accounting expenses, but excluding the underwriting discounts and commissions, will be approximately \$350,000. We have also agreed to reimburse the underwriters for certain of their expenses in an amount up to \$40,000.

A prospectus in electronic format may be made available on the web sites maintained by one or more underwriters, or selling group members, if any, participating in the offering. The underwriters may agree to allocate a number of shares to underwriters and selling group members for sale to their online brokerage account holders. Internet distributions will be allocated by the representatives to underwriters and selling group members that may make Internet distributions on the same basis as other allocations.

We have agreed that we will not (i) sell, offer to sell, contract to sell, lend, effect any short sale, establish or increase any "put equivalent position", liquidate or decrease any "call equivalent position", pledge, hypothecate or grant any security interest in, or in any other way transfer or dispose of any shares of our common stock or related securities, (ii) enter into any swap, hedge or similar arrangement or agreement that transfers, in whole or in part, the economic risk of ownership of any shares of our common stock or related securities; (iv) submit or file any registration statement under the Securities Act in respect of any shares of our common stock or related securities; or (v) effect a reverse stock split, recapitalization, share consolidation, reclassification or similar transaction affecting the outstanding shares of our common stock, or public announce the intention do any of the foregoing, in each case without the prior written consent of J.P. Morgan Securities LLC and Cowen and Company, LLC for a period of 90 days after the date of this prospectus, other than the shares of our common stock to be sold in this offering.

The restrictions on our actions, as described above, do not apply to certain transactions, including (i) the transactions contemplated hereby, including the issuance of common stock in connection with the exercise of the pre-funded warrants; (ii) issuing shares of our common stock, options to purchase shares of our common stock or other issue equity or equity-based awards pursuant to any equity plan or arrangement; (iii) file one or more registration statements on Form S-8 with respect to any shares of our common stock or related securities issued or issuable pursuant to any stock option, stock bonus, or other stock plan or arrangement described in this prospectus supplement; (iv) issue shares of our common stock in connection with the acquisition or license of the securities, business, property, technology or other assets of another person or business entity or pursuant to any employee benefit plan assumed in connection with any such acquisition; (v) issue shares of our common stock or related securities, or enter into an agreement to issue shares of our common stock or related securities, in connection with any merger, joint venture, strategic alliance, commercial or other collaborative transaction; provided that, in the case of immediately preceding clauses (iv) and (v), the aggregate number of shares of our common stock issued or underlying such related securities issued in connection with all such acquisitions and other transactions does not exceed 10% of the number of shares of our common stock outstanding after giving effect to the consummation of this offering; and (vi) assist any stockholder of the Company in the establishment of a trading plan by such stockholder pursuant to Rule 10b5-1 under the Exchange Act for the transfer of shares of our common stock.

Our directors and executive officers, and certain of our significant shareholders (such persons, the "lock-up parties") have entered into lock-up agreements with the underwriters prior to the commencement of this offering pursuant to which each lock-up party, subject to specified exceptions, for a period of 90 days after the date of this prospectus, may not, without the prior written consent of J.P. Morgan Securities LLC and Cowen and Company, LLC, (1) sell or offer to sell any shares of our common stock or related securities currently or hereafter owned either of record or beneficially by the lock-up party or such family member, (2) enter into any hedging, swap or other agreement or transaction that transfers economic consequences of ownership of the shares of our common stock or related securities, (3) make any demand for, or exercise any right with respect

to, the registration under the Securities Act of the offer and sale of any shares of our common stock or related securities, or cause to be filed a registration statement, prospectus or prospectus supplement (or an amendment or supplement thereto) with respect to any such registration, or (4) publicly announce any intention to do any of the foregoing. Such persons or entities have further acknowledged that these undertakings preclude them from engaging in any hedging or other transactions or arrangements (including, without limitation, any short sale or the purchase or sale of, or entry into, any put or call option, or combination thereof, forward, swap or any other derivative transaction or instrument, however described or defined) designed or intended, or which could reasonably be expected to lead to or result in, a sale or disposition or transfer (by any person or entity, whether or not a signatory to such agreement) of any economic consequences of ownership, in whole or in part, directly or indirectly, of any lock-up securities, whether any such transaction or arrangement (or instrument provided for thereunder) would be settled by delivery of lock-up securities, in cash or otherwise.

The restrictions described in the immediately preceding paragraph and contained in the lock-up agreements between the underwriters and the lock-up parties do not apply, subject in certain cases to various conditions, to certain transactions, including (i) transfers or dispositions of shares of our common stock or related securities as a bona fide gift or for estate planning purposes, by will, other testamentary document or intestate succession to the legal representative, heir, beneficiary or any family member, to a trust for the direct or indirect benefit of the lock-up party and/or a family member, or to a charitable organization or educational institution; (ii) transfers or dispositions of shares of our common stock or related securities to any corporation, partnership, limited liability company or other entity, all of the beneficial ownership interests of which are held by the lock-up party or any family member; (iii) if the lock-up party is an entity, transfers, dispositions or distributions of shares of our common stock or related securities to another corporation, partnership, limited liability company, trust or other business entity that is an affiliate of the lock-up party, to any investment fund or other entity controlling, controlled by, managing or managed by or under common control with the lock-up party or affiliates of the lock-up party (including, for the avoidance of doubt, where the lock-up party is a partnership, to its general partner or a successor partnership or fund, or any other funds managed by such partnership) or to its stockholders, limited partners, general partners, limited liability company members or other equity holders or to the estate of any such stockholders, limited partners, general partners, limited liability company members or equity holders; (iv) the exercise by the lock-up party of an option to purchase shares of our common stock or related securities granted under any equity incentive plan or stock purchase plan; (v) the establishment of a trading plan pursuant to Rule 10b5-1 under the Exchange Act for the transfer of shares of our common stock; (vi) transfers or dispositions of shares of our common stock or related securities acquired in the Offering or on the open market following the Offering; (vii) the transfer of shares of our common stock or related securities to a nominee or custodian of a person or entity to whom a disposition or transfer would be permissible under clauses (i)-(iii) and (vi) above; (viii) transfers or dispositions of shares of our common stock or related securities as forfeitures to the Company to satisfy tax withholding obligations of the lock-up party in connection with the vesting or exercise of equity awards by the lock-up party; (ix) transfers to us of shares of our common stock or related securities pursuant to a net exercise or cashless exercise by the lock-up party of outstanding equity awards; (x) transfers or dispositions of the lock-up party's shares of our common stock or related securities pursuant to a bona fide third-party tender offer, merger, consolidation or other similar transaction made to all holders of the Company's securities involving a change of control; or (xi) transfers or dispositions of shares of our common stock or related securities by operation of law, including pursuant to a domestic order or negotiated divorce settlement, or pursuant to a court order.

J.P. Morgan Securities LLC and Cowen and Company, LLC may, in their sole discretion and at any time or from time to time before the termination of the 90-day period release all or any portion of the securities subject to lock-up agreements.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act.

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

In connection with this offering, the underwriters may engage in stabilizing transactions, which involves making bids for, purchasing and selling shares of common stock in the open market for the purpose of preventing or retarding a decline in the market price of the common stock while this offering is in progress. These stabilizing transactions may include making short sales of common stock, which involves the sale by the underwriters of a greater number of shares of common stock than they are required to purchase in this offering, and purchasing shares of common stock on the open market to cover positions created by short sales. Short sales may be "covered" shorts, which are short positions in an amount not greater than the underwriters' option to purchase additional shares referred to above, or may be "naked" shorts, which are short positions in excess of that amount. The underwriters may close out any covered short position either by exercising their option to purchase additional shares, in whole or in part, or by purchasing shares in the open market. In making this determination, the underwriters will consider, among other things, the price of shares available for purchase in the open market compared to the price at which the underwriters may purchase shares through the option to purchase additional shares. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the common stock in the open market that could adversely affect investors who purchase in this offering. To the extent that the underwriters create a naked short position, they will purchase shares in the open market to cover the position.

The underwriters have advised us that, pursuant to Regulation M of the Securities Act, they may also engage in other activities that stabilize, maintain or otherwise affect the price of the common stock, including the imposition of penalty bids. This means that if the representatives of the underwriters purchase common stock in the open market in stabilizing transactions or to cover short sales, the representatives can require the underwriters that sold those shares as part of this offering to repay the underwriting discount received by them.

These activities may have the effect of raising or maintaining the market price of the common stock or preventing or retarding a decline in the market price of the common stock, and, as a result, the price of the common stock may be higher than the price that otherwise might exist in the open market. If the underwriters commence these activities, they may discontinue them at any time. The underwriters may carry out these transactions on the Nasdaq Stock Market, in the over-the-counter market or otherwise.

In addition, in connection with this offering certain of the underwriters (and selling group members) may engage in passive market making transactions in our common stock on The Nasdaq Stock Market prior to the pricing and completion of this offering. Passive market making consists of displaying bids on The Nasdaq Stock Market no higher than the bid prices of independent market makers and making purchases at prices no higher than these independent bids and effected in response to order flow. Net purchases by a passive market maker on each day are generally limited to a specified percentage of the passive market maker's average daily trading volume in the common stock during a specified period and must be discontinued when such limit is reached. Passive market making may cause the price of our common stock to be higher than the price that otherwise would exist in the open market in the absence of these transactions. If passive market making is commenced, it may be discontinued at any time.

Certain of the underwriters and their affiliates have provided in the past to us and our affiliates and may provide from time to time in the future certain commercial banking, financial advisory, investment banking and other services for us and such affiliates in the ordinary course of their business, for which they have received and may continue to receive customary fees and commissions. In addition, from time to time, certain of the underwriters and their affiliates may effect transactions for their own account or the account of customers, and hold on behalf of themselves or their customers, long or short positions in our debt or equity securities or loans, and may do so in the future.

Selling restrictions

Other than in the United States, no action has been taken by us or the underwriters that would permit a public offering of the securities offered by this prospectus in any jurisdiction where action for that purpose is required. The securities offered by this prospectus may not be offered or sold, directly or indirectly, nor may this prospectus or any other offering material or advertisements in connection with the offer and sale of any such securities be distributed or published in any jurisdiction, except under circumstances that will result in compliance with the applicable rules and regulations of that jurisdiction. Persons into whose possession this prospectus comes are advised to inform themselves about and to observe any restrictions relating to the offering and the distribution of this prospectus. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any securities offered by this prospectus in any jurisdiction in which such an offer or a solicitation is unlawful.

Notice to prospective investors in Canada

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

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

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

Notice to prospective investors in the European Economic Area and the UK

In relation to each Member State of the European Economic Area (each, a "Relevant State"), no securities have been offered or will be offered pursuant to the offering to the public in that Relevant State prior to the publication of a prospectus in relation to the securities which has been approved by the competent authority in that Relevant State or, where appropriate, approved in another Relevant State and notified to the competent authority in that Relevant State, all in accordance with the Prospectus Regulation, except that offers of securities may be made to the public in that Relevant State at any time under the following exemptions under the Prospectus Regulation:

- (a) to any legal entity which is a qualified investor as defined under the Prospectus Regulation;
- (b) to fewer than 150 natural or legal persons (other than qualified investors as defined under the Prospectus Regulation), subject to obtaining the prior consent of the underwriters; or
- (c) in any other circumstances falling within Article 1(4) of the Prospectus Regulation,

provided that no such offer of securities shall require us or any of our representatives to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation.

For the purposes of this provision, the expression an "offer to the public" in relation to any securities in any Relevant State means the communication in any form and by any means of sufficient information on the terms of the offer and any securities to be offered so as to enable an investor to decide to purchase any securities, and the expression "Prospectus Regulation" means Regulation (EU) 2017/1129 (as amended).

Notice to prospective investors in the United Kingdom

In relation to the United Kingdom, no securities have been offered or will be offered pursuant to this offering to the public in the United Kingdom prior to the publication of a prospectus in relation to the securities that either (i) has been approved by the Financial Conduct Authority, or (ii) is to be treated as if it had been approved by the Financial Conduct Authority in accordance with the transitional provision in Regulation 74 of the Prospectus (Amendment etc.) (EU Exit) Regulations 2019, except that offers of securities may be made to the public in the United Kingdom at any time under the following exemptions under the UK Prospectus Regulation:

- (a) to any legal entity which is a qualified investor as defined under Article 2 of the UK Prospectus Regulation;
- (b) to fewer than 150 natural or legal persons (other than qualified investors as defined under Article 2 of the UK Prospectus Regulation), subject to obtaining the prior consent of representatives for any such offer; or
- (c) in any other circumstances falling within Section 86 of the Financial Services and Markets Act 2000, or the FSMA, provided that no such offer of the securities shall require the Issuer or any representative to publish a prospectus pursuant to Section 85 of the FSMA or supplement a prospectus pursuant to Article 23 of the UK Prospectus Regulation.

For the purposes of this provision, the expression an "offer to the public" in relation to the securities in the United Kingdom means the communication in any form and by any means of sufficient information on the terms of the offer and any securities to be offered so as to enable an investor to decide to purchase or subscribe for any securities and the expression "UK Prospectus Regulation" means Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018.

In addition, this prospectus is only being distributed to, and is only directed at, and any investment or investment activity to which this prospectus relates is available only to, and will be engaged in only with, persons who are outside the United Kingdom or persons in the United Kingdom (i) having professional experience in matters relating to investments who fall within the definition of "investment professionals" in Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, or the Order; or (ii) who are high net worth entities falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as "relevant persons"). Persons who are not relevant persons should not take any action on the basis of this prospectus and should not act or rely on it.

Any person in the United Kingdom that is not a relevant person should not act or rely on the information included in this document or use it as basis for taking any action. In the United Kingdom, any investment or investment activity that this document relates to may be made or taken exclusively by relevant persons.

Notice to prospective investors in Hong Kong

No securities have been offered or sold, and no securities may be offered or sold, in Hong Kong, by means of any document, other than to persons whose ordinary business is to buy or sell shares or debentures, whether as principal or agent; or to "professional investors" as defined in the Securities and

Futures Ordinance (Cap. 571) of Hong Kong and any rules made under that Ordinance; or in other circumstances which do not result in the document being a "prospectus" as defined in the Companies Ordinance (Cap. 32) of Hong Kong or which do not constitute an offer to the public within the meaning of the Companies Ordinance (Cap. 32) or the Securities and Futures Ordinance (Cap. 571) of Hong Kong. No document, invitation or advertisement relating to the securities has been issued or may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted under the securities laws of Hong Kong) other than with respect to securities which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made under that Ordinance.

This prospectus has not been registered with the Registrar of Companies in Hong Kong. Accordingly, this prospectus may not be issued, circulated or distributed in Hong Kong, and the securities may not be offered for subscription to members of the public in Hong Kong. Each person acquiring the securities will be required, and is deemed by the acquisition of the securities, to confirm that he is aware of the restriction on offers of the securities described in this prospectus and the relevant offering documents and that he is not acquiring, and has not been offered any securities in circumstances that contravene any such restrictions.

Notice to prospective investors in Israel

This document does not constitute a prospectus under the Israeli Securities Law, 5728-1968, or the Securities Law, and has not been filed with or approved by the Israel Securities Authority. In Israel, this prospectus is being distributed only to, and is directed only at, and any offer of the securities is directed only at, (i) a limited number of persons in accordance with the Israeli Securities Law and (ii) investors listed in the first addendum, or the Addendum, to the Israeli Securities Law, consisting primarily of joint investment in trust funds, provident funds, insurance companies, banks, portfolio managers, investment advisors, members of the Tel Aviv Stock Exchange, underwriters, venture capital funds, entities with equity in excess of NIS 50 million and "qualified individuals," each as defined in the Addendum (as it may be amended from time to time), collectively referred to as qualified investors (in each case, purchasing for their own account or, where permitted under the Addendum, for the accounts of their clients who are investors listed in the Addendum). Qualified investors are required to submit written confirmation that they fall within the scope of the Addendum, are aware of the meaning of same and agree to it.

Notice to prospective investors in Japan

The offering has not been and will not be registered under the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948 of Japan, as amended), or FIEL, and the underwriters will not offer or sell any securities, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means, unless otherwise provided herein, any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to or for the benefit of a resident of Japan, except pursuant to an exemption from S-30 the registration requirements of, and otherwise in compliance with, the FIEL and any other applicable laws, regulations and ministerial guidelines of Japan.

Notice to prospective investors in Switzerland

The securities may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange, or the SIX, or on any other stock exchange or regulated trading facility in Switzerland. This prospectus has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of

the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this prospectus, nor any other offering or marketing material, relating to the securities, or the offering, may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this prospectus, nor any other offering or marketing material relating to the offering, us or the securities, have been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with and the offer of securities will not be supervised by, the Swiss Financial Market Supervisory Authority FINMA, and the offer of securities has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes, or the CISA. The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of securities.

Legal matters

The validity of the issuance of the securities offered pursuant to this prospectus supplement will be passed upon for us by Ropes & Gray LLP, Boston, Massachusetts. Certain legal matters in connection with this offering will be passed upon for the underwriters by Latham & Watkins LLP, New York, New York.

Experts

The financial statements of Rallybio Corporation as of December 31, 2021 and 2020, and for each of the two years in the period ended December 31, 2021, 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 supplement and the accompanying prospectus. This prospectus supplement and the accompanying prospectus do 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 supplement or the accompanying 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 supplement and the accompanying 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 part of this prospectus supplement and the accompanying prospectus, and information in documents that we file later with the SEC will automatically update and supersede information in this prospectus supplement and the accompanying prospectus. We incorporate by reference into this prospectus supplement and the accompanying 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 supplement and the accompanying prospectus are 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 supplement or the accompanying prospectus, in each case, until the offering described under this prospectus supplement is termination or completed:

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2021, as filed with the SEC on March 15, 2022;
- our Quarterly Reports on Form 10-Q for the periods ended March 31, 2022, June 30, 2022 and September 30, 2022, as filed with the SEC on May 10, 2022, August 8, 2022 and November 7, 2022, respectively;
- our Current Reports on Form 8-K, as filed with the SEC on <u>April 4, 2022</u> (only with respect to Item 5.02), <u>May 10, 2022</u> (only with respect to Items 1.01 and 8.01 and Exhibit 99.2), <u>May 27, 2022</u>, <u>June 2, 2022</u> and <u>August 2, 2022</u> (only with respect to Item 5.02);
- portions of the Definitive Proxy Statement on <u>Schedule 14A</u>, as filed with the SEC on April 25, 2022, that are incorporated by reference into Part III of our Annual Report on Form 10-K for the year December 31, 2021, as filed with the SEC on March 15, 2022; and
- the description of capital stock contained in the Registration Statement on <u>Form 8-A</u>, as filed with the SEC on July 29, 2021, as supplemented by the description of capital stock filed contained in <u>Exhibit 4.3</u> to our Annual Report on <u>Form 10-K</u> for the fiscal year ended December 31, 2021, as filed with the SEC on March 15, 2022, 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 supplement or the accompanying prospectus will be deemed modified, superseded or replaced for purposes of this prospectus supplement and the accompanying prospectus to the extent that a statement contained in this prospectus supplement or the accompanying 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 supplement and the accompanying prospectus is delivered, a copy of the documents incorporated by reference into this prospectus supplement and the accompanying 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 supplement, 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 supplement or the accompanying prospectus.

Prospectus \$300,000,000



Rallybio Corporation

Common Stock

Preferred Stock

Warrants

Units

We may offer and sell common stock, preferred stock, warrants, or units, described in this prospectus from time to time in one or more transactions.

We will provide specific terms of any offering in a supplement to this prospectus. Any prospectus supplement may also add, update, or change information contained in this prospectus. You should carefully read this prospectus as well as the documents incorporated or deemed to be incorporated by reference in this prospectus before you purchase any of the securities offered hereby.

These securities may be offered and sold in the same offering or in separate offerings; to or through underwriters, dealers, and agents; or directly to purchasers. The names of any underwriters, dealers, or agents involved in the sale of our securities and their compensation will be described in the applicable prospectus supplement.

General Information

Our common stock is traded on The Nasdaq Global Select Market under the symbol "RLYB." On August 5, 2022, the closing price of our common stock was \$11.25 per share.

We have not yet determined whether the other securities that may be offered by this prospectus will be listed on any exchange, interdealer quotation system or over-the-counter market. If we decide to seek the listing of any such securities upon issuance, the prospectus supplement relating to those securities will disclose the exchange, quotation system or market on which those securities will be listed.

Investing in our securities involves certain risks. See "Risk Factors" beginning on page 5 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 August 15, 2022.

About this prospectus

This prospectus is part of a shelf registration statement that we filed with the Securities and Exchange Commission (the "SEC"). By using a shelf registration statement, we may, from time to time, sell any combination of the securities described in this prospectus in one or more offerings, up to a total dollar amount of \$300,000,000. This prospectus provides you with a general description of the securities we may offer. Each time we sell securities, we will provide a prospectus supplement and, if necessary, a free writing prospectus, that will contain specific information about the terms of that offering. The prospectus supplement and, if necessary, a free writing prospectus, may also add to, update or change information contained in this prospectus. Accordingly, to the extent inconsistent, the information in this prospectus will be deemed to be modified or superseded by any inconsistent information contained in a prospectus supplement or a free writing prospectus. You should read carefully this prospectus, the applicable prospectus supplement and any free writing prospectus, together with the additional information incorporated by reference in this prospectus described below under "Where You Can Find More Information" 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.

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 built around a team of seasoned industry experts with a shared purpose and a track record of success in discovering, developing, manufacturing and delivering therapies that meaningfully improve the lives of patients suffering from severe and rare diseases. Our mission at Rallybio is aligned with our expertise, and we believe we have assembled the best people, partners and science to forge new paths to life-changing therapies. Since our launch in January 2018, we have acquired a portfolio of promising product candidates and we are focused on further expanding our portfolio with the goal of making a profound impact on the lives of even more patients. We are drawing on our decades of knowledge and experience with a determination to tackle the undone, the too difficult, the inaccessible – and change the odds for rare disease patients.

Our most advanced program is for the prevention of fetal and neonatal alloimmune thrombocytopenia ("FNAIT"), a potentially life-threatening rare hematological disease that impacts fetuses and newborns. We are evaluating RLYB211, a polyclonal anti-HPA-1a antibody, in a Phase 1/2 clinical trial, which we believe has established proof of concept for RLYB211 and provides support for our proposed mechanism of action. Our lead product candidate is RLYB212, a monoclonal anti-HPA-1a antibody. We submitted a clinical trial application ("CTA") for RLYB212 in July 2021 and initiated a Phase 1 first-in-human trial in Germany in the fourth quarter of 2021. In January 2022, we announced that the first subjects were dosed in the Phase 1 study of RLYB212. This ongoing single-blind, placebo-controlled Phase 1 study is designed to evaluate the safety and pharmacokinetic ("PK") of single and repeat subcutaneous doses of RLYB212 in HPA-1a negative healthy subjects.

In August 2022, we announced that the clinical data from our ongoing Phase 1b proof-of-concept study of subcutaneous RLYB212 shows rapid and complete elimination of transfused HPA-1a positive platelets. These data are consistent with the projected effective therapeutic target concentrations of RLYB212 required to prevent maternal alloimmunization and FNAIT. In order to further characterize the advantages associated with subcutaneous dosing, we are amending the protocol to expand the dose range of RLYB212. This amendment will provide a broader range of PK and pharmacodynamics ("PD") data to inform decision-making as we seek to select dosing for a future registrational study. We expect to discuss the preliminary platelet elimination data by the end of the third quarter of 2022 as planned and to release proof-of-concept data in the first quarter of 2023.

Additionally, in the third quarter of 2021, we initiated 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. 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 for future regulatory discussions. Screening of expectant mothers is currently underway.

We are also focused on developing therapies that address diseases of complement dysregulation, including paroxysmal nocturnal hemoglobinuria ("PNH"), generalized myasthenia gravis ("gMG"), and ophthalmic disorders. RLYB116 is a novel, potentially longacting, subcutaneously administered inhibitor of complement factor 5 ("C5") in development for the treatment of patients with PNH and gMG. We received approval in the fourth quarter of 2021 for a Human Research Ethics Committee ("HREC") submission to support the Phase 1 trial of RLYB116 in healthy participants and in the first quarter of 2022, we initiated the Phase 1 trial in Australia. The single-blind, placebo-controlled dose escalation study is designed to evaluate the safety, PK, and pharmacodynamics of single dose RLYB116 in healthy volunteers and remains on track, with initial data expected for the 30 mg dose in the fourth quarter of 2022. RLYB114 is a pegylated C5 inhibitor in preclinical development for the treatment of complement-mediated ophthalmic diseases.

In May 2022, we obtained worldwide exclusive rights to Sanofi's KY1066, now referred to as RLYB331, a preclinical potentially first-in-class 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 myelodysplastic syndromes. Currently these patients are underserved by the existing standard of care. RLYB331 is a 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 conducting IND-enabling activities for RLYB331 to support transition of the asset into clinical development.

Additionally, in collaboration with Exscientia Limited ("Exscientia"), we have two discovery-stage programs focused on the identification of small molecule therapeutics for patients with rare metabolic diseases. Rallybio, together with its partner Exscientia, continues to work toward the selection of a development candidate to advance into the clinic targeting ENPP1 for the treatment of patients with hypophosphatasia ("HPP"). Investigational new drug enabling studies are expected to commence in the second half of 2022.

Since inception, we have devoted substantially all of our resources to raising capital, organizing and staffing our 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 five programs. We do not have any product candidates approved for sale and have not generated any revenue from product sales. Since our inception, we have funded our operations primarily through equity financings.

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.

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

Except as otherwise provided in a prospectus supplement in connection with an offering of securities pursuant to this prospectus, we currently intend to use the net proceeds from the sale of any securities offered by us under this prospectus primarily for general corporate purposes. General corporate purposes may include, without limitation, research and development expenditures, preclinical and clinical development and commercialization of our product candidates, the acquisition or in-licensing of products or product candidates, business or technologies, collaborations, working capital and capital expenditures. We may temporarily invest the net proceeds we receive in short-term, interest-bearing obligations, investment-grade instruments, certificates of deposit or direct or guaranteed obligations of the U.S. government and its agencies.

We have not determined the amount of net proceeds to be used specifically for such purposes. As a result, management will have broad discretion in the application of the net proceeds we may receive, and investors will be relying on the judgment of our management regarding the application of our net proceeds. Additional information on the use of net proceeds we receive from the sale of securities covered by this prospectus may be set forth in the prospectus supplement relating to the specific offering.

General description of securities

We may offer under this prospectus:

- · common stock;
- · preferred stock;
- · warrants to acquire common stock or preferred stock; or
- · any combination of the foregoing, either individually or as units consisting or two or more securities.

The following description of the terms of these securities sets forth some of the general terms and provisions of securities that may be offered. The particular terms of securities offered by any prospectus supplement and the extent, if any, to which the general terms set forth below do not apply to those securities, will be described in the related prospectus supplement. In addition, if we offer securities as units, the terms of the units will be described in the applicable prospectus supplement. If the information contained in the prospectus supplement differs from the following description, you should rely on the information in the prospectus supplement.

Whenever references are made in this prospectus to information that will be included in a prospectus supplement, to the extent permitted by applicable law, rules or regulations, we may instead include such information or add, update or change the information contained in this prospectus by means of a post-effective amendment to the registration statement of which this prospectus is a part, through filings we make with the SEC that are incorporated by reference in this prospectus or by any other method as may be permitted under applicable law, rules or regulations.

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 June 30, 2022, we had 32,130,970 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.

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 of 1934, as amended (the "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 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, by and among Rallybio Corporation and the stockholders party thereto, dated as of July 28, 2021 (the "Registration Rights Agreement") grants the parties thereto 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.

As of August 5, 2022, holders of 22,634,614 shares of our common stock are entitled to such registration rights pursuant to the Registration Rights Agreement. As to any particular registrable securities, such securities shall cease to be registrable securities when (w) 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, (x) such holder is able to immediately sell such securities under Rule 144, promulgated under the Securities Act, or Rule 144, without any restrictions on transfer (including without application of paragraphs (c), (e), (f) and (h) of Rule 144), (y) such securities shall have been transferred pursuant to 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 Investor 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.

Description of preferred stock

Under the terms of our amended and restated certificate of incorporation, our board of directors is authorized to issue up to 50,000,000 shares of our preferred stock, par value \$0.0001 per share, in one or more series without stockholder approval. As of June 30, 2022, we had no shares of preferred stock outstanding. The purpose of authorizing our board of directors to issue preferred stock and determine its rights and preferences is to eliminate delays associated with a stockholder vote on specific issuances. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions, future financings and other corporate purposes, could have the effect of making it more difficult for a third party to acquire, or could discourage a third party from seeking to acquire, a majority of our outstanding voting stock.

If we offer a specific class or series of preferred stock under this prospectus, we will describe the terms of the preferred stock in the prospectus supplement for such offering and will file a copy of the certificate establishing the terms of the preferred stock with the SEC. To the extent appropriate, this description will include, where applicable:

- · the title and stated value:
- the number of shares offered, the liquidation preference per share and the purchase price;
- the dividend rate(s), period(s) and/or payment date(s), or method(s) of calculation for such dividends;
- · whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate;
- · the procedures for any auction and remarketing, if any;
- · the provisions for a sinking fund, if any;
- · the provisions for redemption, if applicable;
- · any listing of the preferred stock on any securities exchange or market;
- whether the preferred stock will be convertible into our common stock, and, if applicable, the conversion price (or how it will be calculated) and conversion period;
- · voting rights, if any, of the preferred stock;
- a discussion of any material U.S. federal income tax considerations applicable to the preferred stock;
- · the identity of any depositaries, execution or paying agents, transfer agents, registrars or other agents;
- the relative ranking and preferences of the preferred stock as to dividend rights and rights upon liquidation, dissolution or winding up of the affairs of the Company; and
- any material limitations on issuance of any class or series of preferred stock ranking senior to or on a parity with the series of preferred stock as to dividend rights and rights upon liquidation, dissolution or winding up of the Company.

The preferred stock offered by this prospectus, when issued, will not have, or be subject to, any preemptive or similar rights.

Description of warrants

We may issue warrants to purchase shares of our common stock and/or preferred stock in one or more series together with other securities or separately, as described in each applicable prospectus supplement. Below is a description of certain general terms and provisions of the warrants that we may offer. Particular terms of the warrants will be described in the applicable warrant agreements and the applicable prospectus supplement for the warrants.

To the extent appropriate, the applicable prospectus supplement will contain, where applicable, the following terms of and other information relating to the warrants:

- the specific designation and aggregate number of, and the price at which we will issue, the warrants;
- the currency or currency units in which the offering price, if any, and the exercise price are payable;
- the designation, amount and terms of the securities purchasable upon exercise of the warrants;
- if applicable, the exercise price for shares of our common stock and the number of shares of common stock to be received upon
 exercise of the warrants;
- if applicable, the exercise price for shares of our preferred stock, the number of shares of preferred stock to be received upon exercise, and a description of that class or series of our preferred stock;
- the date on which the right to exercise the warrants will begin and the date on which that right will expire or, if the warrants may not be continuously exercised throughout that period, the specific date or dates on which the warrants may be exercised;
- whether the warrants will be issued in fully registered form or bearer form, in definitive or global form or in any combination of these
 forms, although, in any case, the form of a warrant included in a unit will correspond to the form of the unit and of any security included
 in that unit;
- · any applicable material U.S. federal income tax consequences;
- the identity of the warrant agent for the warrants and of any other depositaries, execution or paying agents, transfer agents, registrars or other agents;
- the proposed listing, if any, of the warrants or any securities purchasable upon exercise of the warrants on any securities exchange;
- if applicable, the date from and after which the warrants and the common stock and/or the preferred stock will be separately transferable;
- if applicable, the minimum or maximum amount of the warrants that may be exercised at any one time;
- · information with respect to book-entry procedures, if any;
- · the anti-dilution provisions of the warrants, if any;
- · any redemption or call provisions;
- · whether the warrants are to be sold separately or with other securities as parts of units; and
- any additional terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants.

Description of units

The following is a general description of the terms of the units we may offer from time to time. Particular terms of the units will be described in the applicable unit agreements and the applicable prospectus supplement for the units. We urge you to read the applicable prospectus supplement related to the units that we may sell under this prospectus, as well as the complete unit agreements that will contain the terms of any units.

We may issue units consisting of any combination of the other types of securities offered under this prospectus in one or more series. We may evidence each series of units by unit certificates that we will issue under a separate agreement. We may issue units directly or under a unit agreement to be entered into between us and a unit agent. We will name any unit agent in the applicable prospectus supplement. Any unit agent will act solely as our agent in connection with the units of a particular series and will not assume any obligation or relationship of agency or trust for or with any holders or beneficial owners of units.

Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time, or at any time before a specified date. We may issue units in such amounts and in such numerous distinct series as we determine.

To the extent appropriate, the applicable prospectus supplement will contain, where applicable, the following terms and other information relating to the units:

- · the title of the series of units;
- · identification and description of the separate constituent securities comprising the units;
- the price or prices at which the units will be issued:
- the date, if any, on and after which the constituent securities comprising the units will be separately transferable;
- · a discussion of certain U.S. federal income tax considerations applicable to the units; and
- · any other terms of the units and their constituent securities.

Plan of distribution

We may sell securities in any of the ways described below or in any combination:

- · to or through underwriters or dealers;
- · through one or more agents;
- · as part of a collaboration with a third party;
- as part of an acquisition or merger with a third party;
- · directly to purchasers or to a single purchaser;
- in "at the market offerings," within the meaning of Rule 415(a)(4) of the Securities Act to or through a market maker or into an existing trading market, or an exchange or otherwise; or
- · any other method permitted pursuant to applicable law and described in an applicable prospectus supplement.

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

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

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

The prospectus supplement will describe the terms of the offering of the securities, including the following:

- name or names of any underwriters, dealers or agents and the amounts of securities underwritten or purchased by each of them;
- the public offering price of the securities and the proceeds to us and any discounts, commissions or concessions allowed or reallowed or paid to dealers; and
- · any securities exchanges on which the securities may be listed.

Any offering price and any discounts or concessions allowed or reallowed or paid to dealers will be specified in the applicable prospectus supplement and may be changed from time to time.

Only the agents or underwriters named in each prospectus supplement are agents or underwriters in connection with the securities being offered thereby.

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

all cases be subject to our approval. Delayed delivery contracts will be subject only to those conditions set forth in each applicable prospectus supplement, and each prospectus supplement will set forth any commissions we pay for solicitation of these contracts.

Agents, underwriters and other third parties described above may be entitled to indemnification by us against certain civil liabilities, including liabilities under the Securities Act, or to contribution from us with respect to payments which the agents, underwriters or other third parties may be required to make in respect thereof. Agents, underwriters and such other third parties may be customers of, engage in transactions with, or perform services for us in the ordinary course of business. We may also use underwriters or such other third parties with whom we have a material relationship. We will describe the nature of any such relationship in the applicable prospectus supplement.

One or more firms, referred to as "remarketing firms," may also offer or sell the securities, if a prospectus supplement so indicates, in connection with a remarketing arrangement upon their purchase. Remarketing firms will act as principals for their own accounts or as our agents. These remarketing firms will offer or sell the securities in accordance with the terms of the securities. Each prospectus supplement will identify and describe any remarketing firm and the terms of its agreement, if any, with us and will describe the remarketing firm's compensation. Remarketing firms may be deemed to be underwriters in connection with the securities they remarket. Remarketing firms may be entitled under agreements that may be entered into with us to indemnification by us against certain civil liabilities, including liabilities under the Securities Act, and may be customers of, engage in transactions with or perform services for us in the ordinary course of business.

Certain underwriters may use this prospectus and any accompanying prospectus supplement for offers and sales related to market-making transactions in the securities. These underwriters may act as principal or agent in these transactions, and the sales will be made at prices related to prevailing market prices at the time of sale. Any underwriters involved in the sale of the securities may qualify as "underwriters" within the meaning of Section 2(a)(11) of the Securities Act. In addition, the underwriters' commissions, discounts or concessions may qualify as underwriters' compensation under the Securities Act and the rules of the Financial Industry Regulatory Authority ("FINRA").

Our common stock is listed on The Nasdaq Global Select Market. Underwriters may make a market in our common stock but will not be obligated to do so and may discontinue any market making at any time without notice. We can make no assurance as to the development, maintenance or liquidity of any trading market for the securities.

Certain persons participating in an offering may engage in overallotment, stabilizing transactions, short covering transactions and penalty bids in accordance with rules and regulations under the Exchange Act. Overallotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum. Short covering transactions involve purchases of the securities in the open market after the distribution is completed to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a short covering transaction to cover short positions. Those activities may cause the price of the securities to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of the activities at any time.

Legal matters

Unless the applicable prospectus supplement indicates otherwise, 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. The validity of any securities will be passed upon for any underwriters or agents by counsel that we will name in the applicable prospectus supplement.

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, 2021, as filed with the SEC on March 15, 2022;
- our Quarterly Reports on Form 10-Q for the periods ended March 31, 2022 and June 30, 2022, as filed with the SEC on May 10, 2022 and August 8, 2022, respectively;
- our Current Reports on Form 8-K, as filed with the SEC on <u>April 4, 2022</u> (only with respect to Item 5.02), <u>May 10, 2022</u> (only with respect to Items 1.01 and 8.01 and Exhibit 99.2), <u>May 27, 2022, June 2, 2022</u> and <u>August 2, 2022</u> (only with respect to Item 5.02);
- portions of the <u>Definitive Proxy Statement</u> on Schedule 14A, as filed with the SEC on April 25, 2022, that are incorporated by reference into Part III of our Annual Report on Form 10-K for the year December 31, 2021, as filed with the SEC on March 15, 2022; and
- the description of capital stock contained in the Registration Statement on <u>Form 8-A</u>, as filed with the SEC on July 29, 2021, as supplemented by the description of capital stock filed contained in <u>Exhibit 4.3</u> to our Annual Report on Form 10-K for the fiscal year ended December 31, 2021, as filed with the SEC on March 15, 2022, 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.

\$75,000,000

Rallybio

Common stock

Pre-funded warrants to purchase common stock

Prospectus supplement

J.P. Morgan Cowen Evercore ISI