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Subject to Completion
Preliminary Prospectus Supplement dated December 6, 2023

PROSPECTUS SUPPLEMENT
(To Prospectus dated May 23, 2023)

\$125,000,000

89bio

Common Stock

Pre-funded Warrants to Purchase Shares of Common Stock

We are offering shares of our common stock, par value \$0.001 per share, or, in lieu of common stock to certain investors that so choose, pre-funded warrants to purchase shares of our common stock, pursuant to this prospectus supplement and the accompanying prospectus. 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 \$0.001, the exercise price of each pre-funded warrant. The public offering price for each share of common stock is \$. We are also offering the shares of our common stock that are issuable from time to time upon exercise of the pre-funded warrants.

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 apply for listing of the pre-funded warrants on The Nasdaq Global Market or any securities exchange or nationally recognized trading system. Without an active trading market, the liquidity of the pre-funded warrants will be limited.

Our common stock trades on The Nasdaq Global Market under the symbol “ETNB.” On December 5, 2023, the last reported sale price for our common stock on The Nasdaq Global Market was \$9.96 per share.

Investing in our securities involves a high degree of risk. See “[Risk Factors](#)” beginning on page S-8 of this prospectus supplement and page 5 of the accompanying prospectus, as well as the section captioned “Risk Factors” in our most recently filed annual report on [Form 10-K](#) and any subsequent report we file with the U.S. Securities and Exchange Commission, which are incorporated by reference in this prospectus supplement.

	Per share	Per Pre-funded warrant	Total
Public offering price	\$	\$	\$
Underwriting discounts and commissions ⁽¹⁾	\$	\$	\$
Proceeds to 89bio, Inc., before expenses	\$	\$	\$

⁽¹⁾ See the section of this prospectus supplement entitled “Underwriting” for a description of the compensation payable to the underwriters.

We have granted the underwriters an option to purchase up to \$18,750,000 of additional shares of our common stock, at the public offering price, less the underwriting discount, for 30 days after the date of this prospectus supplement.

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

The underwriters expect to deliver the shares of common stock and pre-funded warrants being offered hereby to purchasers on or about , 2023.

BofA Securities

Leerink Partners

Cantor

Raymond James

UBS Investment Bank

H.C. Wainwright & Co.

The date of this prospectus supplement is , 2023

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We are responsible for the information contained and incorporated by reference in this prospectus supplement, the accompanying prospectus and in any free writing prospectus that we have authorized for use in connection with this offering. We and the underwriters have not authorized anyone to give you any other information, and we and the underwriters take no responsibility for any other information that others may give you. We and the underwriters are not making offers to sell the securities in any jurisdiction in which an offer or solicitation is not authorized or permitted or in which the person making such offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make an offer or solicitation. The information contained and incorporated by reference in this prospectus supplement, the accompanying prospectus and any free writing prospectus that we and the underwriters have authorized for use in connection with this offering speaks only as of the date of this document, unless the information specifically indicates that another date applies. Neither the delivery of this prospectus supplement, the accompanying prospectus or any free writing prospectus that we and the underwriters have authorized for use in connection with this offering, nor any sale of securities made under these documents, will, under any circumstances, create any implication that there has been no change in our affairs since the date of this prospectus supplement, the accompanying prospectus or any free writing prospectus that we have authorized for use in connection with this offering, nor that the information contained or incorporated by reference is correct as of any time subsequent to the date of such information. You should assume that the

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information contained and incorporated by reference in this prospectus supplement, the accompanying prospectus and in any free writing prospectus that we and the underwriters have authorized for use in connection with this offering is accurate only as of the date of the documents containing the information, unless the information specifically indicates that another date applies. Our business, financial condition, results of operations and prospects may have changed since those dates.

ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying prospectus form part of a registration statement on Form S-3 that we filed with the U.S. Securities and Exchange Commission (the “SEC”) using a “shelf” registration process. This document contains two parts. The first part consists of this prospectus supplement, which provides you with specific information about this offering. The second part consists of the accompanying prospectus, which provides more general information, some of which may not apply to this offering. Generally, when we refer only to the “prospectus,” we are referring to both parts combined. This prospectus supplement may add, update or change information contained in the accompanying prospectus. To the extent that any statement we make in this prospectus supplement is inconsistent with statements made in the accompanying prospectus, or any documents incorporated by reference, the statements made in this prospectus supplement will be deemed to modify or supersede those made in the accompanying prospectus, including the documents incorporated by reference therein. Information in any document we subsequently file that is incorporated by reference shall modify or supersede the information in this prospectus supplement, the accompanying prospectus and documents incorporated by reference prior to such subsequent filing.

The distribution of this prospectus supplement and the accompanying prospectus and the offering of our securities in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus supplement and the accompanying prospectus must inform themselves about, and observe any restrictions relating to, the offering of our securities and the distribution of this prospectus supplement and the accompanying prospectus outside the United States.

PROSPECTUS SUPPLEMENT SUMMARY

The items in the following summary are described in more detail later in this prospectus supplement and the accompanying prospectus. This summary provides an overview of selected information and does not contain all of the information you should consider before buying our securities. Therefore, you should read the entire prospectus supplement and the accompanying prospectus carefully, including the information in our filings with the SEC, incorporated by reference herein, and as described under the headings “Where You Can Find More Information” and “Incorporation of Certain Information by Reference,” before deciding to invest in our securities. Investors should carefully consider the information set forth under “Risk Factors” beginning on page S-8 of this prospectus supplement and page 5 of the accompanying prospectus and any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus supplement. In this prospectus supplement, unless the context otherwise requires, references to “the Company,” “we,” “us,” “our,” or “89bio” refer to 89bio, Inc., in each case together with its consolidated subsidiaries.

Overview

We are a clinical-stage biopharmaceutical company focused on the development and commercialization of innovative therapies for the treatment of liver and cardio-metabolic diseases. Our lead product candidate, pegozafermin, a specifically engineered glycoPEGylated analog of fibroblast growth factor 21 (“FGF21”), is currently being developed for the treatment of nonalcoholic steatohepatitis (“NASH”) and severe hypertriglyceridemia (“SHTG”).

Recent Developments

Long-term Data from ENLIVEN Phase 2b Trial

On November 27, 2023, we announced positive topline data from the blinded extension phase of our Phase 2b ENLIVEN trial evaluating treatment with pegozafermin in patients with NASH. At week 48, both the 30 mg weekly and 44 mg every-two-week dosing schedules of pegozafermin demonstrated statistically significant improvements across key markers of liver health. The benefits observed at week 48 were consistent with the results observed at week 24, indicating sustained benefits over time.

ENLIVEN Extension Data

Patients in ENLIVEN continued in a blinded extension phase for an additional 24 weeks (the “Extension Phase”) past the primary endpoint at week 24 (the “Main Study”), for a total treatment period of 48 weeks. A subset of patients in the placebo arm of the Main Study (n=19) were re-randomized to receive pegozafermin 30 mg weekly during the Extension Phase. The efficacy endpoints assessed in the Extension Phase included liver fat, non-invasive markers of fibrosis and inflammation, and metabolic markers. Per the protocol, these patients did not undergo biopsies at week 48.

Table 1. Extension Phase Data at Week 48: Liver Non-Invasive Tests (NITs) Results [marker of]

<i>F2-F3 Patients</i>	Placebo (n=35) ^{1,2}	Pegozafermin	
		30mg QW (n=50) ²	44mg Q2W (n=45) ²
MRI-PDFF [liver fat] ⁴	-11%	-60%**	-47%*
ALT [liver injury/inflammation] ³	-11%	-42%***	-35%**
AST [liver injury/inflammation] ³	-4%	-39%***	-36%***
ELF score [liver fibrosis] ³	+0.1	-0.3**	-0.4***
Pro-C3 [collagen deposition] ³	+5%	-15%***	-14%***
VCTE (kPa) [liver stiffness] ⁴	-0.8	-2.9*	-1.3
FAST [liver fibrosis] ³	-4%	-59%***	-51%***

*** p<0.001, **p<0.01, *p<0.05 versus placebo. ¹ Dataset excludes 19 placebo patients who were re-randomized to pegozafermin 30mg QW in the Extension Phase. ² Extension data at week 48 represents patients who entered the blinded Extension Phase. ³ Least Square (LS) mean change from baseline. ⁴ Median change from baseline.

Patients on Background GLP-1 Therapy:

Consistent with results observed in the Main Study, patients on background GLP-1 therapy who received pegozafermin continue to derive a greater benefit on markers of liver fibrosis, liver injury/inflammation, liver fat and lipids, compared to patients who continued GLP-1 therapy in the placebo group. Patients entering ENLIVEN on background GLP-1 therapies were required to have been on a stable regimen for at least six months.

Table 2. Extension Phase Data at Week 48: Patients on Background GLP-1, Liver NITs and Lipids Results [marker of]

	Placebo (n=12)	Pegozafermin ³ (n=26)
MRI-PDFF [liver fat] ²	-34%	-53%
ALT [liver injury/inflammation] ¹	-15%	-44%
AST [liver injury/inflammation] ¹	-11%	-42%
ELF score [liver fibrosis] ¹	0	-0.5
Pro-C3 [collagen deposition] ¹	-9%	-19%
VCTE (kPa) [liver stiffness] ²	-3.2	-2.2
FAST [liver fibrosis] ¹	-43%	-52%
Triglycerides [lipids] ²	-12%	-22%
LDL-C [lipids] ²	-5%	-14%

¹ LS mean change from baseline. ² Median change from baseline. ³ Patients dosed with pegozafermin 30mg QW or 44mg Q2W.

Compensated Cirrhosis (F4) Patients:

Biopsy-confirmed compensated cirrhosis F4 patients who had previously demonstrated histological response and improvement across NITs at week 24 continued to demonstrate robust and sustained improvements in non-invasive measures at week 48.

Table 3. Extension Phase Data at Week 48: F4 Patients, Liver NITs Results [marker of]

	Pegozafermin ³ (n=12)
ALT [liver injury/inflammation] ¹	-58%
AST [liver injury/inflammation] ¹	-38%
ELF score [liver fibrosis] ¹	-0.5
Pro-C3 [collagen deposition] ¹	-20%
VCTE (kPa) [liver stiffness] ²	-1.1
FAST [liver fibrosis] ¹	-42%

¹ LS mean change from baseline. ² Median change from baseline. ³ Patients dosed with pegozafermin 15mg QW, 30mg QW or 44mg Q2W.

Patients Re-randomized from Placebo to Pegzofermin:

The patients re-randomized to receive 30 mg weekly during the Extension Phase demonstrated robust improvements in NITs of liver fibrosis, liver injury/inflammation, and liver fat following 24 weeks of treatment with pegzofermin after experiencing minimal to no change during the first 24 weeks on placebo. Patients in the re-randomized group serve as their own control.

Pegzofermin continued to demonstrate a favorable safety and tolerability profile at week 48, consistent with previously reported data. The most common treatment-emergent adverse events were Grade 1 or 2 gastrointestinal events. Incidence rates of adverse events remained generally stable between week 24 and week 48 with no new patients on pegzofermin reporting diarrhea or nausea during the Extension Phase. At week 48, no clinically meaningful or statistically significant changes in bone mineral density or bone biomarkers were observed relative to placebo. No clinically meaningful or statistically significant changes in blood pressure or heart rate were observed relative to placebo.

Regulatory Update on Phase 3 Program for Pegzofermin in NASH

On December 4, 2023, we announced a successful end-of-Phase 2 Meeting with the U.S. Food and Drug Administration (“FDA”), supporting the advancement of pegzofermin into Phase 3 in NASH. The program will include two Phase 3 trials evaluating patients with NASH: ENLIGHTEN-Cirrhosis will enroll patients with compensated cirrhosis (F4) and ENLIGHTEN-Fibrosis will enroll patients with fibrosis stage F2-F3. The F2-F3 and the F4 trials are expected to initiate in the first quarter and the second quarter of 2024, respectively. Initial scientific advice received from the European Medicines Agency was generally aligned with the feedback from the FDA.

The planned ENLIGHTEN program will be comprised of two randomized, double-blinded, placebo-controlled Phase 3 trials, evaluating the efficacy and safety of pegzofermin in patients with NASH.

- ENLIGHTEN-Cirrhosis, in patients with compensated F4 NASH: The trial will evaluate the efficacy and safety of pegzofermin administered 30mg weekly.
 - Histology Portion: The primary endpoint will be regression of fibrosis from F4 to an earlier stage of fibrosis. This endpoint is planned to be assessed at 24 months, with the potential to assess it earlier based on the evolving clinical and regulatory landscape. This primary endpoint is intended to support a filing for accelerated approval in the United States and conditional approval in Europe in F4 patients.
 - Outcome Portion: Patients will continue to be treated in a blinded extension phase through clinical outcome events that are expected to be predominantly decompensation events. Alignment with the FDA on modified definitions of some of these events could allow the trial to reach the final number of events more quickly and therefore accelerate the timeline to trial readout. Positive results would support full approval in F4 patients and will also serve as confirmatory full approval in F2-F3 patients.
- ENLIGHTEN-Fibrosis, in patients with F2-F3 NASH: The trial will evaluate the efficacy and safety of pegzofermin administered 30mg weekly and 44mg every-two-weeks.
 - Histology Portion: The co-primary endpoints will be a one-point improvement in fibrosis with no worsening of NASH and NASH resolution with no worsening of fibrosis. These endpoints will be assessed at week 52 and are intended to support a filing for accelerated approval in the U.S. and conditional approval in Europe in F2-F3 patients.
 - Outcome Portion: Patients will continue to be treated in a blinded extension phase to measure clinical outcomes to support full approval in F2-F3 patients. The clinical outcome events are expected to be primarily due to progression to cirrhosis.

Both ENLIGHTEN-Fibrosis and ENLIGHTEN-Cirrhosis will enroll a significant proportion of patients on stable doses of GLP-1 based therapies and data from these patients in the trials will evaluate the expected incremental benefit of adding pegozafermin to these therapies. Both trials will employ the three-panel consensus biopsy reading methodology, which was successfully utilized in the ENLIVEN trial, for both baseline and primary endpoint biopsy reads. Patients will self-administer pegozafermin using the planned commercial liquid formulation delivered as a single subcutaneous injection.

Our Corporate Information

We were incorporated in January 2018 in Israel under the name 89Bio Ltd. 89bio, Inc., the registrant whose name appears on the cover page of this prospectus supplement, was incorporated in June 2019 for the purpose of an internal reorganization transaction.

Our principal executive offices are located at 142 Sansome Street, San Francisco, California 94104 and our telephone number is (415) 432-9270. Our website is www.89bio.com. Information contained on or accessible through our website is not a part of this prospectus supplement, and the inclusion of our website address in this prospectus supplement is an inactive textual reference only.

Implications of Being an Emerging Growth Company and a Smaller Reporting Company

We are an “emerging growth company”, as defined in Section 2(a) of the Securities Act of 1933, as amended (the “Securities Act”), as modified by the Jumpstart Our Business Startups Act of 2012 (the “JOBS Act”), and we may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies, including relief from the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, as amended, less extensive disclosure obligations regarding executive compensation in our registration statements, periodic reports and proxy statements, exemptions from the requirements to hold a nonbinding advisory vote on executive compensation, and exemptions from stockholder approval of any golden parachute payments not previously approved. We may also elect to take advantage of other reduced reporting requirements in future filings. As a result, our stockholders may not have access to certain information that they may deem important and the information that we provide to our stockholders may be different than, and not comparable to, information presented by other public reporting companies. In addition, the JOBS Act also provides that an emerging growth company may take advantage of the extended transition period provided in the Securities Act for complying with new or revised accounting standards. An emerging growth company may therefore delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have elected to avail ourselves of this exemption and, as a result, are not subject to the same implementation timing for new or revised accounting standards as are required of other public companies that are not emerging growth companies, which may make comparison of our consolidated financial information to those of other public companies more difficult.

We are also a “smaller reporting company,” as defined in the Securities Exchange Act of 1934, as amended (the “Exchange Act”). We may continue to be a smaller reporting company even after we are no longer an emerging growth company.

Based on the aggregate market value of our common stock held by non-affiliates as of June 30, 2023, we believe we will become a “large accelerated filer” and no longer qualify as an emerging growth company or smaller reporting company as of December 31, 2023. Because we believe our emerging growth company and non-accelerated filer status will expire on December 31, 2023, we expect to be required, pursuant to Section 404(b) of the Sarbanes-Oxley Act of 2002, to include in our Annual Report on Form 10-K for the year ending December 31, 2023, an attestation report as to the effectiveness of our internal control over financial reporting that is issued by our independent registered public accounting firm. In addition, beginning with our Quarterly Report on Form 10-Q for the quarter ending March 31, 2024, we expect to no longer be permitted to take advantage of the reduced reporting requirements applicable to smaller reporting companies.

THE OFFERING

Common stock offered by us	shares of common stock.
Pre-funded warrants offered by us	We are also offering, in lieu of common stock to certain investors that so choose, pre-funded warrants to purchase up to _____ shares of our common stock. The purchase price of each pre-funded warrant equals the price per share at which the shares of our common stock are being sold to the public in this offering, minus \$0.001, which is the exercise price of each pre-funded warrant per share. 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 Securities We Are Offering” on page S-20 of this prospectus supplement. This prospectus supplement also relates to the offering of the shares of our common stock issuable upon exercise of the pre-funded warrants.
Option to purchase additional shares of common stock	The underwriters have a 30-day option to purchase up to _____ additional shares of our common stock from us.
Common stock to be outstanding after this offering	_____ shares (or _____ shares if the underwriters exercise in full their option to purchase additional shares of our common stock), assuming no exercise of any pre-funded warrants issued in this offering.
Use of proceeds	We currently intend to use the net proceeds from this offering, together with our existing cash, cash equivalents and short-term available-for-sale securities, to fund ongoing clinical activities and development of pegozafermin manufacturing scale-up and other general corporate purposes, including working capital and operating expenses. See “Use of Proceeds” on page S-13 of this prospectus supplement.
Risk factors	You should read the “Risk Factors” section of this prospectus supplement and of the accompanying prospectus and in the documents incorporated by reference into this prospectus supplement for a discussion of factors to consider carefully before deciding to invest in our securities.
The Nasdaq Global Market symbol	“ETNB.” We do not intend to apply for listing of the pre-funded warrants on The Nasdaq Global Market or any securities exchange or nationally recognized trading system.

The number of shares of common stock to be outstanding after this offering is based on 75,638,516 shares of common stock outstanding as of September 30, 2023.

The number of shares of our common stock to be outstanding after this offering excludes the following:

- 4,679,027 shares of our common stock issuable upon the exercise of stock options outstanding as of September 30, 2023, under our 2019 Equity Incentive Plan (as amended and restated, the “2019 Plan”) and our 2023 Inducement Plan (the “2023 Plan”) at a weighted-average exercise price of \$14.14 per share;
- 120,000 shares of our common stock issuable upon the exercise of stock options granted subsequent to September 30, 2023, under the 2023 Plan at a weighted-average exercise price of \$8.41 per share;
- 987,550 shares of common stock issuable upon the vesting of restricted stock units outstanding as of September 30, 2023;
- 25,000 shares of our common stock issuable upon exercise of an outstanding warrant at an exercise price of \$22.06 per share (which expires on June 30, 2025), as of September 30, 2023;
- 33,923 shares of our common stock issuable upon exercise of an outstanding warrant at an exercise price of \$19.12 per share (which expires on May 28, 2031), as of September 30, 2023;
- 174,093 shares of our common stock issuable upon exercise of an outstanding warrant at an exercise price of \$9.76 per share (which expires on January 27, 2033), as of September 30, 2023;
- 10,179,789 shares of our common stock issuable upon exercise of outstanding warrants at an exercise price of \$5.325 per share (which expire July 1, 2024), as of September 30, 2023;
- 800,000 shares of our common stock issuable upon exercise of outstanding pre-funded warrants at an exercise price of \$0.001 per share (which do not expire), as of September 30, 2023;
- 1,848,784 shares of our common stock reserved for future issuance under the 2019 Plan and the 2023 Plan, as well as any automatic increase in the number of shares of common stock reserved for future issuance thereunder, as of September 30, 2023;
- 1,220,897 shares of our common stock reserved for future issuance under our 2019 Employee Stock Purchase Plan (the “ESPP”), as well as any automatic increase in the number of shares of common stock reserved for future issuance thereunder, as of September 30, 2023; and
- Up to \$150.0 million of shares of our common stock that may be sold from time to time under an “at the market” equity offering program that we entered into on March 25, 2021, as amended on February 15, 2023, with Leerink Partners LLC and Cantor Fitzgerald & Co. (the “Sales Agreement”), of which 1,200,539 shares have been sold to date and which has resulted in net proceeds of approximately \$23.7 million to date.

Except as otherwise indicated, all information contained in this prospectus supplement assumes:

- no exercise of outstanding options or warrants or vesting of restricted stock units after September 30, 2023;
- no exercise of the pre-funded warrants offered and sold in this offering; and
- no exercise by the underwriters of their option to purchase up to additional shares of our common stock from us in this offering.

RISK FACTORS

Investing in our securities involves a high degree of risk. Before investing in our securities, you should consider carefully the risks described below, together with the other information contained in this prospectus supplement or incorporated by reference in this prospectus supplement, including the risks and uncertainties discussed under “Risk Factors” in our most recent Quarterly Report on Form 10-Q, as well as any amendments thereto reflected in subsequent filings with the SEC, which are incorporated by reference herein in their entirety. If any of the risks incorporated by reference herein or set forth below occur, our business, financial condition, results of operations and future growth prospects could be materially and adversely affected. In these circumstances, the market price of our common stock or the value of the pre-funded warrants offered and sold in this offering could decline, and you may lose all or part of your investment.

Additional Risks Related to this Offering

Even if this offering is successful, we will require substantial additional capital to finance our operations, which may not be available to us on acceptable terms, or at all. As a result, we may be forced to delay, limit or terminate the development and commercialization of pegozafermin, development of new product candidates or other operations.

As a clinical-stage biopharmaceutical company, our operations have consumed significant amounts of cash since our inception. We expect our research and development expenses to increase in connection with our ongoing activities, particularly as we continue to conduct clinical trials of and seek regulatory approvals for pegozafermin.

Even if this offering is successful, we will require additional capital to discover, develop, obtain regulatory approval for and commercialize pegozafermin and any future product candidates, as applicable, given that our current cash, cash equivalents and marketable securities, together with anticipated net proceeds from this offering, are not sufficient to fund pegozafermin through regulatory approval. Our ability to commence, conduct and complete clinical trials for pegozafermin is subject to our ability to raise additional capital. We do not have any committed external source of funds other than the undrawn term loans available to us pursuant to the Loan and Security Agreement dated January 4, 2023, any sales that we may make pursuant to our Sales Agreement for our “at-the-market” offering facility and the proceeds from this offering. We expect to finance future cash needs through public or private equity or debt offerings or product collaborations. Additional capital may not be available in sufficient amounts or on reasonable terms, if at all. The current market environment for small biotechnology companies, like us, and broader macroeconomic factors, including recent and potential future disruptions in access to bank deposits or lending commitments due to bank failures, may preclude us from successfully raising additional capital.

If we do not raise additional capital, we may not be able to expand our operations or otherwise capitalize on our business opportunities, our business and financial condition will be negatively impacted and we may need to: significantly delay, scale back or discontinue research and discovery efforts and the development or commercialization of pegozafermin or any other product candidates or cease operations altogether; seek strategic alliances for research and development programs when we otherwise would not, or at an earlier stage than we would otherwise desire or on terms less favorable than might otherwise be available; or relinquish, or license on unfavorable terms, our rights to technologies or pegozafermin or any other product candidates that we otherwise would seek to develop or commercialize ourselves.

In addition, if pegozafermin receives approval and is commercialized, we will be required to make milestone and royalty payments to Teva Pharmaceutical Industries Ltd, from whom we acquired certain patents and intellectual property relating to pegozafermin, and from whom we licensed patents and know-how related to glycoPEGylation technology that is used in the manufacture of pegozafermin.

You will incur immediate and substantial dilution in the book value of your shares.

The effective public offering price per share in this offering may exceed the net tangible book value per share of our common stock outstanding prior to this offering, in which case you may incur an immediate and substantial dilution in the net tangible book value of the shares of common stock you purchase in this offering or the shares of common stock underlying the pre-funded warrants you purchase in this offering. After giving effect to the sale by us of shares of our common stock (or pre-funded warrants in lieu thereof) at the public offering price of \$ per share of common stock (or pre-funded warrant in lieu thereof), and after deducting underwriting discounts and commissions and estimated offering expenses payable by us, you will experience immediate dilution of \$ per share, representing the difference between the effective public offering price per share and our as adjusted net tangible book value per share as of September 30, 2023 after giving effect to this offering. The exercise of warrants, including the pre-funded warrants issued in this offering, the exercise of outstanding stock options and the vesting of restricted stock units may result in further dilution of your investment. See the section entitled “Dilution” in this prospectus supplement for a more detailed discussion of the dilution you will incur if you participate in this offering.

There is no public market for the pre-funded warrants being offered 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 to list these pre-funded warrants on any securities exchange or nationally recognized trading system, including The Nasdaq Global Market. Without an active market, the liquidity of these pre-funded warrants will be limited.

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

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

We will not receive significant additional funds upon the exercise of the pre-funded warrants being offered.

In certain limited circumstances, each pre-funded warrant may be exercised by way of a cashless exercise, meaning that the holder may not pay a cash purchase price upon exercise, but instead would receive upon such exercise the net number of shares of our common stock determined according to the formula set forth in the pre-funded warrant. Accordingly, we may not receive any additional funds upon the cashless exercise of the pre-funded warrants or if the pre-funded warrants altogether are not exercised at all. In addition, the pre-funded warrants have an exercise price of \$0.001 per share of common stock, and as a result we will not receive significant additional funds upon their exercise even if not a cashless exercise.

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

Holders of the pre-funded warrants will not be entitled to exercise any portion of any pre-funded warrant which, upon giving effect to such exercise, would cause the aggregate number of shares of our common stock beneficially owned by the holder (together with its affiliates) to exceed a specified percentage 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 the pre-funded warrants. As a result, you may not be able to exercise your pre-funded warrants for shares of our common stock at a time when it would be financially beneficial for you to do so. In such circumstance you could seek to sell your pre-funded warrants to realize value, but you may be unable to do so in the absence of an established trading market for the pre-funded warrants.

Substantial future sales or other issuances of our common stock, including any shares issuable upon exercise of any pre-funded warrants, or the perception that such sales could occur, may depress the market for our common stock and our ability to raise funds in future offerings.

Sales in the public market of a substantial number of shares of our common stock, including any shares issuable upon exercise of any pre-funded warrants issued in this offering, or the perception by the market that those sales could occur, could cause the market price of our common stock to decline or could make it more difficult for us to raise funds through the sale of equity or equity-linked securities in the future.

Future issuances of our common stock or our other equity or debt securities could further depress the market for our common stock. We expect to continue to incur significant expenses and increasing operating losses as we advance pegozafermin and any future product candidates through clinical trials, seek regulatory approval for pegozafermin and any future product candidates, expand our clinical, regulatory, quality, manufacturing and commercialization capabilities, protect our intellectual property, prepare for and, if approved, proceed to commercialization of pegozafermin and any future product candidates, expand our general and administrative support functions, including hiring additional personnel, and general and administrative costs associated with our operations, and to satisfy our funding requirements, we may need to sell additional securities. The proceeds of this offering will not be sufficient to fund the Company beyond and we may need to sell additional securities to continue operating. The sale or the proposed sale of substantial amounts of our common stock, including the shares issuable upon exercise of any pre-funded warrants, or our other securities may adversely affect the market price of our common stock and our stock price may decline substantially. Our stockholders may experience substantial dilution and a reduction in the price that they are able to obtain upon sale of their shares. New securities issued may have greater rights, preferences or privileges than our existing common stock.

Sales of a substantial number of shares of our common stock in the public could cause our stock price to fall.

If our existing stockholders, particularly our directors, executive officers and their respective affiliates, sell, or indicate an intention to sell, substantial amounts of our common stock in the public market after the lock-up period discussed in this prospectus supplement lapses, the market price of our common stock could decline. Our directors, executive officers and their respective affiliates have entered into lock-up agreements with the underwriters in connection with this offering pursuant to which they have agreed with the underwriters not to offer, sell, dispose of or hedge any shares of common stock or securities convertible into or exchangeable for shares of common stock, subject to specified limited exceptions and extensions described elsewhere in this prospectus supplement, for a period of 60 days after the date of this prospectus supplement without the prior written consent of BofA Securities, Inc. and Leerink Partners LLC. Other than any shares held by our directors, executive officers and their respective affiliates subject to lock-up agreements with the underwriters, all of the outstanding shares of common stock are currently freely tradable, and the shares to be sold in this offering and shares issuable upon exercise of any pre-funded warrants will be freely tradable, without restriction, in the public market following this offering. BofA Securities, Inc. and Leerink Partners LLC may, in their sole discretion, permit our executive officers, directors and their respective affiliates who are subject to these lock-up agreements to sell shares prior to the expiration of the lock-up agreements. Sales of a substantial number of shares upon expiration of the lock-up agreements, the perception that such sales may occur, or early release of these agreements, could cause our market price to fall or make it more difficult for you to sell your common stock at a time and price that you deem appropriate.

We will have broad discretion in the use of the net proceeds to us from this offering; we may not use the offering proceeds that we receive effectively.

Our management will have broad discretion in the application of the net proceeds to us from this offering, including for any of the purposes described in the section entitled "Use of Proceeds," and you will not have the opportunity as part of your investment decision to assess whether the net proceeds are being used appropriately. Because of the number and variability of factors that will determine our use of the net proceeds to us from this offering, their ultimate use may vary from their currently intended use. The failure by our management to apply these funds effectively could harm our business.

CAUTIONARY STATEMENT CONCERNING FORWARD LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein contain “forward-looking statements” within the meaning of the federal securities laws, which statements involve substantial risks and uncertainties. In some cases, you can identify forward-looking statements by terms such as “may,” “might,” “will,” “objective,” “intend,” “should,” “could,” “can,” “would,” “expect,” “believe,” “design,” “estimate,” “predict,” “potential,” “plan,” “anticipate,” “target,” “forecast” or the negative of these terms, and similar expressions intended to identify forward-looking statements.

Forward-looking statements involve known and unknown risks, uncertainties and other factors that could cause our actual results to differ materially from the forward-looking statements expressed or implied in this prospectus supplement and the accompanying prospectus. Such risks, uncertainties and other factors include, among others, the factors disclosed in the section titled “Risk Factors” in this prospectus supplement and the accompanying prospectus and the sections titled “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in our most recent Quarterly Report on Form 10-Q, which is incorporated by reference herein, and the following risks, uncertainties and factors:

- our plans to develop and commercialize pegozafermin (previously BIO89-100) or any future product candidates;
- our ongoing and planned clinical trials;
- the timing of and our ability to obtain regulatory approvals for pegozafermin or any future product candidates;
- our estimates regarding expenses, future revenue, capital requirements and needs for additional financing;
- our ability to obtain additional capital;
- the effects of unstable market and economic conditions, inflation, increases in interest rates, natural disasters, public health crises such as the COVID-19 pandemic, political crises, geopolitical events, such as the crisis in Ukraine and Israel, or other macroeconomic conditions;
- our ability to identify additional products or product candidates with significant commercial potential that are consistent with our commercial objectives;
- the rate and degree of market acceptance and clinical utility of pegozafermin or any future product candidates, if approved;
- our commercialization, marketing and manufacturing capabilities and strategy;
- substantial competition in our industry and with respect to the product candidates that we are developing;
- our intellectual property position;
- loss of key members of management;
- failure to successfully execute our growth strategy, including any delays in our planned future growth;
- our failure to maintain effective internal controls;
- our expected use of our existing cash, cash equivalents and short-term available-for-sale securities and the proceeds from this offering; and
- other risks and uncertainties, including those listed or incorporated by reference in “Risk Factors.”

We caution you that the risks, uncertainties and other factors referred to above, elsewhere in this prospectus supplement and the accompanying prospectus and in the documents incorporated by reference herein may not contain all of the risks, uncertainties and other factors that may affect our future results and operations.

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Any forward-looking statements in this prospectus supplement and the documents incorporated by reference herein reflect our views with respect to future events or to our future financial performance only as of the date of the document containing the applicable statement and involve known and unknown risks, uncertainties, and other factors that may cause our actual results, performance, or achievements to be materially different from any future results, performance, or achievements expressed or implied by these forward-looking statements. Factors that may cause actual results to differ materially from current expectations include, among other things, those discussed under “Risk Factors” and elsewhere and incorporated by reference in this prospectus supplement and the accompanying prospectus. Given these uncertainties, you should not place undue reliance on these forward-looking statements. Except as required by law, we assume no obligation to update or revise these forward-looking statements for any reason, even if new information becomes available in the future.

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

USE OF PROCEEDS

We estimate that the net proceeds from our issuance and sale of shares of our common stock and pre-funded warrants in this offering will be approximately \$ million (or, approximately \$ million if the underwriters' option to purchase additional shares is exercised in full), after deducting the underwriting discounts and commissions and the estimated offering expenses payable by us. These estimates exclude the proceeds, if any, from the exercise of the pre-funded warrants sold in this offering.

We intend to use the net proceeds from this offering, together with our existing cash, cash equivalents and short-term available-for-sale securities, to fund ongoing clinical activities and development of pegozafermin manufacturing scale-up and other general corporate purposes, including working capital and operating expenses.

The expected net proceeds to us from this offering will not be sufficient for us to fund pegozafermin through regulatory approval, and we will need to raise substantial additional capital to complete the development and commercialization of pegozafermin.

As of the date of this prospectus supplement, we cannot specify with certainty all of the particular uses for the net proceeds to us from the sale of the shares of our common stock (or pre-funded warrants in lieu thereof) offered by us hereunder. Accordingly, our management will have broad discretion in the timing and application of these proceeds. Pending application of the net proceeds as described above, we intend to temporarily invest the proceeds in short-term, interest-bearing instruments.

DILUTION

If you invest in our common stock or pre-funded warrants in this offering, your ownership interest will be diluted to the extent of the difference between the public offering price per share of our common stock (or pre-funded warrant in lieu thereof) and the as-adjusted net tangible book value per share of our common stock immediately after this offering. We calculate net tangible book value per share by dividing the net tangible book value, which is total tangible assets less total liabilities, by the number of outstanding shares of our common stock. Dilution represents the difference between the portion of the amount per share (or pre-funded warrants in lieu thereof) paid by investors participating in this offering and the as-adjusted net tangible book value per share of our common stock immediately after giving effect to this offering. Our net tangible book value as of September 30, 2023 was approximately \$409.9 million, or \$5.42 per share.

After giving effect to the issuance and sale of shares of our common stock (or pre-funded warrants in lieu thereof) in this offering by us at a public offering price of \$ _____ per share (or \$ _____ per pre-funded warrant in lieu thereof), and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, our as-adjusted net tangible book value as of September 30, 2023 would have been \$ _____ million, or approximately \$ _____ per share of our common stock. This represents an immediate increase in net tangible book value of \$ _____ per share of our common stock to our existing stockholders and an immediate dilution of \$ _____ per share to investors participating in this offering, as illustrated in the following table:

Public offering price per share (or pre-funded warrant in lieu thereof at the public offering price less \$0.001)	\$ _____
Net tangible book value per share as of September 30, 2023	\$ 5.42
Increase in net tangible book value per share attributable to new investors in this offering	_____
As-adjusted net tangible book value per share as of September 30, 2023 after giving effect to this offering	_____
Dilution per share to investors participating in this offering	\$ _____

If the underwriters exercise their option in full to purchase an additional shares of common stock, our as-adjusted net tangible book value per share after this offering would be approximately \$ _____ per share, representing an increase of as-adjusted net tangible book value of \$ _____ per share to our existing stockholders and an immediate dilution of approximately \$ _____ per share to investors participating in this offering.

The discussion and table above assume no exercise of the pre-funded warrants sold in this offering. Investors who purchase common stock upon the exercise of the pre-funded warrants offered hereby may experience dilution depending on our net tangible book value at the time of exercise.

Except as noted above, the foregoing excludes, in each case as of September 30, 2023:

- 4,679,027 shares of our common stock issuable upon the exercise of stock options outstanding as of September 30, 2023, under the 2019 Plan and the 2023 Plan at a weighted-average exercise price of \$14.14 per share;
- 120,000 shares of our common stock issuable upon the exercise of stock options granted subsequent to September 30, 2023, under the 2023 Plan at a weighted-average exercise price of \$8.41 per share;
- 987,550 shares of common stock issuable upon the vesting of restricted stock units outstanding as of September 30, 2023;
- 25,000 shares of our common stock issuable upon exercise of an outstanding warrant at an exercise price of \$22.06 per share (which expires on June 30, 2025), as of September 30, 2023;

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- 33,923 shares of our common stock issuable upon exercise of an outstanding warrant at an exercise price of \$19.12 per share (which expires on May 28, 2031), as of September 30, 2023;
- 174,093 shares of our common stock issuable upon exercise of an outstanding warrant at an exercise price of \$9.76 per share (which expires on January 27, 3033), as of September 30, 2023;
- 10,179,789 shares of our common stock issuable upon exercise of outstanding warrants at an exercise price of \$5.325 per share (which expire July 1, 2024), as of September 30, 2023;
- 800,000 shares of our common stock issuable upon exercise of outstanding pre-funded warrants at an exercise price of \$0.001 per share (which do not expire), as of September 30, 2023;
- 1,848,784 shares of our common stock reserved for future issuance under the 2019 Plan and 2023 Plan, as well as any automatic increase in the number of shares of common stock reserved for future issuance thereunder, as of September 30, 2023;
- 1,220,897 shares of our common stock reserved for future issuance under the ESPP, as well as any automatic increase in the number of shares of common stock reserved for future issuance thereunder, as of September 30, 2023; and
- Up to \$150.0 million of shares of our common stock that may be sold from time to time pursuant to our Sales Agreement, of which 1,200,539 shares have been sold to date and which has resulted in net proceeds of approximately \$23.7 million to date.

To the extent that options or warrants outstanding as of September 30, 2023, have been or are exercised, restricted stock units are settled, or other shares are issued, investors purchasing shares in this offering could experience further dilution. In addition, we may choose to raise additional capital, including pursuant to the Sales Agreement, due to market conditions or strategic considerations, even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

CERTAIN MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS

The following discussion is a summary of certain material U.S. federal income tax considerations generally applicable to the ownership and disposition of our common stock and pre-funded warrants, which we refer to collectively as our securities. This summary is based upon U.S. federal income tax law as of the date of this prospectus supplement, which is subject to change or differing interpretations, possibly with retroactive effect. This summary does not discuss all potential tax considerations that may be important to particular investors in light of their individual circumstances, including, without limitation:

- banks, insurance companies or other financial institutions;
- tax-exempt entities or organizations;
- brokers, traders or dealers in securities or currencies;
- persons that own, or are deemed to own, more than five percent of our capital stock;
- U.S. expatriates and certain former citizens or long-term residents of the United States;
- persons who hold our securities as a position in a hedging transaction, “straddle,” “conversion transaction” or other risk reduction transaction;
- persons that have elected the mark-to-market method of tax accounting,
- persons who do not hold our securities as a capital asset within the meaning of Section 1221 of the Internal Revenue Code of 1986, as amended (the “Code”) (generally, for investment purposes);
- partnerships or other entities or arrangements treated as pass-through entities for U.S. federal income tax purposes (or investors in any such entities);
- persons deemed to sell our securities under the constructive sale provisions of the Code;
- regulated investment companies or real estate investment trusts;
- pension plans or funds, or an entity that is wholly owned by a pension plan or fund;
- controlled foreign corporations;
- passive foreign investment companies; or
- persons that acquire our securities as compensation for services.

In addition, this summary does not discuss other U.S. federal tax consequences (e.g., estate or gift tax), any state, local, or non-U.S. tax considerations or the Medicare tax or alternative minimum taxes. No assurance can be given that the IRS would not assert, or that a court would not sustain a position contrary to any of the tax aspects set forth below.

For purposes of this summary, a “U.S. Holder” is a beneficial holder of securities that, for U.S. federal income tax purposes is:

1. an individual who is a United States citizen or resident of the United States;
2. a corporation or other entity treated as a corporation for United States federal income tax purposes created in, or organized under the law of, the United States or any state or political subdivision thereof;
3. an estate the income of which is includible in gross income for United States federal income tax purposes regardless of its source; or
4. a trust (A) the administration of which is subject to the primary supervision of a United States court and which has one or more United States persons (within the meaning of the Code) who have the authority to control all substantial decisions of the trust or (B) that has in effect a valid election under applicable Treasury regulations to be treated as a United States person.

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A “non-U.S. Holder” is a beneficial holder of securities that is neither a U.S. Holder nor a partnership for U.S. federal income tax purposes.

THIS DISCUSSION OF U.S. FEDERAL INCOME TAX CONSIDERATIONS IS FOR GENERAL INFORMATION PURPOSES ONLY AND IS NOT TAX ADVICE. PROSPECTIVE HOLDERS SHOULD CONSULT THEIR TAX ADVISORS CONCERNING THE U.S. FEDERAL INCOME TAX CONSEQUENCES TO THEM OF OWNING AND DISPOSING OF OUR SECURITIES, AS WELL AS THE APPLICATION OF ANY, STATE, LOCAL AND NON-U.S. INCOME, ESTATE AND OTHER TAX CONSIDERATIONS.

Treatment of Pre-Funded Warrants

Although it is not entirely free from doubt, the pre-funded warrants are generally expected to be treated as shares of our common stock for U.S. federal income tax purposes. Accordingly, no gain or loss should be recognized upon exercise of a pre-funded warrant, and the holding period of a pre-funded warrant should carry over to the shares of common stock received upon exercise. Similarly, the tax basis of the pre-funded warrant should carry over to the shares of common stock received upon exercise, increased by the exercise price. Each U.S. Holder and non-U.S. Holder is urged to consult its tax advisor regarding the U.S. federal income tax treatment of the pre-funded warrants.

Possible Constructive Distributions

The terms of each pre-funded warrant provide for an adjustment to the consideration issuable upon exercise in certain events, as discussed in the section of this prospectus supplement captioned “Description of Securities We Are Offering — Pre-funded Warrants.” An adjustment which has the effect of preventing dilution is generally not a taxable event. Nevertheless, a U.S. Holder or non-U.S. Holder of pre-funded warrants may be treated as receiving a constructive distribution from us if, for example, the adjustment increases the holder’s proportionate interest in our assets or earnings and profits (e.g., through an increase in the number of shares of common stock that would be obtained upon exercise) as a result of a distribution of cash to the holders of shares of our common stock which is taxable to such holders as a distribution. Such constructive distribution would be subject to tax in the same manner as if such U.S. Holder or non-U.S. Holder received a cash distribution from us equal to the fair market value of such increased interest, in each case, as described below. Each U.S. Holder and non-U.S. Holder is urged to consult its tax advisor regarding the U.S. federal income tax considerations of constructive distributions, if any, on the pre-funded warrants.

U.S. Holders

Distributions

We have not paid and do not anticipate paying dividends. However, in the event that we make a distribution of cash or other property (other than certain pro rata distributions of our stock) in respect of our common stock, such distribution will be treated as a dividend to the extent paid out of our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Distributions in excess of current and accumulated earnings and profits will be treated as a non-taxable return of capital to the extent of the U.S. Holder’s basis in its common shares and, to the extent the amount of the distribution exceeds a U.S. Holder’s adjusted tax basis in such shares, the excess will be treated as gain from the disposition of such security (the tax treatment of which is discussed below under “U.S. Holders — Sale, Exchange or Other Taxable Disposition of Our Securities”).

Dividends we pay to a U.S. Holder that is a taxable corporation generally will qualify for the dividends received deduction if the requirements relating to the requisite holding period are satisfied. With certain exceptions, and provided certain holding period requirements are met, dividends we pay to a non-corporate U.S. Holder generally will constitute “qualified dividends” that currently are subject to tax at preferential long-term capital gains rates.

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Sale, Exchange or Other Taxable Disposition of Our Securities

Upon a sale, exchange (other than by exercise) or other taxable disposition of our securities, a U.S. Holder will generally recognize taxable gain or loss in an amount equal to the difference between (1) the amount realized upon such sale, exchange or disposition and (2) the U.S. Holder's tax basis in the security. Such gain or loss will generally be treated as long-term capital gain or loss if the security is held by the U.S. Holder for more than one year at the time of such sale, exchange or disposition.

Non-U.S. Holders

Distributions

We have not paid and do not anticipate paying dividends. However, any distribution to a non-U.S. Holder with respect to shares of our common stock that is treated as a dividend for U.S. federal income tax purposes will generally be subject to withholding tax at a 30% rate (or such lower rate specified by an applicable income tax treaty). To obtain the benefit of a reduced rate under an applicable income tax treaty, a non-U.S. Holder must certify as to its non-U.S. status, that no withholding is required pursuant to the Foreign Account Tax Compliance Act ("FATCA") (discussed below), and to such right under the applicable income tax treaty on a properly completed IRS Form W-8BEN or IRS Form W-8BEN-E. If, however, a non-U.S. Holder provides an IRS Form W-8ECI, certifying that the dividend is effectively connected with the non-U.S. Holder's conduct of a trade or business within the United States (and, in the case of certain income tax treaties, is attributable to a permanent establishment or fixed base maintained by the non-U.S. Holder in the United States), the dividend will not be subject to withholding. Instead, such dividends are subject to U.S. federal income tax at regular rates applicable to U.S. persons generally and, for corporate holders, may also be subject to a 30% "branch profits tax" unless the non-U.S. Holder qualifies for a lower rate under an applicable U.S. income tax treaty.

Sale, Exchange or Other Taxable Disposition of Our Securities

A non-U.S. Holder will generally not be subject to U.S. federal income or withholding tax in respect of gain recognized on a sale, taxable exchange or other taxable disposition of our securities unless:

- the gain is effectively connected with the conduct of a trade or business by the non-U.S. Holder within the United States (and, if an applicable tax treaty so requires, is attributable to a U.S. permanent establishment or fixed base maintained by the non-U.S. Holder);
- the 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; or
- we are or have been a "United States real property holding corporation" for U.S. federal income tax purposes during a specified period and certain other requirements are met. We do not expect to be a "United States real property holding corporation" for U.S. federal income tax purposes, but there can be no assurance in that regard.

Gain described in the first bullet point above will be subject to tax at the generally applicable U.S. federal income tax rates. Any gains described in the first bullet point above of a non-U.S. Holder that is a foreign corporation may also be subject to an additional "branch profits tax" at a 30% rate (or lower applicable treaty rate). Gain described in the second bullet point above will generally be subject to a flat 30% U.S. federal income tax. Non-U.S. Holders are urged to consult their tax advisors regarding possible eligibility for benefits under income tax treaties. If the third bullet point above applies to a non-U.S. Holder, gain recognized by such holder on the sale, exchange or other disposition of our securities will be subject to tax at the generally applicable U.S. federal income tax rates, and certain withholding requirements may apply. Each Non-U.S. Holder is urged to consult its tax advisor regarding the application of these rules.

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Foreign Account Tax Compliance Act

Under FATCA, withholding at a rate of 30% will generally be required on dividends in respect of shares of our common stock (or constructive dividends on our pre-funded warrants) held by or through certain foreign financial institutions (including investment funds), unless such institution (i) enters into an agreement with the U.S. Department of the Treasury to report, on an annual basis, information with respect to shares in, and accounts maintained by, the institution to the extent such shares (or pre-funded warrants) or accounts are held by certain U.S. persons and by certain non-U.S. entities that are wholly or partially owned by U.S. persons and to withhold on certain payments, or (ii) complies with the terms of an intergovernmental agreement between the United States and an applicable foreign country. Accordingly, the entity through which our common stock or pre-funded warrants is held will affect the determination of whether such withholding is required. Similarly, dividends in respect of shares of our common stock (or constructive dividends on our pre-funded warrants) held by an investor that is a non-financial non-U.S. entity that does not qualify under certain exemptions will be subject to withholding at a rate of 30%, unless such entity either (i) certifies that such entity does not have any “substantial United States owners” or (ii) provides certain information regarding the entity’s “substantial United States owners,” which we or the applicable withholding agent will in turn provide to the Secretary of the Treasury. An intergovernmental agreement between the United States and an applicable foreign country, or future Treasury regulations or other guidance, may modify these requirements. We will not pay any additional amounts to investors in respect of any amounts withheld. Each non-U.S. Holder is urged to consult its tax advisor regarding the possible implications of FATCA on such holder’s investment in our securities.

Information Reporting and Backup Withholding

Information returns will be filed with the IRS in connection with payments of dividends and the proceeds from a sale, exchange or other taxable disposition of our securities. A non-U.S. Holder may have to comply with certification procedures to establish that it is not a “United States person” within the meaning of Section 7701(a)(30) of the Code in order to avoid information reporting and backup withholding requirements. The certification procedures required to claim a reduced rate of withholding under a treaty generally will satisfy the certification requirements necessary to avoid the backup withholding as well.

Backup withholding is not an additional tax. The amount of any backup withholding from a payment to a non-U.S. Holder will be allowed as a credit against such holder’s U.S. federal income tax liability and may entitle such holder to a refund, provided that the required information is timely furnished to the IRS.

Each non-U.S. Holder is urged to consult its tax advisor regarding the application of information reporting and backup withholding to such non-U.S. Holder.

DESCRIPTION OF SECURITIES WE ARE OFFERING

Common Stock

We are offering shares of our common stock in this offering. See “Description of Securities” in the accompanying prospectus for more information regarding our shares of common stock.

Pre-funded Warrants

The following is a summary of the material attributes and characteristics of the pre-funded warrants. The form of pre-funded warrants will be provided to the pre-funded warrant purchasers in this offering and will be filed as an exhibit to a Current Report on Form 8-K in connection with this offering and incorporated by reference into the registration statement of which this prospectus supplement forms a part. The following summary is subject in all respects to the provisions contained in the pre-funded warrants.

Pre-funded warrants will be issued in certificated form only.

Duration and Exercise Price

Each pre-funded warrant entitles the holder thereof to purchase shares of our common stock at an exercise price equal to \$0.001 per share. Each pre-funded warrant will be exercisable at any time beginning on the date of issuance. The number of shares of our common stock issuable upon exercise of each pre-funded warrant is subject to adjustment in the event of stock dividends, stock splits, reorganizations or similar events affecting our common stock and the exercise price.

Exercisability

The holder of the pre-funded warrant may exercise the pre-funded warrant by delivering an exercise notice, completed and duly signed, and payment in cash of the exercise price for the number of shares of our common stock for which the pre-funded warrant is being exercised. The holder of the pre-funded warrant may also satisfy its obligation to pay the exercise price through a “cashless exercise,” in which the holder receives the net value of the pre-funded warrant in shares of common stock determined according to the formula set forth in the pre-funded warrant.

Upon a holder’s exercise of the pre-funded warrant, we will issue the shares of common stock to which the holder is entitled pursuant to such exercise within three trading days after the exercise date.

A holder of the pre-funded warrant will not be entitled to exercise any portion of such 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% (or 4.99% at the election of the holder) 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.

Fundamental Transaction

In the event of any fundamental transaction, as described in the pre-funded warrants and generally including any merger with or into another entity, sale of all or substantially all of our assets, tender offer or exchange offer, or reclassification of our shares of common stock, then upon any subsequent exercise of a pre-funded warrant, the holder will have the right to receive as alternative consideration, for each share of common stock that would have

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been issuable upon such exercise immediately prior to the occurrence of such fundamental transaction, the number of shares of common stock of the successor or acquiring corporation of our company, if it is the surviving corporation, and any additional consideration receivable upon or as a result of such transaction by a holder of the number of shares of common stock for which the warrant is exercisable immediately prior to such event.

Transferability

Subject to applicable laws, a pre-funded warrant may be transferred at the option of the holder upon surrender of the pre-funded warrant to us together with the appropriate instruments of transfer and payment of funds sufficient to pay any transfer taxes (if applicable).

Exchange Listing

There is no trading market available for the pre-funded warrants on any securities exchange or nationally recognized trading system. We do not intend to list the pre-funded warrants on The Nasdaq Global Market or any securities exchange or nationally recognized trading system.

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

Right as a Stockholder

Except as otherwise provided in the pre-funded warrants or by virtue of such holder's ownership of shares of our common stock, the holders of the pre-funded warrants do not have the rights or privileges of holders of our common stock, including any voting rights, until they exercise their pre-funded warrants.

UNDERWRITING

BofA Securities, Inc. and Leerink Partners LLC are acting as representatives of each of the underwriters named below. Subject to the terms and conditions set forth in an underwriting agreement among us and the representatives of the underwriters, we have agreed to sell to the underwriters, and each of the underwriters has agreed, severally and not jointly, to purchase from us, the number of shares of common stock and pre-funded warrants set forth opposite its name below.

Underwriter	Number of Shares	Number of Pre-Funded Warrants
BofA Securities, Inc.		
Leerink Partners LLC		
Cantor Fitzgerald & Co.		
Raymond James & Associates, Inc.		
UBS Securities LLC		
H.C. Wainwright & Co., LLC		
Total	_____	_____

Subject to the terms and conditions set forth in the underwriting agreement, the underwriters have agreed, severally and not jointly, to purchase all of the shares and pre-funded warrants sold under the underwriting agreement if any of these shares and pre-funded warrants are purchased. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the non-defaulting underwriters may be increased or the underwriting agreement may be terminated.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act, or to contribute to payments the underwriters may be required to make in respect of those liabilities.

The underwriters are offering the shares and pre-funded warrants, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel, including the validity of the shares and pre-funded warrants, and other conditions contained in the underwriting agreement, such as the receipt by the underwriters of officer's certificates and legal opinions. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

Commissions and Discounts

The representatives have advised us that the underwriters propose initially to offer the shares and pre-funded warrants to the public at the public offering price set forth on the cover page of this prospectus and to dealers at that price less a concession not in excess of \$ per share and \$ per pre-funded warrant. After the initial offering, the public offering price, concession or any other term of the offering may be changed.

The following table shows the public offering price, underwriting discounts and commissions and proceeds before expenses to us. The information assumes either no exercise or full exercise by the underwriters of their option to purchase additional shares.

	Per Share	Per Pre-Funded Warrant	Total Without Option	Total With Option
Public offering price	\$	\$	\$	\$
Underwriting discounts and commissions	\$	\$	\$	\$
Proceeds, before expenses, to us	\$	\$	\$	\$

The expenses of the offering, not including the underwriting discounts and commissions, are estimated at \$ million and are payable by us. We have also agreed to reimburse the underwriters for certain of their expenses incurred in connection with, among others, the review and clearance by the Financial Industry Regulatory Authority, Inc. in an amount of up to \$40,000.

Option to Purchase Additional Shares

We have granted an option to the underwriters, exercisable for 30 days after the date of this prospectus supplement, to purchase up to additional shares of our common stock at the public offering price, less the underwriting discounts and commissions. If the underwriters exercise this option, each will be obligated, subject to the conditions contained in the underwriting agreement, to purchase a number of additional shares of our common stock proportionate to that underwriter's initial amount reflected in the above table.

No Sales of Similar Securities

We, our executive officers and directors and their respective affiliates have agreed not to sell or transfer any common stock or securities convertible into, exchangeable for, exercisable for, or repayable with common stock, for 60 days (or 45 days with respect to an entity affiliated with one of our directors) after the date of this prospectus without first obtaining the written consent of the representatives. Specifically, we and these other persons have agreed, with certain limited exceptions (including for sales under our Sales Agreement, provided no such sales shall be made for 30 days from the date of this prospectus supplement), not to directly or indirectly:

- offer, pledge, sell or contract to sell any common stock,
- sell any option or contract to purchase any common stock,
- purchase any option or contract to sell any common stock,
- grant any option, right or warrant for the sale of any common stock,
- lend or otherwise dispose of or transfer any common stock,
- request or demand that we file or make a confidential submission of a registration statement related to the common stock, or
- enter into any swap or other agreement that transfers or is designed to, intended to, or which could reasonably be expected to lead to or result in the transfer, in whole or in part, the economic consequence of ownership of any common stock whether any such swap or transaction is to be settled by delivery of shares or other securities, in cash or otherwise.

This lock-up provision applies to common stock and to securities convertible into or exchangeable or exercisable for or repayable with common stock. It also applies to common stock owned now or acquired later by the person executing the agreement or for which the person executing the agreement later acquires the power of disposition.

The Nasdaq Global Market Listing

Our common stock is listed on The Nasdaq Global Market under the symbol "ETNB." We do not plan to list the pre-funded warrants on The Nasdaq Global Market or any other securities exchange or trading market.

Price Stabilization and Short Positions

Until the distribution of the shares is completed, SEC rules may limit underwriters and selling group members from bidding for and purchasing our common stock. However, the representatives may engage in transactions that stabilize the price of the common stock, such as bids or purchases to peg, fix or maintain that price.

In connection with the offering, the underwriters may purchase and sell our common stock in the open market. These transactions may include short sales, purchases on the open market to cover positions created by short sales and stabilizing transactions. Short sales involve the sale by the underwriters of a greater number of shares than they are required to purchase in the offering. Stabilizing transactions consist of various bids for or purchases of shares of common stock made by the underwriters in the open market prior to the completion of the offering.

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Similar to other purchase transactions, the underwriters' purchases to cover the syndicate short sales may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock may be higher than the price that might otherwise exist in the open market. The underwriters may conduct these transactions on The Nasdaq Global Market, in the over-the-counter market or otherwise.

Neither we nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common stock. In addition, neither we nor any of the underwriters make any representation that the representatives will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

Passive Market Making

In connection with this offering, underwriters and selling group members may engage in passive market making transactions in the common stock on The Nasdaq Global Market in accordance with Rule 103 of Regulation M under the Exchange Act during a period before the commencement of offers or sales of common stock and extending through the completion of distribution. A passive market maker must display its bid at a price not in excess of the highest independent bid of that security. However, if all independent bids are lowered below the passive market maker's bid, that bid must then be lowered when specified purchase limits are exceeded. 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 those transactions. The underwriters and dealers are not required to engage in passive market making and may end passive market making activities at any time.

Electronic Distribution

In connection with the offering, certain of the underwriters or securities dealers may distribute prospectuses by electronic means, such as e-mail.

Other Relationships

Some of the underwriters and their affiliates have engaged in, and may in the future engage in, investment banking and other commercial dealings in the ordinary course of business with us or our affiliates. They have received, or may in the future receive, customary fees and commissions for these transactions. Some of the underwriters in this offering also served as underwriters in our initial public offering in November 2019 and our underwritten public offerings in July 2020, September 2020, July 2022 and March 2023. Furthermore, Leerink Partners LLC is a sales agent under our amended Sales Agreement, pursuant to which we may offer and sell up to \$150.0 million of shares of our common stock from time to time in "at-the-market" offerings.

In addition, in the ordinary course of their business activities, the underwriters and their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers. Such investments and securities activities may involve securities and/or instruments of ours or our affiliates. The underwriters and their affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

Notice to Prospective Investors in the European Economic Area

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

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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 representatives for any such offer; or
- (c) in any other circumstances falling within Article 1(4) of the Prospectus Regulation,

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

Each person in a Relevant State who initially acquires any securities or to whom any offer is made will be deemed to have represented, acknowledged and agreed to and with us and the representatives that it is a qualified investor within the meaning of the Prospectus Regulation.

In the case of any securities being offered to a financial intermediary as that term is used in Article 5(1) of the Prospectus Regulation, each such financial intermediary will be deemed to have represented, acknowledged and agreed that the securities acquired by it in the offer have not been acquired on a non-discretionary basis on behalf of, nor have they been acquired with a view to their offer or resale to, persons in circumstances which may give rise to an offer to the public other than their offer or resale in a Relevant State to qualified investors, in circumstances in which the prior consent of the representatives has been obtained to each such proposed offer or resale.

We, the representatives and their affiliates will rely upon the truth and accuracy of the foregoing representations, acknowledgements and agreements.

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 or subscribe for any securities, and the expression “Prospectus Regulation” means Regulation (EU) 2017/1129.

The above selling restriction is in addition to any other selling restrictions set out below.

In connection with the offering, the underwriters are not acting for anyone other than the issuer and will not be responsible to anyone other than the issuer for providing the protections afforded to their clients nor for providing advice in relation to the offering.

Notice to Prospective Investors in the United Kingdom

In relation to the United Kingdom (“UK”), no securities have been offered or will be offered pursuant to the offering to the public in the UK prior to the publication of a prospectus in relation to the securities which has been approved by the Financial Conduct Authority in the UK in accordance with the UK Prospectus Regulation and the FSMA, except that offers of securities may be made to the public in the UK at any time under the following exemptions under the UK Prospectus Regulation and the FSMA:

- (a) to any legal entity which is a qualified investor as defined under the UK Prospectus Regulation;
- (b) to fewer than 150 natural or legal persons (other than qualified investors as defined under the UK Prospectus Regulation), subject to obtaining the prior consent of the representatives for any such offer; or
- (c) at any time in other circumstances falling within section 86 of the FSMA,

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provided that no such offer of securities shall require us or any representative to publish a prospectus pursuant to Section 85 of the FSMA or Article 3 of the UK Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the UK Prospectus Regulation.

Each person in the UK who initially acquires any securities or to whom any offer is made will be deemed to have represented, acknowledged and agreed to and with us and the representatives that it is a qualified investor within the meaning of the UK Prospectus Regulation.

In the case of any securities being offered to a financial intermediary as that term is used in Article 5(1) of the UK Prospectus Regulation, each such financial intermediary will be deemed to have represented, acknowledged and agreed that the securities acquired by it in the offer have not been acquired on a non-discretionary basis on behalf of, nor have they been acquired with a view to their offer or resale to, persons in circumstances which may give rise to an offer to the public other than their offer or resale in the UK to qualified investors, in circumstances in which the prior consent of the representatives has been obtained to each such proposed offer or resale.

We, the representatives and their affiliates will rely upon the truth and accuracy of the foregoing representations, acknowledgements and agreements.

For the purposes of this provision, the expression an “offer to the public” in relation to any securities in the UK 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, 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, and the expression “FSMA” means the Financial Services and Markets Act 2000.

This document is for distribution only to persons who (i) have professional experience in matters relating to investments and who qualify as investment professionals within the meaning of Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended, the “Financial Promotion Order”), (ii) are persons falling within Article 49(2)(a) to (d) (“high net worth companies, unincorporated associations etc.”) of the Financial Promotion Order, (iii) are outside the United Kingdom, or (iv) are persons to whom an invitation or inducement to engage in investment activity (within the meaning of Section 21 of FSMA) in connection with the issue or sale of any securities may otherwise lawfully be communicated or caused to be communicated (all such persons together being referred to as “relevant persons”). This document is directed only at relevant persons and must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this document relates is available only to relevant persons and will be engaged in only with relevant persons.

In connection with the offering, the underwriters are not acting for anyone other than the issuer and will not be responsible to anyone other than the issuer for providing the protections afforded to their clients nor for providing advice in relation to the offering.

Notice to Prospective Investors in Switzerland

This document is not intended to constitute an offer or solicitation to purchase or invest in the securities. The securities may not be publicly offered, directly or indirectly, in Switzerland within the meaning of the Swiss Financial Services Act (“FinSA”) and no application has or will be made to admit the securities to trading on trading venue (exchange or multilateral trading facility) in Switzerland. Neither this document nor any other offering or marketing material relating to the securities constitutes a prospectus pursuant to the FinSA, and neither this document 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 document nor any other offering or marketing material relating to the offering, our company 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

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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 (“CISA”). The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of securities.

Notice to Prospective Investors in the Dubai International Financial Centre

This prospectus relates to an Exempt Offer in accordance with the Offered Securities Rules of the Dubai Financial Services Authority (“DFSA”). This prospectus is intended for distribution only to persons of a type specified in the Offered Securities Rules of the DFSA. It must not be delivered to, or relied on by, any other person. The DFSA has no responsibility for reviewing or verifying any documents in connection with Exempt Offers. The DFSA has not approved this prospectus nor taken steps to verify the information set forth herein and has no responsibility for the prospectus. The securities to which this prospectus relates may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of the securities offered should conduct their own due diligence on the securities. If you do not understand the contents of this prospectus you should consult an authorized financial advisor.

Notice to Prospective Investors in Australia

No placement document, prospectus, product disclosure statement or other disclosure document has been lodged with the Australian Securities and Investments Commission, in relation to the offering. This prospectus does not constitute a prospectus, product disclosure statement or other disclosure document under the Corporations Act 2001 (the “Corporations Act”), and does not purport to include the information required for a prospectus, product disclosure statement or other disclosure document under the Corporations Act.

Any offer in Australia of the securities may only be made to persons (the “Exempt Investors”) who are “sophisticated investors” (within the meaning of section 708(8) of the Corporations Act), “professional investors” (within the meaning of section 708(11) of the Corporations Act) or otherwise pursuant to one or more exemptions contained in section 708 of the Corporations Act so that it is lawful to offer the securities without disclosure to investors under Chapter 6D of the Corporations Act.

The securities applied for by Exempt Investors in Australia must not be offered for sale in Australia in the period of 12 months after the date of allotment under the offering, except in circumstances where disclosure to investors under Chapter 6D of the Corporations Act would not be required pursuant to an exemption under section 708 of the Corporations Act or otherwise or where the offer is pursuant to a disclosure document which complies with Chapter 6D of the Corporations Act. Any person acquiring securities must observe such Australian on-sale restrictions.

This prospectus contains general information only and does not take account of the investment objectives, financial situation or particular needs of any particular person. It does not contain any securities recommendations or financial product advice. Before making an investment decision, investors need to consider whether the information in this prospectus is appropriate to their needs, objectives and circumstances, and, if necessary, seek expert advice on those matters.

Notice to Prospective Investors in Hong Kong

The securities have not been offered or sold and will not be offered or sold in Hong Kong, by means of any document, other than (a) to “professional investors” as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made under that ordinance; or (b) 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 that ordinance. No advertisement, invitation or document relating to the securities has been or may be issued or has been or may be in the possession of any person for the purposes of issue, whether in Hong Kong or elsewhere, which is directed at, or the contents of

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which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to 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 and any rules made under that ordinance.

Notice to Prospective Investors in Japan

The securities have not been and will not be registered under the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948, as amended) and, accordingly, will not be offered or sold, directly or indirectly, in Japan, or for the benefit of any Japanese Person or to others for re-offering or resale, directly or indirectly, in Japan or to any Japanese Person, except in compliance with all applicable laws, regulations and ministerial guidelines promulgated by relevant Japanese governmental or regulatory authorities in effect at the relevant time. For the purposes of this paragraph, “Japanese Person” shall mean any person resident in Japan, including any corporation or other entity organized under the laws of Japan.

Notice to Prospective Investors in Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, the securities were not offered or sold or caused to be made the subject of an invitation for subscription or purchase and will not be offered or sold or caused to be made the subject of an invitation for subscription or purchase, and this prospectus or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the securities, has not been circulated or distributed, nor will it be circulated or distributed, whether directly or indirectly, to any person in Singapore other than (i) to an institutional investor (as defined in Section 4A of the Securities and Futures Act (Chapter 289) of Singapore, as modified or amended from time to time (the “SFA”)) pursuant to Section 274 of the SFA, (ii) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the securities are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

- (a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or
- (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities or securities-based derivatives contracts (each term as defined in Section 2(1) of the SFA) of that corporation or the beneficiaries’ rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the securities pursuant to an offer made under Section 275 of the SFA except:

- (a) to an institutional investor or to a relevant person, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i) (B) of the SFA;
- (b) where no consideration is or will be given for the transfer;
- (c) where the transfer is by operation of law; or
- (d) as specified in Section 276(7) of the SFA.

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

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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 (or, in the case of securities issued or guaranteed by the government of a non-Canadian jurisdiction, section 3A.4) 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.

LEGAL MATTERS

Gibson, Dunn & Crutcher LLP, San Francisco, California will pass upon the validity of the shares of common stock and pre-funded warrants offered hereby. Certain legal matters in connection with this offering will be passed upon for the underwriters by Cooley LLP, San Francisco, California.

EXPERTS

The consolidated financial statements of 89bio, Inc. as of December 31, 2022 and 2021, and for each of the years in the two-year period ended December 31, 2022, have been incorporated by reference herein and in the registration statement in reliance upon the report of KPMG LLP, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the informational requirements of the Exchange Act and in accordance therewith file reports, proxy statements and other information with the SEC. Our filings are available to the public over the Internet at the SEC's website at www.sec.gov, as well as at our website at www.89bio.com.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to incorporate by reference into this prospectus supplement the information contained in other documents we file with the SEC, which means that we can disclose important information to you by referring you to those documents. Any statement contained in any document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded, for purposes of this prospectus supplement, to the extent that a statement contained in or omitted from this prospectus supplement, or in any other subsequently filed document that also is or is deemed to be incorporated by reference herein, modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus supplement. We incorporate by reference the documents listed below which have been filed by us:

- Our Annual Report on [Form 10-K](#) for the year ended December 31, 2022 filed on March 15, 2023;
- Our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2023, June 30, 2023 and September 30, 2023 filed on [May 8, 2023](#), [August 9, 2023](#) and [November 9, 2023](#), respectively;
- Any portions of our Definitive Proxy Statement on [Schedule 14A](#) filed on April 24, 2023 that were incorporated by reference into our Annual Report on Form 10-K for the year ended December 31, 2022;
- Our Current Reports on Form 8-K (other than information furnished rather than filed) filed with the SEC on [January 6, 2023](#) (as amended by our Current Report on Form 8-K filed with the SEC on [February 2, 2023](#)), [February 15, 2023](#), [February 16, 2023](#), [March 28, 2023](#), [June 9, 2023](#), [August 15, 2023](#), [November 14, 2023](#) and [December 6, 2023](#);
- The description of our common stock contained in our registration statement on [Form 8-A](#) filed with the SEC on November 1, 2019, as updated by [Exhibit 4.2](#) to our Annual Report on Form 10-K for the year ended December 31, 2022, including any amendments or reports filed for the purposes of updating this description.

All documents we file with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, except as to any portion of any report or document that is not deemed filed under such provisions on or after the date of this prospectus supplement until the earlier of the date on which all of the securities registered hereunder have been sold or the registration statement of which this prospectus supplement is a part has been withdrawn, shall be deemed incorporated by reference in this prospectus supplement and to be a part of this prospectus supplement from the date of filing of those documents. Nothing in this prospectus supplement shall be deemed to incorporate information furnished but not filed with the SEC pursuant to Item 2.02 or 7.01 of Form 8-K.

Upon written or oral request, we will provide without charge to each person, including any beneficial owner, to whom a copy of the prospectus supplement is delivered a copy of the documents incorporated by reference herein (other than exhibits to such documents unless such exhibits are specifically incorporated by reference herein). You should direct any requests for documents to:

89bio, Inc.
142 Sansome Street, 2nd Floor
San Francisco, California 94104
(415) 432-9270

We have authorized no one to provide you with any information that differs from that contained in this prospectus supplement. Accordingly, you should not rely on any information that is not contained in this prospectus supplement. You should not assume that the information in this prospectus supplement is accurate as of any date other than the date of the front cover of this prospectus supplement.

PROSPECTUS



**COMMON STOCK
PREFERRED STOCK
DEBT SECURITIES
WARRANTS
UNITS**

From time to time, we or any selling stockholder may issue, in one or more series or classes, an indeterminate number of shares of our common stock, preferred stock, debt securities, warrants and/or units, at prices and on terms that we will determine at the time of the offering.

We or any selling stockholder may offer these securities through agents, underwriters or dealers or directly to investors. See “Plan of Distribution” in this prospectus. This prospectus provides you with a general description of the securities we or any selling stockholder may offer. Each time we or any selling stockholder offer securities, we will provide specific terms of the securities offered in a supplement to this prospectus. We may also authorize one or more free writing prospectuses to be provided to you in connection with these offerings. The prospectus supplement and any related free writing prospectus may also add, update or change information contained in this prospectus. We may not sell any securities under this prospectus without delivery of the applicable prospectus supplement. If information in any prospectus supplement is inconsistent with the information in this prospectus, then the information in that prospectus supplement will apply and will supersede the information in this prospectus.

You should read this prospectus, the applicable prospectus supplement and any related free writing prospectus carefully, as well as any documents incorporated by reference, before you invest in any of the securities being offered.

Our shares of common stock are listed on the Nasdaq Global Market under the symbol “ETNB”. The last reported sale price of our common stock on the Nasdaq Global Market on May 22, 2023 was \$17.32 per share. We recommend that you obtain current market quotations for our common stock prior to making an investment decision.

Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading “[Risk Factors](#)” contained in this prospectus beginning on page 5 and any applicable prospectus supplement, and under similar headings in the other documents that are incorporated by reference into this prospectus.

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

Prospectus dated May 23, 2023

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ABOUT THIS PROSPECTUS

This prospectus is part of an automatic shelf registration statement on Form S-3 that we filed with the Securities and Exchange Commission (the “SEC” or the “Commission”) as a “well-known seasoned issuer” as defined in Rule 405 under the Securities Act of 1933, as amended (the “Securities Act”), utilizing a “shelf” registration process. Under this shelf registration process, we and/or selling stockholders may sell any combination of the securities described in this prospectus from time to time in one or more offerings. This prospectus provides you with a general description of the securities we and/or selling stockholders may offer.

Each time we and/or selling stockholders sell securities under this prospectus, we will provide a prospectus supplement that will contain specific information about the terms of that offering. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. The prospectus supplement and any related free writing prospectus that we may authorize to be provided to you may also add, update or change information contained in this prospectus or in any documents that we have incorporated by reference into this prospectus. You should carefully read both this prospectus and any prospectus supplement together with additional information under the headings “Where You Can Find More Information” and “Incorporation of Certain Information by Reference.”

Neither we nor any selling stockholder have authorized anyone to provide you with any information other than that contained or incorporated by reference in this prospectus and any applicable prospectus supplement, along with the information contained in any free writing prospectuses we have authorized for use in connection with a specific offering. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus is an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. This prospectus, any applicable supplement to this prospectus or any related free writing prospectus do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the registered securities to which they relate, nor do this prospectus, any applicable supplement to this prospectus or any related free writing prospectus constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction.

You should not assume that the information contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus is accurate on any date subsequent to the date set forth on the front of the document or that any information we have incorporated by reference is correct on any date subsequent to the date of the document incorporated by reference, even though this prospectus, any applicable prospectus supplement or any related free writing prospectus is delivered, or securities are sold, on a later date.

Unless the context otherwise requires, we use the terms “89bio,” “Company,” “we,” “us,” and “our” in this prospectus to refer to 89bio, Inc. and, where appropriate, our subsidiaries.

CAUTIONARY STATEMENT CONCERNING FORWARD-LOOKING STATEMENTS

This prospectus, including the documents that we incorporate by reference, contains “forward-looking statements” within the meaning of Section 27A of the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), which statements involve substantial risks and uncertainties. All statements, other than statements of historical facts included in this prospectus, including statements concerning our plans, objectives, goals, strategies, future events, future revenues or performance, financing needs, plans or intentions relating to acquisitions, business trends and other information referred to in the section entitled “Risk Factors” in this prospectus, the sections entitled “Business,” “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in our most recent Annual Report on Form 10-K, and in our subsequent Quarterly Reports on Form 10-Q, as applicable, which are incorporated by reference herein, are forward-looking statements. Forward-looking statements generally relate to future events or our future financial or operating performance. In some cases, you can identify forward-looking statements by terms such as “may,” “might,” “will,” “objective,” “intend,” “should,” “could,” “can,” “would,” “expect,” “believe,” “design,” “estimate,” “predict,” “potential,” “plan,” “anticipate,” “target,” “forecast,” or the negative of these terms, and similar expressions intended to identify forward-looking statements. Forward-looking statements are not historical facts and reflect our current views with respect to future events and are based on assumptions and subject to risks and uncertainties. Given these uncertainties, you should not place undue reliance on these forward-looking statements.

There are a number of risks, uncertainties and other important factors that could cause our actual results to differ materially from the forward-looking statements contained in this prospectus. Such risks, uncertainties and other important factors include, among others, the risks, uncertainties and factors set forth in “Risk Factors,” and the following risks, uncertainties and factors:

- our plans to develop and commercialize pegozafermin (previously BIO89-100) or any future product candidates;
- our ongoing and planned clinical trials;
- the timing of and our ability to obtain regulatory approvals for pegozafermin or any future product candidates;
- our estimates regarding expenses, future revenue, capital requirements and needs for additional financing;
- our ability to obtain additional capital;
- our ability to identify additional products or product candidates with significant commercial potential that are consistent with our commercial objectives;
- the rate and degree of market acceptance and clinical utility of pegozafermin or any future product candidates, if approved;
- our commercialization, marketing and manufacturing capabilities and strategy;
- substantial competition in our industry and with respect to the product candidates that we are developing;
- our intellectual property position;
- loss of key members of management;
- failure to successfully execute our growth strategy, including any delays in our planned future growth;
- our failure to maintain effective internal controls; and
- other risks and uncertainties, including those listed or incorporated by reference in “Risk Factors.”

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There may be other factors that may cause our actual results to differ materially from the forward-looking statements, including factors disclosed in “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in our most recent Annual Report on Form 10-K and our subsequent Quarterly Reports on Form 10-Q, which are incorporated by reference herein. You should evaluate all forward-looking statements made in this prospectus in the context of these risks and uncertainties. These factors should not be construed as exhaustive and should be read in conjunction with the other cautionary statements that are included in this prospectus, any accompanying prospectus supplement, information incorporated by reference herein or therein, and any related free-writing prospectus. In addition, we cannot assure you that we will realize the results, benefits or developments that we expect or anticipate or, even if substantially realized, that they will result in the consequences or affect us or our business in the way expected. All forward-looking statements contained in this prospectus are made as of the date of hereof and we undertake no obligation to publicly update or revise any forward-looking statements to reflect subsequent events or circumstances.

THE COMPANY

We are a clinical-stage biopharmaceutical company focused on the development and commercialization of innovative therapies for the treatment of liver and cardio-metabolic diseases. Our lead product candidate, pegozafermin, a specifically engineered glycoPEGylated analog of fibroblast growth factor 2, is currently being developed for the treatment of nonalcoholic steatohepatitis and severe hypertriglyceridemia.

Corporate Information

We were incorporated in January 2018 in Israel under the name 89Bio Ltd. 89bio, Inc., the registrant whose name appears on the cover page of this prospectus, was incorporated in June 2019 for the purpose of an internal reorganization transaction.

Our principal executive offices are located at 142 Sansome Street, 2nd Floor, San Francisco, California 94104 and our telephone number is (415) 432-9270. Our website is www.89bio.com. The information on, or that can be accessed through, our website is not part of this prospectus and is not incorporated by reference herein.

RISK FACTORS

Investing in our securities involves risks. You should carefully consider the risks, uncertainties and other factors described in our most recent Annual Report on Form 10-K, as supplemented and updated by subsequent Quarterly Reports on Form 10-Q and Current Reports on Form 8-K that we have filed or will file with the SEC, and in other documents that are incorporated by reference into this prospectus, as well as the risk factors and other information contained in or incorporated by reference into any accompanying prospectus supplement, before investing in any of our securities. Our business, financial condition, results of operations, cash flows or prospects could be materially and adversely affected by any of these risks. The risks and uncertainties described in the documents incorporated by reference herein are not the only risks and uncertainties that you may face.

For more information about our SEC filings, please see “Where You Can Find More Information” and “Incorporation of Certain Information by Reference.”

USE OF PROCEEDS

We will retain broad discretion over the use of the net proceeds from the sale of the securities offered hereby. Unless otherwise specified in a prospectus supplement accompanying this prospectus, the net proceeds from the sale by us of the securities to which this prospectus relates will be used for development, manufacturing and scale-up, as well as for working capital and general corporate purposes. We may also use a portion of the proceeds to license, acquire or invest in new programs or for drug development activities related to such programs; however, we have no current commitments to do so. Our expected use of proceeds from the sale of the securities offered hereby represents our current intentions based on our present plans and business condition. As of the date of this prospectus, we cannot predict with certainty all of the particular uses for the proceeds to be received from the sale of the securities offered hereby or the amounts that we will actually spend on the uses set forth above. Unless otherwise set forth in a prospectus supplement accompanying this prospectus, we will not receive any proceeds from the sale of securities by any selling stockholder.

Pending the use of the net proceeds, we may invest the proceeds in interest-bearing, investment-grade securities, certificates of deposit or government securities. When we offer and sell the securities to which this prospectus relates, the prospectus supplement related to such offering will set forth our intended use of the proceeds, if any, received from the sale of such securities.

SECURITIES WE MAY OFFER

This prospectus contains summary descriptions of the securities we may offer from time to time. These summary descriptions are not meant to be complete descriptions of each security. The particular terms of any security will be described in the applicable prospectus supplement.

DESCRIPTION OF SECURITIES

The following is a summary of the material terms of our capital stock, as well as other material terms of certain provisions of Delaware law, our second amended and restated certificate of incorporation (as amended from time to time, our “certificate of incorporation”), and our second amended and restated bylaws (as amended from time to time, our “bylaws”). This summary does not purport to be complete and is qualified in its entirety by the provisions of our certificate of incorporation and our bylaws. For more information on how you can obtain our certificate of incorporation and our bylaws, see the heading “Where You Can Find More Information.”

Our authorized capital stock consists of 100,000,000 shares of common stock, par value \$0.001 per share, and 10,000,000 shares of preferred stock, par value \$0.001 per share.

As of May 2, 2023, 72,868,455 shares of our common stock were issued and outstanding.

Common Stock

Our certificate of incorporation authorizes the issuance of up to 100,000,000 shares of our common stock. All outstanding shares of our common stock are validly issued, fully paid and nonassessable.

The holders of our common stock are entitled to one vote per share on all matters submitted to a vote of stockholders. A majority vote of the shares present in person or represented by proxy and entitled to vote on the subject matter is required for the holders of our common stock to take action on all matters (except for the election of directors (as discussed below)), except as otherwise required by law, our certificate of incorporation or our bylaws. Our certificate of incorporation does not provide for cumulative voting in the election of directors. The holders of our common stock will receive ratably any dividends declared by our board of directors out of funds legally available therefor. In the event of our liquidation, dissolution or winding-up, the holders of our common stock will be entitled to share ratably in all assets remaining after payment of or provision for any liabilities.

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

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

- ***Issuance of undesignated preferred stock:*** Under our certificate of incorporation, our board of directors has the authority, without further action by the stockholders, to issue up to 10,000,000 shares of undesignated preferred stock with rights and preferences, including voting rights, designated from time to time by our board of directors. The existence of authorized but unissued shares of preferred stock enables our board of directors to make it more difficult to attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise.
- ***Classified board:*** Our certificate of incorporation establishes a classified board of directors consisting of three classes of directors, with staggered three-year terms. Only one class of directors will be elected at each annual meeting of our stockholders, with the other classes continuing for the remainder of their respective three-year terms. This provision may have the effect of delaying a change in control of our board of directors.
- ***Election and removal of directors and board vacancies:*** Our bylaws provide that directors will be elected by a plurality vote. Our certificate of incorporation and bylaws also provide that our board of directors has the right to increase or decrease the size of the board and to fill vacancies on the board. Directors may be removed only for cause by the affirmative vote of the holders of at least 66 2/3% of

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the votes that all our stockholders would be entitled to cast in an annual election of directors. Only our board of directors is authorized to fill vacant directorships. In addition the number of directors constituting our board of directors may be set only by resolution adopted by a majority vote of the directors then in office. These provisions prevent stockholders from increasing the size of our board of directors and gaining control of our board of directors by filling the resulting vacancies with its own nominees.

- **Requirements for advance notification of stockholder nominations and proposals:** Our bylaws establish advance notice procedures with respect to stockholder proposals and the nomination of candidates for election as directors that specify certain requirements as to the timing, form and content of a stockholder's notice. Business that may be conducted at an annual meeting of stockholders will be limited to those matters properly brought before the meeting. These provisions may make it more difficult for our stockholders to bring matters before our annual meeting of stockholders or to nominate directors at annual meetings of stockholders.
- **No written consent of stockholders:** Our certificate of incorporation provides that all stockholder actions be taken by a vote of the stockholders at an annual or special meeting, and that stockholders may not take any action by written consent in lieu of a meeting. This limit may lengthen the amount of time required to take stockholder actions and would prevent the amendment of our bylaws or removal of directors by our stockholders without holding a meeting of stockholders.
- **No stockholder ability to call special meetings:** Our certificate of incorporation and bylaws provide that only a majority of the members of our board of directors then in office may be able to call special meetings of stockholders and only those matters set forth in the notice of the special meeting may be considered or acted upon at a special meeting of stockholders.
- **Amendments to certificate of incorporation and bylaws:** Any amendment to our certificate of incorporation will be required to be approved by a majority of our board of directors as well as, if required by law or the certificate of incorporation, a majority of the outstanding shares entitled to vote on the amendment and a majority of the outstanding shares of each class entitled to vote thereon as a class, except that the amendment of provisions to board classification, stockholder action, certificate amendments, and liability of directors must be approved by not less than 66 2/3% of the outstanding shares entitled to vote on the amendment, voting together as a single class. Any amendment to our bylaws must be approved by either a majority of our board of directors or not less than 66 2/3% of the outstanding shares entitled to vote on the amendment, voting together as a single class.

These provisions are designed to enhance the likelihood of continued stability in the composition of our board of directors and its policies, to discourage certain types of transactions that may involve an actual or threatened acquisition of us and to reduce our vulnerability to an unsolicited acquisition proposal. We also designed these provisions to discourage certain tactics that may be used in proxy fights. However, these provisions could have the effect of discouraging others from making tender offers for our shares and, as a consequence, they may also reduce fluctuations in the market price of our shares that could result from actual or rumored takeover attempts.

Section 203 of the Delaware General Corporation Law

We are subject to the provisions of Section 203 of the Delaware General Corporation Law (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.

Choice of Forum

Our certificate of incorporation requires that the Court of Chancery of the State of Delaware be the exclusive forum for the following types of actions or proceedings under Delaware statutory or common law:

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(1) any derivative action or proceeding brought on our behalf; (2) any action asserting a breach of fiduciary duty owed by any director, officer or other employee to us or our stockholders; (3) any action asserting a claim against us or any director or officer or other employee arising pursuant to the DGCL, our certificate of incorporation or our bylaws; or (4) any action asserting a claim against us or any director or officer or other employee that is governed by the internal affairs doctrine. This provision would not apply to claims brought to enforce a duty or liability created by the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction. Our certificate of incorporation provides further that the federal district courts of the United States will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act, subject to and contingent upon a final adjudication in the State of Delaware of the enforceability of such exclusive forum provision. Although we believe these provisions benefit us by providing increased consistency in the application of Delaware law for the specified types of actions and proceedings, the provisions may have the effect of discouraging lawsuits against us or our directors or officers.

Transfer Agent and Registrar

American Stock Transfer and Trust Company, LLC serves as the transfer agent and registrar for our common stock.

Listing

Our common stock is listed on the Nasdaq Global Market under the symbol “ETNB.”

Preferred Stock

Under the terms of our certificate of incorporation, our board of directors has the authority, without further action by our stockholders, to issue up to 10,000,000 shares of preferred stock in one or more series, to establish from time to time the number of shares to be included in each such series, to fix the dividend, voting and other rights, preferences and privileges of the shares of each wholly unissued series and any qualifications, limitations or restrictions thereon, and to increase or decrease the number of shares of any such series, but not below the number of shares of such series then outstanding.

Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of our common stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deferring or preventing a change in our control and may adversely affect the market price of our common stock and the voting and other rights of the holders of our common stock. As of May 2, 2023, there were no shares of preferred stock issued and outstanding, and we have no current plans to issue any shares of preferred stock.

Debt Securities

The paragraphs below describe the general terms and provisions of the debt securities we may issue. When we offer to sell a particular series of debt securities, we will describe the specific terms of the securities in a supplement to this prospectus, including any additional covenants or changes to existing covenants relating to such series. The prospectus supplement also will indicate whether the general terms and provisions described in this prospectus apply to a particular series of debt securities. You should read the actual indenture if you do not fully understand a term or the way we use it in this prospectus.

If we issue debt securities at a discount from their principal amount, then, for purposes of calculating the aggregate initial offering price of the offered securities issued under this prospectus, we will include only the initial offering price of the debt securities and not the principal amount of the debt securities.

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We have summarized below the material provisions of the indenture, or indicated which material provisions will be described in the related prospectus supplement. The prospectus supplement relating to any particular securities offered will describe the specific terms of the securities, which may be in addition to or different from the general terms summarized in this prospectus. We have included the form of the indenture as an exhibit to our registration statement of which this prospectus is a part, and it is incorporated into this prospectus by reference. Because the summary in this prospectus and in any prospectus supplement does not contain all of the information that you may find useful, you should read the documents relating to the securities that are described in this prospectus or in any applicable prospectus supplement. Please read “Where You Can Find More Information” in this prospectus to find out how you can obtain a copy of those documents. References below to an “indenture” are references to the indenture, as supplemented, under which a particular series of debt securities is issued. As used under this caption, the term “debt securities” includes the debt securities being offered by this prospectus and all other debt securities issued by us under the indenture.

General

The indenture:

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

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

- the title of the debt securities and whether they are senior, senior subordinated or subordinated debt securities;
- the aggregate principal amount of the debt securities being offered and any limit on their aggregate principal amount, and, if the series is to be issued at a discount from its face amount, the method of computing the accretion of such discount;
- the price at which the debt securities will be issued, expressed as a percentage of the principal and, if other than the full principal amount thereof, the portion of the principal amount thereof payable upon declaration of acceleration of the maturity thereof or, if applicable, the portion of the principal amount of such debt securities that is convertible into common stock or preferred stock or the method by which any such portion shall be determined;
- if convertible, the terms on which such debt securities are convertible, including the initial conversion price or rate or the method of calculation, how and when the conversion price or exchange ratio may be adjusted, whether conversion or exchange is mandatory, at the option of the holder or at our option, the conversion or exchange period, and any other provision in relation thereto, and any applicable limitations on the ownership or transferability of common stock or preferred stock received on conversion;
- the date or dates, or the method for determining the date or dates, on which the principal of the debt securities will be payable;
- the fixed or variable interest rate or rates of the debt securities, or the method by which the interest rate or rates is determined;
- the date or dates, or the method for determining the date or dates, from which interest will accrue;
- the dates on which interest will be payable;

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- the record dates for interest payment dates, or the method by which we will determine those dates;
- the persons to whom interest will be payable;
- the basis upon which interest will be calculated if other than that of a 360-day year of twelve 30-day months;
- Any collateral securing the performance of our obligations under the debt securities;
- the place or places where the principal of, premium, if any, and interest on, the debt securities will be payable;
- where the debt securities may be surrendered for registration of transfer or conversion or exchange;
- where notices or demands to or upon us in respect of the debt securities and the applicable indenture may be served;
- any provisions regarding our right to redeem or purchase debt securities or the right of holders to require us to redeem or purchase debt securities;
- any right or obligation we have to redeem, repay or purchase the debt securities pursuant to any sinking fund or analogous provision;
- the currency or currencies (including any composite currency) in which the debt securities are denominated and payable if other than United States dollars, and the currency or currencies (including any composite currency) in which principal, premium, if any, and interest, if any, will be payable, and if such payments may be made in a currency other than that in which the debt securities are denominated, the manner for determining such payments, including the time and manner of determining the exchange rate between the currency in which such securities are denominated and the currency in which such securities or any of them may be paid, and any additions to, modifications of or deletions from the terms of the debt securities to provide for or to facilitate the issuance of debt securities denominated or payable in a currency other than U.S. dollars;
- whether the amount of payments of principal of, premium, if any, or interest on, the debt securities may be determined according to an index, formula or other method and how such amounts will be determined;
- whether the debt securities will be in registered form, bearer form or both, and the terms of these forms;
- whether the debt securities will be issued in whole or in part in the form of a global security and, if applicable, the identity of the depository for such global security;
- any provision for electronic issuance of the debt securities or issuance of the debt securities in uncertificated form;
- whether and upon what terms the debt securities of such series may be defeased or discharged, if different from the provisions set forth in the indenture for the series to which the supplemental indenture or authorizing resolution relates;
- any provisions granting special rights to holders of securities upon the occurrence of such events as specified in the applicable prospectus supplement;
- any deletions from, modifications of, or additions to our events of default or covenants or other provisions set forth in the indenture for the series to which the supplemental indenture or authorizing resolution relates; and
- any other material terms of the debt securities, which may be different from the terms set forth in this prospectus.

We may issue debt securities at a discount below their principal amount and provide for less than the entire principal amount thereof to be payable upon declaration of acceleration of the maturity of the debt securities. We

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refer to any such debt securities throughout this prospectus as “original issue discount securities.” The applicable prospectus supplement will describe the United States federal income tax consequences and other relevant considerations applicable to original issue discount securities.

Neither the DGCL nor our governing instruments define the term “substantially all” as it relates to the sale of assets. Additionally, Delaware cases interpreting the term “substantially all” rely upon the facts and circumstances of each particular case. Consequently, to determine whether a sale of “substantially all” of our assets has occurred, a holder of debt securities must review the financial and other information that we have disclosed to the public.

The applicable prospectus supplement will also describe any material covenants to which a series of debt securities will be subject and the applicability of those covenants to any of our subsidiaries to be restricted thereby, which are referred to herein as “restricted subsidiaries.” The applicable prospectus supplement will also describe provisions for restricted subsidiaries to cease to be restricted by those covenants.

Events of Default

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

- our failure to pay interest on any debt security of such series when the same becomes due and payable and the continuance of any such failure for a period of 30 days;
- our failure to pay the principal or premium of any debt security of such series when the same becomes due and payable at maturity, upon acceleration, redemption or otherwise;
- our failure or the failure of any restricted subsidiary to comply with any of its agreements or covenants in, or provisions of, the debt securities of such series or the indenture (as they relate thereto) and such failure continues for a period of 60 days after our receipt of notice of the default from the trustee or from the holders of at least 25 percent in aggregate principal amount of the then outstanding debt securities of that series (except in the case of a default with respect to the provisions of the indenture regarding the consolidation, merger, sale, lease, conveyance or other disposition of all or substantially all of the assets of us (or any other provision specified in the applicable supplemental indenture or authorizing resolution), which will constitute an event of default with notice but without passage of time); or
- certain events of bankruptcy, insolvency or reorganization occur with respect to 89bio or any restricted subsidiary of 89bio that is a significant subsidiary (as defined in the indenture).

If an event of default occurs and is continuing with respect to debt securities of any series outstanding, then the trustee or the holders of 25% or more in principal amount of the outstanding debt securities of that series will have the right to declare the principal amount of all the debt securities of that series to be due and payable immediately. However, the holders of at least a majority in principal amount of outstanding debt securities of such series may rescind and annul such declaration and its consequences, except an acceleration due to nonpayment of principal or interest on such series, if the rescission would not conflict with any judgment or decree and if all existing events of default with respect to such series have been cured or waived.

The indenture also provides that the holders of at least a majority in principal amount of the outstanding debt securities of any series, by notice to the trustee, may, on behalf of all holders, waive any existing default and its consequences with respect to such series of debt securities, other than any event of default in payment of principal or interest.

The indenture will require the trustee to give notice to the holders of debt securities within 90 days after the trustee obtains knowledge of a default that has occurred and is continuing. However, the trustee may withhold

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notice to the holders of any series of debt securities of any default, except a default in payment of principal or interest, if any, with respect to such series of debt securities, if the trustee considers it in the interest of the holders of such series of debt securities to do so.

The holders of a majority of the outstanding principal amount of the debt securities of any series will have the right to direct the time, method and place of conducting any proceedings for any remedy available to the trustee with respect to such series, subject to limitations specified in the indenture.

Amendment, Supplement and Waiver

Without notice to or the consent of any holder, we and the trustee may amend or supplement the indenture or the debt securities of a series:

- to cure any ambiguity, omission, defect or inconsistency;
- to comply with the provisions of the indenture regarding the consolidation, merger, sale, lease, conveyance or other disposition of all or substantially all of our assets;
- to provide that specific provisions of the indenture shall not apply to a series of debt securities not previously issued or to make a change to specific provisions of the indenture that only applies to any series of debt securities not previously issued or to additional debt securities of a series not previously issued;
- to create a series and establish its terms;
- to provide for uncertificated debt securities in addition to or in place of certificated debt securities;
- to release a guarantor in respect of any series which, in accordance with the terms of the indenture applicable to such series, ceases to be liable in respect of its guarantee;
- to add a guarantor subsidiary in respect of any series of debt securities;
- to secure any series of debt securities;
- to add to the covenants of 89bio for the benefit of the holders or surrender any right or power conferred upon 89bio;
- to appoint a successor trustee with respect to the securities;
- to comply with requirements of the SEC in order to effect or maintain the qualification of the indenture under Trust Indenture Act of 1939 (the "Trust Indenture Act");
- to make any change that does not adversely affect the rights of holders; or
- to conform the provisions of the indenture to the final offering document in respect of any series of debt securities.

The indenture will provide that we and the trustee may amend or supplement any provision of the debt securities of a series or of the indenture relating to such series with the written consent of the holders of at least a majority in principal amount of the outstanding debt securities of such series. However, without the consent of each holder of a debt security, the terms of which are directly amended, supplemented or waived, an amendment, supplement or waiver may not:

- reduce the amount of debt securities of such series whose holders must consent to an amendment, supplement or waiver;
- reduce the rate of or extend the time for payment of interest, including defaulted interest;
- reduce the principal of or extend the fixed maturity of any debt security or alter the provisions with respect to redemptions or mandatory offers to repurchase debt securities of a series in a manner adverse to holders;

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- make any change that adversely affects any right of a holder to convert or exchange any debt security into or for shares of our common stock or other securities, cash or other property in accordance with the terms of such security;
- modify the ranking or priority of the debt securities of the relevant series;
- release any guarantor of any series from any of its obligations under its guarantee or the indenture otherwise than in accordance with the terms of the indenture;
- make any change to any provision of the indenture relating to the waiver of existing defaults, the rights of holders to receive payment of principal and interest on the debt securities, or to the provisions regarding amending or supplementing the indenture or the debt securities of a particular series with the written consent of the holders of such series, except to increase the percentage required for modification or waiver or to provide for consent of each affected holder of debt securities of such series;
- waive a continuing default or event of default in the payment of principal of or interest on the debt securities; or
- make any debt security payable at a place or in money other than that stated in the debt security, or impair the right of any holder of a debt security to bring suit as permitted by the indenture.

The holders of a majority in aggregate principal amount of the outstanding debt securities of such series may, on behalf of all holders of debt securities of that series, waive any existing default under, or compliance with, any provision of the debt securities of a particular series or of the indenture relating to a particular series of debt securities, other than any event of default in payment of interest or principal.

Defeasance

The indenture will permit us to terminate all our respective obligations under the indenture as they relate to any particular series of debt securities, other than the obligation to pay interest, if any, on and the principal of the debt securities of such series and certain other obligations, at any time by:

- depositing in trust with the trustee, under an irrevocable trust agreement, money or government obligations in an amount sufficient to pay principal of and interest, if any, on the debt securities of such series to their maturity or redemption; and
- complying with other conditions, including delivery to the trustee of an opinion of counsel to the effect that holders will not recognize income, gain or loss for federal income tax purposes as a result of our exercise of such right and will be subject to federal income tax on the same amount and in the same manner and at the same times as would have been the case otherwise.

The indenture will also permit us to terminate all of our respective obligations under the indenture as they relate to any particular series of debt securities, including the obligations to pay interest, if any, on and the principal of the debt securities of such series and certain other obligations, at any time by:

- depositing in trust with the trustee, under an irrevocable trust agreement, money or government obligations in an amount sufficient to pay principal and interest, if any, on the debt securities of such series to their maturity or redemption; and
- complying with other conditions, including delivery to the trustee of an opinion of counsel to the effect that (A) we have received from, or there has been published by, the Internal Revenue Service a ruling, or (B) since the date such series of debt securities were originally issued, there has been a change in the applicable federal income tax law, in either case to the effect that, and based thereon such opinion of counsel shall state that, holders will not recognize income, gain or loss for federal income tax purposes as a result of our exercise of such right and will be subject to federal income tax on the same amount and in the same manner and at the same times as would have been the case otherwise.

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In addition, the indenture will permit us to terminate substantially all of our respective obligations under the indenture as they relate to a particular series of debt securities by depositing with the trustee money or government obligations sufficient to pay all principal and interest on such series at its maturity or redemption date if the debt securities of such series will become due and payable at maturity within one year or are to be called for redemption within one year of the deposit.

Transfer and Exchange

A holder will be able to transfer or exchange debt securities only in accordance with the indenture. The registrar may require a holder, among other things, to furnish appropriate endorsements and transfer documents, and to pay any taxes and fees required by law or permitted by the indenture.

Concerning the Trustee

The indenture will contain limitations on the rights of the trustee, should it become our creditor, to obtain payment of claims in specified cases or to realize on property received in respect of any such claim as security or otherwise. The indenture will permit the trustee to engage in other transactions; however, if it acquires any conflicting interest, it must eliminate such conflict or resign.

The indenture will provide that in case an event of default occurs and is not cured, the trustee will be required, in the exercise of its power, to use the degree of care of a prudent person in similar circumstances in the conduct of such person's own affairs. The trustee shall be under no obligation to exercise any of the rights or powers vested in it by the indenture at the request or direction of any of the holders pursuant to the indenture, unless such holders shall have offered to the trustee security or indemnity satisfactory to the trustee against the costs, expenses and liabilities which might be incurred by it in compliance with such request or direction.

No Recourse Against Others

The indenture will provide that there is no recourse under any obligation, covenant or agreement in the applicable indenture or with respect to any debt security against any of our or our successor's past, present or future stockholders, employees, officers or directors.

Governing Law

The laws of the State of New York will govern the indenture and the debt securities.

Warrants

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

If we issue warrants, they will be evidenced by warrant agreements or warrant certificates issued under one or more warrant agreements, which are contracts between us and an agent for the holders of the warrants. We urge you to read the prospectus supplement related to any series of warrants we may offer, as well as the complete warrant agreement and warrant certificate that contain the terms of the warrants. If we issue warrants, forms of warrant agreements and warrant certificates relating to warrants for the purchase of common stock, preferred stock and debt securities will be incorporated by reference into the registration statement of which this prospectus is a part from reports we would subsequently file with the SEC.

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

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under a separate agreement. We may enter into unit agreements with a unit agent. Each unit agent will be a bank or trust company that we select. We will indicate the name and address of the unit agent in the applicable prospectus supplement relating to a particular series of units.

The following description, together with the additional information included in any applicable prospectus supplement, summarizes the general features of the units that we may offer under this prospectus. You should read any prospectus supplement and any free writing prospectus that we may authorize to be provided to you related to the series of units being offered, as well as the complete unit agreements that contain the terms of the units. Specific unit agreements will contain additional important terms and provisions and we will file as an exhibit to the registration statement of which this prospectus is a part, or will incorporate by reference from another report that we file with the SEC, the form of each unit agreement relating to units offered under this prospectus.

If we offer any units, certain terms of that series of units will be described in the applicable prospectus supplement, including, without limitation, the following, as applicable:

- 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 United States federal income tax considerations applicable to the units; and
- any other terms of the units and their constituent securities.

SELLING STOCKHOLDERS

Selling stockholders are persons or entities that, directly or indirectly, have acquired or will from time to time acquire from us, our securities. Such selling stockholders may be parties to registration rights agreements with us, or we otherwise may have agreed or will agree to register their securities for resale. The initial purchasers of our securities, as well as their transferees, pledgees, donees or successors, all of whom we refer to as “selling stockholders,” may from time to time offer and sell our securities pursuant to this prospectus, any applicable prospectus supplement or post-effective amendment.

Information regarding the beneficial ownership of our securities by a selling stockholder, the number of securities being offered by a selling stockholder and the number of securities beneficially owned by a selling stockholder after the applicable offering, where applicable, will be set forth in a prospectus supplement accompanying this prospectus or in a post-effective amendment. The applicable prospectus supplement or post-effective amendment will also disclose whether any of the selling stockholders has held any position or office with, has been employed by or otherwise has had a material relationship with us during the three years prior to the date of the applicable prospectus supplement, or post-effective amendment.

PLAN OF DISTRIBUTION

We may sell the securities from time to time pursuant to underwritten public offerings, negotiated transactions, block trades or a combination of these methods. We may sell the securities to or through underwriters or dealers, through agents, or directly to one or more purchasers. We may distribute securities from time to time in one or more transactions:

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

We may also sell equity securities covered by this registration statement in an “at the market offering” as defined in Rule 415(a)(4) under the Securities Act. Such offering may be made into an existing trading market for such securities in transactions at other than a fixed price, either:

- on or through the facilities of the Nasdaq Global Market or any other securities exchange or quotation or trading service on which such securities may be listed, quoted or traded at the time of sale; and/or
- to or through a market maker otherwise than on the Nasdaq Global Market or such other securities exchanges or quotation or trading services.

Such at the market offerings, if any, may be conducted by underwriters acting as principal or agent.

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

- the name or names of any underwriters, dealers or agents, if any;
- the purchase price of the securities and the proceeds we will receive from the sale;
- any options under which underwriters may purchase additional securities from us;
- any agency fees or underwriting discounts and other items constituting agents’ or underwriters’ compensation;
- any public offering price;
- any discounts or concessions allowed or re-allowed or paid to dealers; and
- any securities exchange or market on which the securities may be listed.

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

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

We may sell securities directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of securities, and we will describe any commissions we will pay the agent in the

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prospectus supplement. Unless the prospectus supplement states otherwise, our agent will act on a best-efforts basis for the period of its appointment.

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

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

All securities we offer, other than our shares of common stock, will be new issues of securities with no established trading market. Any underwriters may make a market in these securities, but will not be obligated to do so and may discontinue any market making at any time without notice. We cannot guarantee the liquidity of the trading markets for any securities.

Any underwriter may engage in overallotment, stabilizing transactions, short covering transactions and penalty bids in accordance with Regulation M 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 stabilizing or covering transaction to cover short positions. Those activities may cause the price of the securities to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of the activities at any time. These transactions may be effected on any exchange or over-the-counter market or otherwise.

Any underwriters who are qualified market makers on the Nasdaq Global Market may engage in passive market making transactions in the securities on the Nasdaq Global Market in accordance with Rule 103 of Regulation M, during the business day prior to the pricing of the offering, before the commencement of offers or sales of the securities. Passive market makers must comply with applicable volume and price limitations and must be identified as passive market makers. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for such security; if all independent bids are lowered below the passive market maker's bid, however, the passive market maker's bid must then be lowered when certain purchase limits are exceeded. Passive market making may stabilize the market price of the securities at a level above that which might otherwise prevail in the open market and, if commenced, may be discontinued at any time.

LEGAL MATTERS

Certain legal matters, including the legality of the securities offered, will be passed upon for us by Gibson, Dunn & Crutcher LLP, San Francisco, California. Additional legal matters may be passed upon for us or any underwriters, dealers or agents, by counsel that we will name in the applicable prospectus supplement.

EXPERTS

The consolidated financial statements of 89bio, Inc. as of December 31, 2022 and 2021, and for each of the years in the two-year period ended December 31, 2022, have been incorporated by reference herein and in the registration statement in reliance upon the report of KPMG LLP, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and special reports, proxy statements and other information with the SEC, and we have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the securities offered by this prospectus. This prospectus, which forms part of the registration statement, does not contain all of the information included in the registration statement, including its exhibits and schedules. For further information about us and the securities described in this prospectus, you should refer to the registration statement, its exhibits and schedules and our reports, proxies, information statements and other information filed with the SEC.

Our filings are available to the public on the Internet, through a database maintained by the SEC at www.sec.gov. We also maintain a website at www.89bio.com. We have included our website address for the information of prospective investors and do not intend it to be an active link to our website. Information contained on our website does not constitute a part of this prospectus or any applicable prospectus supplement (or any document incorporated by reference herein or therein).

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to incorporate by reference the information and reports we file with it, which means that we can disclose important information to you by referring you to those publicly available documents. The information incorporated by reference is an important part of this prospectus, and information that we file after the date hereof with the SEC will automatically update and supersede the information already incorporated by reference. We are incorporating by reference the documents listed below:

- Our Annual Report on [Form 10-K](#) for the year ended December 31, 2022 filed with the SEC on March 15, 2023 (including those portions of our [Definitive Proxy Statement on Schedule 14A](#) filed on April 24, 2023 that were incorporated by reference therein);
- Our Quarterly Report on [Form 10-Q](#) for the quarter ended March 31, 2023, filed with the SEC on May 8, 2023;
- Our Current Reports on Form 8-K (other than information furnished rather than filed) filed with the SEC on [January 6, 2023](#) (as amended on [February 2, 2023](#)), [February 15, 2023](#), [February 16, 2023](#), [March 22, 2023](#) and [March 28, 2023](#); and
- The description of our common stock contained in our registration statement on [Form 8-A](#) filed with the SEC on November 1, 2019, including any amendments or reports filed for the purposes of updating this description.

Because we are incorporating by reference future filings with the SEC, this prospectus is continually updated and those future filings may modify or supersede some of the information included or incorporated in this prospectus. This means that you must look at all of the SEC filings that we incorporate by reference to determine if any of the statements in this prospectus or in any document previously incorporated by reference have been modified or superseded.

This prospectus incorporates by reference the documents listed above and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act between the date of the initial registration statement and the effectiveness of the registration statement and following the effectiveness of the registration statement until the offering of the securities under the registration statement is terminated or completed, except that we are not incorporating by reference any information furnished (and not filed) with the SEC, including any information furnished pursuant to Items 2.02 or 7.01 of Form 8-K or related exhibits furnished pursuant to Item 9.01 of Form 8-K (unless expressly provided to the contrary).

You may request a copy of these filings (other than exhibits to such documents unless such exhibits are specifically incorporated by reference herein), at no cost, by contacting us, either orally or in writing, at the following:

89bio, Inc.
142 Sansome Street, 2nd Floor
San Francisco, California 94104
(415) 432-9270

Information about us, including our reports filed with the SEC, is available through our website at www.89bio.com. Such reports are accessible at no charge through our website and are made available as soon as reasonably practicable after such material is filed with or furnished to the SEC. Our website and the information contained on that website, or connected to that website, are not incorporated by reference in this prospectus. We have authorized no one to provide you with any information that differs from that contained in this prospectus. Accordingly, we take no responsibility for any other information that others may give you. You should not assume that the information in this prospectus is accurate as of any date other than the date of the front cover of this prospectus.

\$125,000,000



Common Stock

Pre-funded Warrants to Purchase Shares of Common Stock

PROSPECTUS SUPPLEMENT

BofA Securities

Leerink Partners

Cantor

Raymond James

UBS Investment Bank

H.C. Wainwright & Co.

, 2023
