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

FORM S-1
(Amendment No. 3)
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

Baudax Bio, Inc.

(Exact name of Registrant as specified in its charter)

Pennsylvania
(State or other jurisdiction of
incorporation or organization)

8090
(Primary Standard Industrial
Classification Code Number)

47-4639500
(I.R.S. Employer
Identification No.)

490 Lapp Road
Malvern, PA 19355
(484) 395-2440

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

Gerri A. Henwood
President and Chief Executive Officer
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490 Lapp Road
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(Name, address, including zip code, and telephone number, including area code, of agent for service)

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Approximate date of commencement of the proposed sale to the public: As soon as practicable after the effective date of this Registration Statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act, check the following box. ☒

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

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

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

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

Large accelerated filer ☐

Accelerated filer ☐

Non-accelerated filer ☒

Smaller reporting company ☒

Emerging growth company ☒

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

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

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The information in this preliminary prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

Subject to Completion, dated December 1, 2022

PRELIMINARY PROSPECTUS



**Up to 1,794,688 Shares of Common Stock and accompanying Series A-3
Warrants to Purchase up to 1,794,688 Shares of Common Stock and Series A-4
Warrants to Purchase up to 1,794,688 Shares of Common Stock**

or

**Up to 1,794,688 Series C Pre-funded Warrants to Purchase up to 1,794,688 Shares of Common Stock and accompanying Series A-3 Warrants to
Purchase up to 1,794,688 Shares
of Common Stock and Series A-4 Warrants to Purchase
up to 1,794,688 Shares of Common Stock**

Placement Agent Warrants to Purchase up to 107,681 Shares of Common Stock

We are offering up to 1,794,688 shares of common stock, together with the Series A-3 warrants to purchase up to 1,794,688 shares of common stock (the "Series A-3 warrants") and Series A-4 warrants to purchase up to 1,794,688 shares of common stock (the "Series A-4 warrants," and together with the Series A-3 warrants, the "Series A warrants"), pursuant to this prospectus. The combined public offering price for each share of common stock, together with the Series A warrants, is \$. The shares of common stock and Series A warrants will be separately issued, but the shares of common stock and Series A warrants will be issued to purchasers in the ratio of one to one. Each Series A-3 warrant will have an exercise price of \$ per share, will be exercisable upon issuance and will expire five years from the date of issuance. Each Series A-4 warrant will have an exercise price of \$ per share, will be exercisable upon issuance and will expire thirteen months from the date of issuance.

We are also offering up to 1,794,688 pre-funded warrants, or the Series C pre-funded warrants (and collectively with the Series A warrants, the "warrants"), to those purchasers whose purchase of shares of common stock in this offering would result in the purchaser, together with its affiliates and certain related parties, beneficially owning more than 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding common stock following the consummation of this offering in lieu of the shares of our common stock that would result in ownership in excess of 4.99% (or, at the election of the purchaser, 9.99%). Each Series C pre-funded warrant will be exercisable for one share of common stock at an exercise price of \$0.01 per share. Each Series C pre-funded warrant is being issued together with the same Series A warrant described above being issued with each share of common stock. The combined public offering price for each such Series C pre-funded warrant, together with the Series A warrants, is \$. Each Series C pre-funded warrant will be exercisable upon issuance and may be exercised at any time until all of the pre-funded warrants are exercised in full. The Series C pre-funded warrants and Series A warrants are immediately separable and will be issued separately in this offering.

There is no established public trading market for the warrants, and we do not expect a market to develop. We do not intend to apply for listing of the warrants on any securities exchange or other nationally recognized trading system. Without an active trading market, the liquidity of the warrants will be limited.

This offering will terminate on December 16, 2022, unless we decide to terminate the offering (which we may do at any time in our discretion) prior to that date. We will have one closing for all the securities purchased in this offering. The combined public offering price per share (or pre-funded warrant) and warrants will be fixed for the duration of this offering.

We have engaged H.C. Wainwright & Co., LLC, or the placement agent, to act as our exclusive placement agent in connection with this offering. The placement agent has agreed to use its reasonable best efforts to arrange for the sale of the securities offered by this prospectus. The placement agent is not purchasing or selling any of the securities we are offering and the placement agent is not required to arrange the purchase or sale of any specific number of securities or dollar amount. We have agreed to pay to the placement agent the placement agent fees set forth in the table below, which assumes that we sell all of the securities offered by this prospectus. There is no arrangement for funds to be received in escrow, trust or similar arrangement. There is no minimum offering requirement. We will bear all costs associated with the offering. See "Plan of Distribution" on page 26 of this prospectus for more information regarding these arrangements.

Our common stock is listed on the Nasdaq Capital Market under the symbol "BXR." On November 29, 2022, the last reported sale price of our common stock on the Nasdaq Capital Market was \$0.1393 per share (\$5.572 after giving effect to a one-for- forty (1-for-40) reverse stock split effected on December 1, 2022).

The combined public offering price per share and accompanying Series A warrants and the combined offering price per Series C pre-funded warrant and accompanying Series A warrants will be determined between us and investors based on market conditions at the time of pricing, and may be at a discount to the current market price of our common stock. Therefore, the recent market price used throughout this prospectus may not be indicative of the actual offering price.

INVESTING IN OUR SECURITIES INVOLVES RISKS. SEE THE " [RISK FACTORS](#)" ON PAGE 10 OF THIS PROSPECTUS AND ANY SIMILAR SECTION CONTAINED IN ANY DOCUMENT INCORPORATED BY REFERENCE HEREIN CONCERNING FACTORS YOU SHOULD CONSIDER BEFORE INVESTING IN OUR SECURITIES.

	Per Share and Series A Warrants	Per Series C Pre-Funded Warrant and Series A Warrants	Total
Public offering price	\$	\$	\$
Placement Agent's fees(1)	\$	\$	\$
Proceeds, before expenses, to us(2)	\$	\$	\$

- (1) We have agreed to pay the placement agent a total cash fee equal to 7.0% of the gross proceeds raised in this offering. We have also agreed to pay the placement agent a management fee equal to 1.0% of the gross proceeds raised in this offering and to reimburse the placement agent for its non-accountable expenses in the amount of \$20,000 and for its legal fees and expenses and out-of-pocket expenses in an amount up to \$90,000, and for its clearing expenses in the amount of \$15,950. In addition, we have agreed to issue to the placement agent, or its designees, warrants to purchase a number of shares of our common stock equal to 6.0% of the aggregate number of shares of common stock and Series C pre-funded warrants being offered at an exercise price equal to 125% of the combined public offering price per share of common stock and Series A warrants. We refer you to "Plan of Distribution" on page 26 of this prospectus for additional information regarding placement agent compensation.
- (2) Because there is no minimum number of securities or amount of proceeds required as a condition to closing in this offering, the actual public offering amount, placement agent fees, and proceeds to us, if any, are not presently determinable and may be substantially less than the total maximum offering amounts set forth above. We refer you to "Plan of Distribution" on page 26 of this prospectus for additional information regarding placement agent compensation.

The placement agent expects to deliver the shares and warrants to the purchasers in the offering on or about , 2022, subject to satisfaction of certain conditions.

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.

H.C. Wainwright & Co.

Prospectus dated , 2022

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ABOUT THIS PROSPECTUS

The registration statement we filed with the Securities and Exchange Commission (the “SEC”) includes exhibits that provide more detail of the matters discussed in this prospectus. You should read this prospectus, the related exhibits filed with the SEC, and the documents incorporated by reference herein before making your investment decision. You should rely only on the information provided in this prospectus and the documents incorporated by reference herein or any amendment thereto. You should not assume that the information contained in this prospectus 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 herein is correct on any date subsequent to the date of the document incorporated by reference, even though this prospectus or any related free writing prospectus is delivered, or securities are sold, on a later date. This prospectus contains or incorporates by reference summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been or will be filed or have been or will be incorporated by reference as exhibits to the registration statement of which this prospectus forms a part, and you may obtain copies of those documents as described in this prospectus supplement under the heading “Where You Can Find More Information.”

You should rely only on the information that we have included or incorporated by reference in this prospectus and any related free writing prospectus that we may authorize to be provided to you. Neither we, nor the placement agent, have authorized any dealer, salesman or other person to give any information or to make any representation other than those contained or incorporated by reference in this prospectus or any related free writing prospectus that we may authorize to be provided to you. You must not rely upon any information or representation not contained or incorporated by reference in this prospectus or any related free writing prospectus. This prospectus and 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 does 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.

When we refer to “Baudax,” “we,” “our,” “us” and the “Company” in this prospectus, we mean Baudax Bio, Inc., and its consolidated subsidiaries unless otherwise specified. When we refer to “you,” we mean the potential holders of the applicable series of securities.

Solely for convenience, tradenames referred to in this prospectus appear without the® and™ symbols, but those references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights, or that the applicable owner will not assert its rights, to these tradenames.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference herein contain forward-looking statements that involve substantial risks and uncertainties. All statements, other than statements of historical facts, included in this prospectus or the documents incorporated herein by reference regarding our strategy, future operations, future financial position, future revenues, projected costs, prospects, plans and objectives of management are forward-looking statements. The words “anticipate,” “believe,” “estimate,” “expect,” “intend,” “may,” “plan,” “predict,” “project,” “will,” “would,” “could,” “should,” “potential,” “seek,” “evaluate,” “pursue,” “continue,” “design,” “impact,” “affect,” “forecast,” “target,” “outlook,” “initiative,” “objective,” “designed,” “priorities,” “goal,” or the negative of such terms and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Such statements are based on assumptions and expectations that may not be realized and are inherently subject to risks, uncertainties and other factors, many of which cannot be predicted with accuracy and some of which might not even be anticipated.

The forward-looking statements in this prospectus and the documents incorporated herein by reference include, among other things, statements about:

- our estimates regarding expenses, revenue, capital requirements and timing and availability of and the need for additional financing;
- our ability to continue as a going concern for the next twelve months;
- our ability to operate under significant indebtedness;
- our ability to maintain the listing of our common stock on the Nasdaq Capital Market;
- our ability to maintain regulatory approval for ANJESO® (meloxicam) injection, or ANJESO, and obtain regulatory approval for any other product candidates that we may develop, and any related restrictions, limitations, or warnings in the label of any approved product candidates;
- our ability to successfully manage the timing, costs and other aspects of the commercialization of ANJESO, including maintaining an acceptable price for and adequate coverage and reimbursement of ANJESO;
- our ability to successfully market, commercialize and achieve broad market acceptance for ANJESO and any of our other product candidates once approved;
- our ability to identify a strategic partner with appropriate sales and marketing capabilities and to enter into a strategic partnership on commercially acceptable terms with such partner or discontinue commercialization of ANJESO within or outside of the United States;
- the acceptance of ANJESO by the medical community, including physicians, patients, healthcare providers and hospital formularies and grow market demand;
- our ability and that of our third-party manufacturers to successfully scale-up our commercial manufacturing process for ANJESO;
- the results, timing and outcome of our clinical trials of our product candidates, and any future clinical trials and preclinical studies;
- our ability to source materials needed for our drug candidates, optimize formulations for stability and other characteristics;
- our relationships with Alkermes plc, or Alkermes, other third parties, licensors, collaborators, and our employees;
- potential indemnification liabilities we may owe to Societal CDMO, Inc., or Societal CDMO, formerly Recro Pharma, Inc., after the separation of Societal CDMO’s acute care business and transfer of such assets to us, or the Separation;

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- the effects of changes in our effective tax rate due to changes in the mix of earnings in countries with differing statutory tax rates, changes in the valuation of deferred tax assets and liabilities, tax impacts and net operating loss utilization related to the Separation from Societal CDMO and changes in the tax laws;
- our ability to comply with the regulatory schemes applicable to our business and other regulatory developments in the United States and foreign countries;
- the performance of third-parties upon which we depend, including third-party contract research organizations, or CROs, and third-party suppliers, manufacturers including Alkermes and Patheon UK Limited, group purchasing organizations, distributors, supply chain and logistics providers;
- our ability to obtain and maintain patent protection and defend our intellectual property rights against third-parties;
- our ability to maintain our relationships, profitability and contracts with our key commercial partners;
- our ability to defend any material litigation filed against us and avoid liabilities resulting from any material litigation, including any liabilities associated with the ongoing securities class action filed against Societal CDMO for which we have agreed to indemnify Societal CDMO;
- our ability to recruit or retain key scientific, technical, commercial, and management personnel or to retain our executive officers;
- our ability to raise future financing and attain profitability for continued development of our business and commercialization or other monetization of ANJESO and our product candidates and to meet any required debt payments, and any milestone payments owing to Alkermes, or our other licensing and collaboration partners;
- the volatility of capital markets and other macroeconomic factors, including inflation, geopolitical tensions or the outbreak or escalation of hostilities or war;
- our ability to operate under increased leverage and comply with associated lending covenants; to pay existing required interest and principal amortization payments when due; and/or to obtain acceptable refinancing alternatives;
- our expectations regarding the impact of the ongoing COVID-19 pandemic including, but not limited to, the emergence of variants of the virus, the availability and efficacy of vaccines for COVID-19 and peoples' willingness to avail themselves of such vaccines, the expected duration of disruption and immediate and long-term delays, disruption in the commercialization of ANJESO, our ability to access hospital systems and formulary committees, manufacturing and supply chain interruptions, including but not limited to manufacturing components and raw materials, adverse effects on healthcare systems and disruption of the global economy, and the overall impact of the COVID-19 pandemic on our business, financial condition and results of operations; and
- other risks and uncertainties, including those described or incorporated by reference under the caption "Risk Factors" in this prospectus.

We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. We have included important factors in the cautionary statements included in this prospectus supplement, particularly under "Risk Factors," that we believe could cause actual results or events to differ materially from the forward-looking statements that we make. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures, collaborations or investments we may make.

You should read this prospectus and the documents that we incorporate by reference herein completely and with the understanding that our actual future results may be materially different from what we expect. We do not assume any obligation to update any forward-looking statements.

PROSPECTUS SUMMARY

This summary highlights information contained in other parts of this prospectus and in the documents we incorporate by reference. Because it is only a summary, it does not contain all of the information that you should consider before investing in our securities and it is qualified in its entirety by, and should be read in conjunction with, the more detailed information appearing elsewhere in this prospectus, any applicable free writing prospectus and the documents incorporated by reference herein. You should read all such documents carefully, especially the risk factors and our consolidated financial statements and the related notes included or incorporated by reference herein, before deciding to buy our securities. Unless the context requires otherwise, references in this prospectus to “Baudax,” “we,” “us” and “our” refer to Baudax Bio, Inc. and our subsidiaries.

Overview

We are a pharmaceutical company primarily focused on innovative products for hospital and related settings. We believe that we can bring valuable therapeutic options for patients, prescribers and payers to the hospital and related markets.

In mid-2020, we launched our first commercial product, ANJESO, in the United States. ANJESO is the first and only 24-hour, intravenous, or IV, analgesia agent. ANJESO is a cyclooxygenase-2, or COX-2, preferential, non-steroidal anti-inflammatory, or NSAID, for the management of moderate to severe pain, which can be administered alone or in combination with other non-NSAID analgesics. We have successfully completed three Phase III clinical trials, including two pivotal efficacy trials, a large double-blind Phase III safety trial and two Phase IIIb programs evaluating ANJESO clinical safety and efficacy along with its health economic impacts in specific surgical settings.

We utilized our internal field team and collaborated with contracted third parties, to market ANJESO to health care professionals at key targeted institutions for the commercialization of ANJESO in the United States. In March of 2022 and September of 2022, we first reduced then eliminated dedicated commercial personnel.

The Centers for Medicare and Medicaid Services, or CMS, established a unique J-code for ANJESO in the fourth quarter of 2020. ANJESO has transitional pass-through status under traditional Medicare plans for a period of 3 years, thereby providing separate reimbursement for ANJESO when used for surgical procedures in the outpatient setting. We also entered into agreements with leading group purchasing organizations in the U.S., including Vizient Inc., Premier Inc. and HealthTrust, as well as one of the top three integrated delivery networks that serves over twelve million patients nationwide, for availability of ANJESO to their member institutions and with a leading operator of surgical facilities and ancillary services nationally, with over 150 locations nationwide. In addition, ANJESO is currently approved for use within the Department of Veterans Affairs, the Department of Defense, Indian Health Service, 340B covered entities, and multiple state Medicaid programs. We are continuing to evaluate alternative approaches to the monetization of ANJESO both in the United States and outside the United States including, but not limited to, the out-license or other partnering of ANJESO and the discontinuation of the commercialization of ANJESO.

ANJESO has continued to be used most in institutions where we have had repeat ordering experience, despite the discontinuation of our dedicated commercial team. In September 2022, the number of vials sold to end-users increased approximately 16% in the third quarter of 2022 compared to the third quarter of prior year but decreased approximately 20% over the second quarter of 2022 due to the related discounts associated with a higher volume sold to 340B hospitals in the third quarter.

Our costs have consisted primarily of expenses incurred in conducting our manufacturing, commercialization of ANJESO, public company and personnel costs, clinical trials and preclinical studies, and regulatory activities. We expect to incur operating losses for at least the next few years. We expect substantially all of our operating losses to

result from costs incurred in connection with our commercialization activities, including manufacturing costs, and development programs, including our clinical, non-clinical and formulation development activities. Our expenses over the next several years are expected to primarily relate to commercialization activities and continuing to develop our other current and future product candidates. In addition, we may incur costs associated with the acquisition or in-license of products and successful commercialization of the acquired or in-licensed products.

Our pipeline also includes other early-stage product candidates, including two novel NMBs and a related proprietary chemical reversal agent and Dex-IN, a proprietary intranasal formulation of dexmedetomidine, or Dex, an alpha-4 adrenergic agonist that we are evaluating for possible partnering.

Recent Developments

Reverse Stock Split

On November 30, 2022, we filed Articles of Amendment to the Company's Articles of Incorporation, as amended, with the Secretary of State of the Commonwealth of Pennsylvania, to effect a reverse stock split of our common stock at a rate of one for forty (1-for-40), which became effective as of December 1, 2022. The reverse stock split does not have any impact on the number of authorized shares of common stock. Unless otherwise noted, the share and per share information in this prospectus reflects the reverse stock split of our outstanding common stock at a one for forty (1-for-40) ratio.

Going Concern

Our management has concluded that substantial doubt exists about our ability to continue as a going concern for one year from the date of this prospectus. We do not expect that the net proceeds from this offering will be sufficient to allow us to continue as a going concern for one year from the date of this prospectus. If we were to receive net proceeds of \$8.8 million from this offering, we believe that the net proceeds from this offering, together with our existing cash and cash equivalents, will meet our capital needs in to March 2023. If we receive the above \$8.8 million in this offering, and if we raise an additional \$1.2 million in net proceeds through the sale of securities or otherwise, we believe that we will then meet our capital needs through the end of the first quarter of 2023 and our anticipated announcement of top line results for our double blind, active controlled Phase 2 surgery clinical trial in which BX 1000 is used in intubation of the patient. If we were to receive net proceeds of \$5.0 million from this offering, we believe that the net proceeds from this offering, together with our existing cash and cash equivalents, will meet our capital needs through early February 2023 and our anticipated announcement of the results of our planned interim analysis of our double blind, active controlled Phase 2 surgery clinical trial in which BX 1000 is used in intubation of the patient.

Nasdaq Notice

On November 15, 2022, we received a letter from The Nasdaq Stock Market LLC, or Nasdaq, indicating that we are not in compliance with Nasdaq Listing Rule 5550(b)(1), which requires companies listed on The Nasdaq Capital Market to maintain a minimum of \$2,500,000 in stockholders' equity for continued listing. We reported shareholders' equity of (\$19,540,000) on our quarterly report for the quarter ended September 30, 2022, and, as a result, we do not currently satisfy Listing Rule 5550(b)(1). Nasdaq's letter has no immediate impact on the listing of our common stock, which will continue to be listed and traded on The Nasdaq Capital Market, subject to our compliance with the other continued listing requirements. We have until December 30, 2022 to submit a plan to regain compliance to Nasdaq. If the plan is accepted, we can be granted up to 180 calendar days from November 15, 2022 to evidence compliance. We intend to take all reasonable measures available to regain compliance under the Nasdaq Listing Rules and remain listed on Nasdaq and we are currently evaluating our available options to resolve the deficiency and regain compliance with the Nasdaq minimum stockholders' equity requirement. There can be no assurance that we will regain compliance with NASDAQ Listing Rule 5550(b)(1), and if we are unable to regain compliance, we may not be permitted to remain listed on the Nasdaq.

Risks Associated with this Offering

This offering is subject to numerous risks and uncertainties, including those highlighted in the section entitled “Risk Factors” immediately following this prospectus summary and the similarly titled sections in the documents incorporated by reference into this prospectus. These risks include, but are not limited to, the following:

- Our business has incurred significant losses and we may continue to incur significant losses for the foreseeable future. We may never achieve profitability and these factors raise substantial doubt about our ability to continue as a going concern absent obtaining adequate new debt or equity financings.
- If we are unable to regain compliance with the listing standards of Nasdaq, our common stock may become delisted, which could have a material adverse effect on the liquidity of our common stock and our ability to raise funding.
- Management will have broad discretion as to the use of the proceeds from this offering, and we may not use the proceeds effectively.
- You will experience immediate dilution in the book value per share of the common stock purchased in the offering.
- Issuances of shares of common stock or securities convertible into or exercisable for shares of common stock following this offering, as well as the exercise of options outstanding, will dilute your ownership interests and may adversely affect the future market price of our common stock.
- A substantial number of shares of common stock may be sold in the market following this offering, which may depress the market price for our common stock.
- There is no public market for the warrants being offered in this offering.
- The holders of warrants purchased in this offering will have no rights as common shareholders until such holders exercise their warrants and acquires our common shares, except as set forth in the warrants.
- The warrants are speculative in nature.
- The market price for our common stock has been volatile and may continue to fluctuate or may decline significantly in the future.
- We have incurred significant indebtedness, which could adversely affect our business, including as a result of any default thereof.

Corporate Information

We were incorporated as a Delaware corporation in 2015 and converted to a Pennsylvania corporation in September 2019. Our principal executive offices are located at 490 Lapp Road, Malvern, PA 19355, and our telephone number is (484) 395-2440.

Available Information

Our website address is www.baudaxbio.com. Any information contained on, or that can be accessed through, our website is not incorporated by reference into, nor is it in any way part of this prospectus and should not be relied upon in connection with making any decision with respect to an investment in our securities. We are required to file annual, quarterly and current reports, proxy statements and other information with the Securities and Exchange Commission, or the SEC. You may obtain any of the documents filed by us with the SEC, at no cost from the SEC’s website at www.sec.gov.

Implications of Being an Emerging Growth Company

We are an “emerging growth company” as defined in the Jumpstart Our Business Startups Act of 2012, as amended, or JOBS Act. We will remain an emerging growth company until December 31, 2024, unless our gross revenue exceeds \$1.235 billion in any fiscal year before that date, we issue more than \$1.0 billion of non-convertible debt in any three-year period before that date or the market value of our common stock held by non-affiliates exceeds \$700.0 million as of the last business day of the second fiscal quarter of any fiscal year before that date. We have elected to take advantage of certain of the scaled disclosure available for emerging growth companies in this prospectus as well as our filings under the Exchange Act of 1934, or the Exchange Act, including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation and financial statements in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote to approve executive compensation and shareholder approval of any golden parachute payments not previously approved. We will take advantage of these reporting exemptions until we are no longer an “emerging growth company.” The JOBS Act provides that an “emerging growth company” can take advantage of an extended transition period for complying with new or revised accounting standards. We have irrevocably elected not to avail ourselves of this exemption and, therefore, we are subject to the same new or revised accounting standards as other public companies that are not “emerging growth companies.”

THE OFFERING	
Securities we are offering	Up to 1,794,688 shares of our common stock and accompanying Series A-3 warrants to purchase up to 1,794,688 shares of common stock and Series A-4 warrants to purchase up to 1,794,688 shares of common stock, or up to 1,794,688 Series C pre-funded warrants to purchase 1,794,688 shares of common stock and accompanying Series A-3 warrants to purchase shares up to 1,794,688 shares of common stock and Series A-4 warrants to purchase up to 1,794,688 shares of common stock. The shares, or Series C pre-funded warrants, and in each case the accompanying Series A warrants will be separately transferable immediately upon issuance, but the shares, or Series C pre-funded warrants, and in each case the accompanying Series A warrants will be issued to purchasers in the ratio of one to one.
Description of Series A warrants	Each Series A-3 warrant will have an exercise price of \$ per share, will be exercisable upon issuance and will expire five years from the date of issuance. Each Series A-4 warrant will have an exercise price of \$ per share, will be exercisable upon issuance and will expire thirteen months from the date of issuance.
Description of Series C pre-funded warrants	If the issuance of shares of our common stock to a purchaser in this offering would result in such purchaser, together with its affiliates and certain related parties, beneficially owning more than 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding common stock following the consummation of this offering, then such purchaser may purchase, if they so choose, in lieu of the shares of our common stock that would result in such excess ownership, a Series C pre-funded warrant to purchase shares of our common stock for a purchase price per share of common stock subject to such Series C pre-funded warrant equal to the per share public offering price for the common stock to be sold in this offering less \$0.01. Each Series C pre-funded warrant will have an exercise price of \$0.01 per share, will be exercisable upon issuance and may be exercised at any time until all of the pre-funded warrants are exercised in full. Purchasers of Series C pre-funded warrants will also receive accompanying Series A warrants as if such purchasers were buying shares of our common stock in this offering. This prospectus also relates to the offering of the shares of common stock issuable upon exercise of these Series C pre-funded warrants.
Term of the offering	This offering will terminate on December 16, 2022, unless we decide to terminate the offering (which we may do at any time in our discretion) prior to that date.
Common stock outstanding before offering:	500,094 shares of common stock.

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Common stock outstanding after this offering	2,294,782 shares of common stock, assuming no sale of Series C pre-funded warrants in this offering and no exercise of the Series A warrants being issued in this offering.
Use of proceeds	We currently intend to use the net proceeds from this offering for working capital, pipeline development activities and general corporate purposes. See “Use of Proceeds” on page 14 of this prospectus.
Risk factors	See “Risk Factors” beginning on page 10 and the similarly titled sections in the documents incorporated by reference into this prospectus.
Nasdaq Capital Market Symbol	Our common stock is listed on the Nasdaq Capital Market under the symbol “BXRX.” There is no established trading market for the Series A warrants or the Series C pre-funded warrants, and we do not expect a trading market to develop. We do not intend to list the Series A warrants or the Series C pre-funded warrants on any securities exchange or other trading market. Without a trading market, the liquidity of the Series A warrants or Series C pre-funded warrants will be extremely limited.
Reverse Stock Split	The number of shares of common stock, Series C pre-funded warrants, Series A-3 warrants and Series A-4 warrants in this prospectus reflects a reverse stock split of our common stock at a one-for-forty (1-for-40) ratio.
The number of shares of our common stock to be outstanding immediately after this offering is based on 500,094 shares of our common stock outstanding as of November 29, 2022, and excludes as of such date:	
<ul style="list-style-type: none">• 2,027 shares of our common stock issuable upon the exercise of stock options outstanding, at a weighted-average exercise price of \$3,490.57 per share;• 13,149 shares of our common stock issuable upon the vesting and settlement of restricted stock units outstanding;• 2,908 shares of our common stock available for future issuance under our 2019 Equity Incentive Plan; and• 782,410 shares of our common stock issuable upon the exercise of warrants outstanding as of November 29, 2022 with a weighted-average exercise price of \$34.08 per share.	
Unless otherwise indicated, all information contained in this prospectus assumes:	
<ul style="list-style-type: none">• no exercise of the outstanding options or warrants, and no settlement of the restricted stock units described in the bullets above;• no exercise of the Series A warrants or the Placement Agent Warrants issued in this offering; and• no sale of Series C pre-funded warrants in this offering.	

RISK FACTORS

An investment in our securities involves a high degree of risk. Before deciding whether to invest in our securities, you should carefully consider the risks described below and those discussed under the Section captioned “Risk Factors” contained in our Annual Report on Form 10-K for the year ended December 31, 2021, as revised or supplemented by our subsequent quarterly reports on Form 10-Q or our current reports on Form 8-K, each as filed with the SEC and which are incorporated by reference in this prospectus, together with other information in this prospectus, the information and documents incorporated by reference herein, and in any free writing prospectus that we have authorized for use in connection with this offering. If any of these risks actually occurs, our business, financial condition, results of operations or cash flow could be seriously harmed. This could cause the trading price of our common stock to decline, resulting in a loss of all or part of your investment. Please also read carefully the section above entitled “Forward-Looking Statements.”

Risks Related to This Offering

Management will have broad discretion as to the use of the proceeds from this offering, and we may not use the proceeds effectively.

Our management will have broad discretion with respect to the use of proceeds of this offering, including for any of the purposes described in the section of this prospectus entitled “Use of Proceeds.” You will be relying on the judgment of our management regarding the application of the proceeds of this offering. The results and effectiveness of the use of proceeds are uncertain, and we could spend the proceeds in ways that you do not agree with or that do not improve our results of operations or enhance the value of our common stock. Our failure to apply these funds effectively could harm our business, delay the development of our pipeline product candidates and cause the price of our common stock to decline.

You will experience immediate dilution in the book value per share of the common stock purchased in the offering.

Since the public offering price of our common stock in this offering is substantially higher than the net tangible book value per share of our outstanding common stock outstanding prior to this offering, you will suffer dilution in the book value of the common stock you purchase in this offering. The exercise of outstanding stock options and warrants, including warrants sold in this offering and the placement agent warrants, may result in further dilution of your investment. See the section titled “Dilution” for a more detailed discussion of the dilution you will incur if you purchase shares in this offering.

Issuances of shares of common stock or securities convertible into or exercisable for shares of common stock following this offering, as well as the exercise of options outstanding, will dilute your ownership interests and may adversely affect the future market price of our common stock.

We may need additional capital to fund the development, registration and commercialization of our product candidates. We may seek additional capital through a combination of private and public equity offerings, debt financings, strategic partnerships and alliances and licensing arrangements, which may cause your ownership interest to be diluted. In addition, we have a significant number of options and warrants to purchase shares of our common stock outstanding. If these securities are exercised, you may incur further dilution. Moreover, to the extent that we issue additional options to purchase, or securities convertible into, exercisable or exchangeable for, shares of our common stock in the future and those options or other securities are exercised, converted or exchanged, shareholders may experience further dilution.

A substantial number of shares of common stock may be sold in the market following this offering, which may depress the market price for our common stock.

Sales of a substantial number of shares of our common stock in the public market following this offering could cause the market price of our common stock to decline. A substantial majority of the outstanding shares of our

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common stock are, and the shares of common stock sold in this offering upon issuance will be, freely tradable without restriction or further registration under the Securities Act of 1933, as amended, or the Securities Act.

Upon completion of this offering, based on our shares outstanding as of November 29, 2022, we will have 2,294,782 shares of common stock outstanding, assuming full exercise of the Series C pre-funded warrants sold in this offering, which may be resold into the public market immediately without restriction, unless owned or purchased by our “affiliates” as that term is defined in Rule 144 under the Securities Act.

As of November 29, 2022, there were approximately 15,176 shares subject to outstanding options and restricted stock unit awards or that are otherwise issuable under our equity compensation plans, all of which shares we have registered or will register under the Securities Act on a registration statement on Form S-8. The registered shares can be freely sold in the public market upon issuance, subject to volume limitations applicable to affiliates, to the extent applicable. As of November 29, 2022, we had outstanding warrants exercisable for 782,410 shares of common stock with a weighted-average exercise price of \$34.08 per share. The shares of our common stock underlying such warrants will, upon issuance, be freely tradeable without restriction or further registration under the Securities Act.

There is no public market for the warrants being offered in this offering.

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

The holders of warrants purchased in this offering will have no rights as common shareholders until such holders exercise their warrants and acquires our common shares, except as set forth in the warrants.

Until a holder of warrants acquires the shares of common stock upon exercise of the warrants, such holder will have no rights with respect to the shares of common stock underlying such warrants, except as set forth in the warrants. Upon exercise of the warrants, holders will be entitled to exercise the rights of common shareholders only as to matters for which the record date occurs after the exercise date.

The warrants are speculative in nature.

The warrants do not confer any rights of common stock ownership on their holders, such as voting rights or the right to receive dividends, but rather merely represent the right to acquire shares of common stock at a fixed price for a limited period of time. Specifically, holders of the warrants may exercise their right to acquire the common stock and pay an exercise price of \$ per share for the Series A-3 warrants, \$ per share for the Series A-4 warrants and \$0.01 per share for the Series C pre-funded warrants, subject to certain adjustments, commencing immediately upon issuance and for the Series A-3 warrants, for a five-year period, after which period any unexercised Series A-3 warrants will expire and have no further value and for the Series A-4 warrants, for a thirteen month period, after which period any unexercised Series A-4 warrants will expire and have no further value. There can be no assurance that the market price of the common stock will ever equal or exceed the exercise price of the warrants, and consequently, it may not ever be profitable for holders of the warrants to exercise the warrants.

The market price for our common stock has been volatile and may continue to fluctuate or may decline significantly in the future.

An active, liquid and orderly market for our common stock may not be sustained, which could depress the trading price of our common stock or cause it to continue to be highly volatile or subject to wide fluctuations.

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Some of the factors that could negatively affect our share price or result in fluctuations in the price or trading volume of our common stock include, among other things:

- our ability to successfully commercialize or monetize ANJESO® (meloxicam) injection, or ANJESO;
- our ability to identify a strategic partner with appropriate sales and marketing capabilities and to enter into a strategic partnership on commercially acceptable terms with such partner or discontinue commercialization of ANJESO within or outside of the United States;
- our ability to effectively manage the levels of production, distribution and delivery of ANJESO through our supply chain;
- our ability to leverage our development experience to progress our other pipeline product candidates;
- our ability to identify and successfully acquire orin-license new product candidates on acceptable terms;
- United States Food and Drug Administration, state or international regulatory actions, including actions on regulatory applications for ANJESO or any of our product candidates;
- legislative or regulatory changes;
- judicial pronouncements interpreting laws and regulations;
- changes in government programs;
- announcements of new products, services or technologies, commercial relationships, acquisitions or other events by us or our competitors;
- market conditions in the pharmaceutical and biotechnology sectors;
- fluctuations in stock market prices and trading volumes of similar companies;
- changes in accounting principles;
- litigation or public concern about the safety of our products or product candidates or similar products or product candidates;
- sales of large blocks of our common stock, including sales by our executive officers, directors and significant shareholders;
- our announcement of financing transactions, including debt, convertible notes, warrant exchanges, etc.;
- our ability to have sufficient authorized shares of our common stock available;
- our ability to regain compliance with the Nasdaq Stock Market, or Nasdaq, listing requirements;
- the continued negative effects of the COVID-19 pandemic on the global economy; and
- actions by institutional shareholders.

These broad market and industry factors may decrease the market price of our common stock, regardless of our actual operating performance. The stock market in general has from time to time experienced extreme price and volume fluctuations, including recently. In addition, in the past, following periods of volatility in the overall market and decreases in the market price of a company's securities, securities class action litigation has often been instituted against these companies. This litigation, if instituted against us, could result in substantial costs and a diversion of our management's attention and resources.

This is a best efforts offering, no minimum amount of securities is required to be sold, and we may not raise the amount of capital we believe is required for our business plans, including our near-term business plans.

The placement agent has agreed to use its reasonable best efforts to solicit offers to purchase the securities in this offering. The placement agent has no obligation to buy any of the securities from us or to arrange for the

purchase or sale of any specific number or dollar amount of the securities. There is no required minimum number of securities that must be sold as a condition to completion of this offering. Because there is no minimum offering amount required as a condition to the closing of this offering, the actual offering amount, placement agent fees and proceeds to us are not presently determinable and may be substantially less than the maximum amounts set forth herein. We may sell fewer than all of the securities offered hereby, which may significantly reduce the amount of proceeds received by us, and investors in this offering will not receive a refund in the event that we do not sell an amount of securities sufficient to support our continued operations, including our near-term continued operations. Thus, we may not raise the amount of capital we believe is required for our operations in the short-term and may need to raise additional funds to complete such short-term operations. Such additional fundraises may not be available or available on terms acceptable to us.

Risks Related to Our Finances and Capital Requirements

Our losses, negative cash flows from operations and accumulated deficit raise substantial doubt about our ability to continue as a going concern absent obtaining adequate new debt or equity financings.

Management has concluded that substantial doubt exists about our ability to continue as a going concern for the next twelve months from the date hereof. We do not expect that the net proceeds from this offering will be sufficient to allow us to continue as a going concern for one year from the date of this prospectus. As of September 30, 2022, we had an accumulated deficit of \$181.7 million, cash and cash equivalents of \$5.65 million and current liabilities of \$21.28 million. Based on available resources, we believe that, prior to this offering, our cash and cash equivalents on hand would be sufficient to fund our currently anticipated operating and capital requirements through early 2023. If we were to receive net proceeds of \$8.8 million from this offering, we believe that the net proceeds from this offering, together with our existing cash and cash equivalents, will meet our capital needs in to March 2023. If we receive the above \$8.8 million in this offering, and if we raise an additional \$1.2 million in net proceeds through the sale of securities or otherwise, we believe that we will then meet our capital needs through the end of the first quarter of 2023 and our anticipated announcement of top line results for our double blind, active controlled Phase 2 surgery clinical trial in which BX 1000 is used in intubation of the patient. If we were to receive net proceeds of \$5.0 million from this offering, we believe that the net proceeds from this offering, together with our existing cash and cash equivalents, will meet our capital needs through early February 2023 and our anticipated announcement of the results of our planned interim analysis of our double blind, active controlled Phase 2 surgery clinical trial in which BX 1000 is used in intubation of the patient. However, because there is no minimum offering amount required as a condition to the closing of this offering, the actual offering amount, placement agent fees and proceeds to us are not presently determinable and may be substantially less than the maximum amounts set forth herein.

We did not become a revenue-generating company until the second quarter of 2020, following the commercial launch of ANJESO. We expect to continue to incur losses for the foreseeable future as we continue our efforts to monetize ANJESO and develop our other current and future product candidates. We have also incurred significant indebtedness. As of September 30, 2022, we had an outstanding balance of \$8.9 million under our credit facility with MAM Eagle Lender. These factors, individually and collectively, raise substantial doubt about our ability to continue as a going concern, and therefore, could materially limit our ability to raise additional funds through an issuance of debt or equity securities or otherwise.

Our forecast of the period of time through which our financial resources will be adequate to support our operating requirements is a forward-looking statement and involves risks and uncertainties, and actual results could vary as a result of a number of factors, including the factors discussed elsewhere in this “Risk Factors” section and Part I, Item 1A “Risk Factors” of our Annual Report on Form 10-K filed with the SEC on March 16, 2022, as revised or supplemented by our subsequent quarterly reports on Form 10-Q or our current reports on Form 8-K, each as filed with the SEC. We have based this estimate on a number of assumptions that may prove to be wrong and changing circumstances beyond our control may cause us to consume capital more rapidly than we currently anticipate. Our inability to obtain additional funding when we need it could seriously harm our business.

We have incurred significant indebtedness, which could adversely affect our business, including as a result of any default thereof.

As of September 30, 2022, we had an outstanding balance of \$8.9 million under our credit agreement with MAM Eagle Lender. Our indebtedness could have important consequences to our shareholders. For example, it:

- increases our vulnerability to adverse general economic and industry conditions;
- limits our flexibility in planning for, or reacting to, changes in our business or the industries in which we operate;
- reduces proceeds we may receive as a result of any sale;
- limits our ability to obtain additional financing or refinancing in the future for working capital, clinical trials, research and development, or other purposes; and
- places us at a competitive disadvantage compared to our competitors that have less indebtedness.

Any of the above-listed factors could materially adversely affect our business, financial condition, results of operations and cash flows.

Our credit agreement with MAM Eagle Lender also contains certain financial and other covenants, and includes limitations on, among other things, additional indebtedness, paying dividends in certain circumstances, and making certain acquisitions and investments. The credit agreement provides for certain mandatory prepayment events, including with respect to the net proceeds of asset sales, extraordinary receipts, casualty payments and other specified events, based on the terms of the credit agreement with MAM Eagle Lender.

On October 24, 2022, we entered into Amendment No. 2 and Waiver to Credit Agreement, or the Amendment, with MAM Eagle Lender. Pursuant to the terms of the Amendment, the credit agreement is amended such that we must repay the principal thereunder (i) on the first business day of each month, each, an Interest Payment Date, until the Interest Payment Date on December 1, 2022, in equal monthly installments of principal based on an amortization schedule of 36 months, (ii) an additional payment of principal in the amount of \$300,000 prior to December 31, 2022 and (iii) commencing on the Interest Payment Date on January 2, 2023 and on each Interest Payment Date thereafter until the obligations have been repaid in full, the principal amount of \$500,000.

In addition, the Amendment decreases the minimum cash covenant we are required to maintain under the credit agreement, or the Minimum Liquidity Covenant, to (i) \$3.0 million for the period beginning on October 1, 2022, and ending on December 6, 2022, (ii) \$4.5 million for the period beginning on December 7, 2022, and ending on February 28, 2023, and (iii) \$4.0 million from and after March 1, 2023. Further, we have agreed that prior to December 31, 2022, we will not, without the prior written consent of MAM Eagle Lender, make or permit any payment under our agreements with Alkermes.

We intend to remain in discussion with MAM Eagle Lender regarding the appropriate cash level for the Minimum Liquidity Covenant, however, any failure to comply with the terms, covenants and conditions of the credit agreement, as amended, including the Minimum Liquidity Covenant, may result in an event of default under such agreement, which could have a material adverse effect on our business, financial condition and results of operation, and could result in the filing of a voluntary or involuntary bankruptcy petition.

We are not in compliance with Nasdaq Listing Rule 5550(b)(1) and there can be no assurance that we will regain compliance with NASDAQ Listing Rule 5550(b)(1), and if we are unable to regain compliance, we may not be permitted to remain listed on the Nasdaq.

On November 15, 2022, we received a letter from The Nasdaq Stock Market LLC, or Nasdaq, indicating that we are not in compliance with Nasdaq Listing Rule 5550(b)(1), which requires companies listed on The Nasdaq Capital Market to maintain a minimum of \$2,500,000 in stockholders' equity for continued listing. We reported

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shareholders' equity of (\$19,540,000) on our quarterly report for the quarter ended September 30, 2022, and, as a result, we do not currently satisfy Listing Rule 5550(b)(1). Nasdaq's letter has no immediate impact on the listing of our common stock, which will continue to be listed and traded on The Nasdaq Capital Market, subject to our compliance with the other continued listing requirements. We have until December 30, 2022 to submit a plan to regain compliance to Nasdaq. If the plan is accepted, we can be granted up to 180 calendar days from November 15, 2022 to evidence compliance. We intend to take all reasonable measures available to regain compliance under the Nasdaq Listing Rules and remain listed on Nasdaq and we are currently evaluating our available options to resolve the deficiency and regain compliance with the Nasdaq minimum stockholders' equity requirement. There can be no assurance that we will regain compliance with NASDAQ Listing Rule 5550(b)(1), and if we are unable to regain compliance, we may not be permitted to remain listed on the Nasdaq.

USE OF PROCEEDS

We estimate that the net proceeds from this offering will be approximately \$8.8 million based on the sale of 1,794,688 shares of common stock Series A-3 warrants to purchase 1,794,688 shares of common stock and Series A-4 warrants to purchase 1,794,688 shares of common stock at an assumed combined public offering price of \$0.1393 (\$5.572 after giving effect to a one-for-forty (1-for-40) reverse stock split) per share of common stock and accompanying Series A warrants, which is equal to the last reported sale price per share of our common stock on the Nasdaq Capital Market on November 29, 2022, after deducting the placement agent fees and estimated offering expenses payable by us, and assuming no sale of Series C pre-funded warrants in this offering and no exercise of the Series A warrants being issued in this offering. However, because this is a best efforts offering and there is no minimum offering amount required as a condition to the closing of this offering, the actual offering amount, the placement agent's fees and net proceeds to us are not presently determinable and may be substantially less than the maximum amounts set forth on the cover page of this prospectus. The table below depicts how we plan to utilize the proceeds in the event that 25%, 50%, 75% and 100% of the securities in this offering are sold, after deducting estimated offering expenses payable by us:

<i>Use of Proceeds</i>	100%	75%	50%	25%
Pipeline Development Activities	\$ 5,280,000	\$ 3,960,000	\$ 2,640,000	\$ 1,320,000
General Corporate Purposes/Working Capital	\$ 3,520,000	\$ 2,640,000	\$ 1,760,000	\$ 880,000
Total:	\$ 8,800,000	\$ 6,600,000	\$ 4,400,000	\$ 2,200,000

These estimates exclude the proceeds, if any, from the exercise of Series A warrants issued in this offering. If all of the Series A-3 warrants issued in this offering were to be exercised in cash at an assumed exercise price of \$ per share of common stock, we would receive additional proceeds of approximately \$ million and if all of the Series A-4 warrants issued in this offering were to be exercised in cash at an exercise price of \$ per share of common stock, we would receive additional proceeds of approximately \$ million. We cannot predict when or if these Series A warrants will be exercised. It is possible that these Series A warrants may expire and may never be exercised. Additionally, the Series A warrants contain a cashless exercise provision that permit exercise of Series A warrants on a cashless basis at any time where there is no effective registration statement under the Securities Act covering the issuance of the underlying shares.

We intend to use the net proceeds of this offering for pipeline development activities and general corporate purposes. General corporate purposes may include, and are not limited to, costs associated with, research and development costs, manufacturing costs, the acquisition or licensing of other businesses, products or product candidates, working capital and capital expenditures. These expected uses represent our intentions based upon our current plans and business conditions, which could change in the future as our plans and business conditions evolve. The amounts and timing of our actual expenditures may vary significantly depending on numerous factors, including the progress of our development, the status of and results from clinical trials, as well as any new collaborations that we may enter into with third parties for our product candidates, the commercialization of our products or our product candidates, if approved, and any unforeseen cash needs. As a result, our management will have broad discretion in the application of the net proceeds from this offering, and the investors will be relying on the judgment of our management regarding the application of the net proceeds from this offering. Pending application of the net proceeds as described above, we intend to invest the net proceeds of this offering in short-term, investment-grade, interest-bearing securities.

DIVIDEND POLICY

We have never declared or paid any cash dividends on our common stock and our ability to pay cash dividends is currently restricted by the terms of our credit facility with MAM Eagle Lender, LLC. We currently intend to retain all available funds and any future earnings, if any, to fund the development and expansion of our business and we do not anticipate paying any cash dividends in the foreseeable future. Any future determination to pay dividends on our common stock will be made at the discretion of our board of directors and will depend on various factors, including applicable laws, our results of operations, financial condition, future prospects, anticipated cash needs, plans for expansion and any other factors deemed relevant by our board of directors.

DILUTION

If you invest in our common stock, your interest will be immediately diluted to the extent of the difference between the public offering price per share and the as adjusted net tangible book value per share of our common stock after this offering. Net tangible book value per share represents our total tangible assets less total liabilities, divided by the number of shares of our common stock outstanding.

As of September 30, 2022, our net tangible book value was \$(23.7) million, or \$(47.33) per share of common stock, based on 500,094 shares of common stock outstanding as of September 30, 2022.

After giving effect to the sale of 1,794,688 shares of our common stock and accompanying Series A warrants at an assumed public offering price per share of common stock of \$0.1393 (\$5.572 after giving effect to a one-for-forty (1-for-40) reverse stock split), the last reported sale price of common stock on the Nasdaq Capital Market on November 29, 2022, assuming no sale of any Series C pre-funded warrants in this offering, and after deducting the estimated placement agent fees and estimated offering expenses payable by us, and excluding the proceeds, if any, from the exercise of the warrants issued in this offering, our as adjusted net tangible book value as of September 30, 2022 would have been approximately \$(14.9) million, or approximately \$(6.50) per share. This represents an immediate increase in net tangible book value to existing shareholders of \$40.83 per share and an immediate dilution in net tangible book value of \$(12.07) per share of our common stock to the investors purchasing securities in this offering.

The following table illustrates this per share dilution to the new investors purchasing shares of common stock in this offering:

Combined public offering price per share of common stock and accompanying Series A warrants	\$ 5.572
Historical net tangible book value (deficit) per share as of September 30, 2022	\$(47.33)
Increase in net tangible book value per share attributable to investors purchasing in this offering	\$ 40.83
As adjusted net tangible book value per share as of September 30, 2022 after this offering	<u>\$ (6.50)</u>
Dilution per share to investors purchasing in this offering	<u>\$(12.07)</u>

Each \$1.00 increase or decrease in the assumed public offering price per share of common stock and accompanying Series A warrants of \$0.1393 (\$5.572 after giving effect to a one-for-forty (1 for 40) reverse stock split), the last reported sale price of our common stock on the Nasdaq Capital Market on November 29, 2022, would increase or decrease the net proceeds to us from this offering by \$1.7 million, assuming that the number of share of common stock and accompanying Series A warrants offered by us, as set forth on the cover page of this prospectus, remains the same, assuming no sale of any Series C pre-funded warrants and accompanying Series A warrants, after deducting the estimated placement agent fees and estimated offering expenses payable by us, and excluding the proceeds, if any, from the exercise of the warrants issued pursuant to this offering. The as adjusted information discussed above is illustrative only and will be adjusted based on the actual public offering price and other terms of this offering as determined between us and the placement agent at pricing.

The foregoing table and calculations are based on 500,094 shares of our common stock outstanding as of September 30, 2022, and excludes:

- 2,043 shares of our common stock issuable upon the exercise of stock options outstanding, at a weighted-average exercise price of \$3,475.76 per share;
- 13,149 shares of our common stock issuable upon the vesting and settlement of restricted stock units outstanding;

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- 2,892 shares of our common stock available for future issuance under our 2019 Equity Incentive Plan; and
- 782,410 shares of our common stock issuable upon the exercise of warrants outstanding as of September 30, 2022 with an exercise price of \$34.08 per share.

DESCRIPTION OF CAPITAL STOCK

The following description of our capital stock is not complete and may not contain all the information you should consider before investing in our capital stock. This description is summarized from, and qualified in its entirety by reference to, our amended and restated certificate of incorporation, which has been publicly filed with the SEC. For more information on how you can obtain copies of our amended and restated certificate of incorporation and amended and restated bylaws, see “Where You Can Find More Information.”

Pursuant to our Amended and Restated Articles of Incorporation, our authorized capital stock consists of 190,000,000 shares of common stock, par value of \$0.01 per share, and 10,000,000 shares of preferred stock, par value \$0.01 per share, to be designated from time to time by our board of directors.

As of November 29, 2022, there were 500,094 shares of our common stock issued and outstanding and no shares of our preferred stock issued and outstanding.

Common Stock

Holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of shareholders, including the election of directors, and do not have cumulative voting rights. Directors are elected by a plurality of the votes cast.

Subject to preferences that may be applicable to any then-outstanding shares of preferred stock, holders of our common stock are entitled to receive ratably dividends when, as, and if declared by our board of directors out of funds legally available therefor, subject to any preferential dividend rights of outstanding preferred stock. In the event of our liquidation, dissolution, or winding up, holders of our common stock will be entitled to ratably receive the net assets of our company available after the payments of all debts and other liabilities and subject to the prior rights of the holders of any then-outstanding shares of preferred stock.

Holders of our common stock have no preemptive, subscription, redemption or conversion rights. The rights and privileges of the holders of the common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future.

Preferred Stock

Our board of directors has the authority, without further action by our shareholders, 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 the common stock and the voting and other rights of the holders of our common stock. We have no current plans to issue any shares of preferred stock.

Anti-Takeover Effects of Our Amended and Restated Articles of Incorporation and Our Amended and Restated Bylaws

Provisions of our Amended and Restated Articles of Incorporation and Amended and Restated Bylaws may delay or discourage transactions involving an actual or potential change of control or change in our management, including transactions in which shareholders might otherwise receive a premium for their shares, or transactions

that our shareholders might otherwise deem to be in their best interests. Therefore, these provisions could adversely affect the price of our common stock. Among other things, our Amended and Restated Articles of Incorporation and Amended and Restated Bylaws:

- divide our board of directors into three classes with staggered three-year terms;
- provide that a special meeting of shareholders may be called only by a majority of our board of directors, the chairman of our board of directors, the chief executive officer or the president;
- establish advance notice procedures with respect to shareholder proposals to be brought before a shareholder meeting and the nomination of candidates for election as directors, other than nominations made by or at the direction of the board of directors or a committee of the board of director;
- provide that shareholders may only act at a duly organized meeting; and
- provide that members of our board of directors may be removed from office by our shareholders only for cause by the affirmative vote of 75% of the total voting power of all shares entitled to vote generally in the election of directors.

Our Amended and Restated Articles of Incorporation also provide that, unless we consent in writing to the selection of an alternative forum, a state or federal court located within the County of Philadelphia in the Commonwealth of Pennsylvania will be the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of our company, (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers or other employees or our shareholders, (iii) any action asserting a claim arising pursuant to any provision of the Pennsylvania Business Corporation Law, or PBCL, or (iv) any action asserting a claim peculiar to the relationships among or between our company and our officers, directors and shareholders.

The exclusive forum provision described above is intended to apply to the fullest extent permitted by law, including to actions arising under the Securities Act or the Securities Exchange Act of 1934, or the Exchange Act. However, the enforceability of exclusive forum provisions in the governing documents of other companies has been challenged in legal proceedings, and it is possible that a court could find our forum selection provision to be inapplicable or unenforceable with respect to actions arising under the Securities Act or the Exchange Act. Even if it is accepted that our exclusive forum provision applies to actions arising under the Securities Act, shareholders will not be deemed to have waived our compliance with the federal securities laws and the rules and regulations thereunder.

Anti-Takeover Provisions under Pennsylvania Law

Provisions of the PBCL applicable to us provide, among other things, that:

- we may not engage in a business combination with an “interested shareholder,” generally defined as a holder of 20% of a corporation’s voting stock, during the five-year period after the interested shareholder became such except under certain specified circumstances;
- holders of our common stock may object to a “control transaction” involving us (a control transaction is defined as the acquisition by a person or group of persons acting in concert of at least 20% of the outstanding voting stock of a corporation), and demand that they be paid a cash payment for the “fair value” of their shares from the “controlling person or group”;
- holders of “control shares” will not be entitled to voting rights with respect to any shares in excess of specified thresholds, including 20% voting control, until the voting rights associated with such shares are restored by the affirmative vote of a majority of disinterested shares and the outstanding voting shares of the Company; and
- any “profit,” as defined, realized by any person or group who is or was a “controlling person or group” with respect to us from the disposition of any equity securities of within 18 months after the person or group became a “controlling person or group” shall belong to and be recoverable by us.

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Pennsylvania-chartered corporations may exempt themselves from these and other anti-takeover provisions. Our Amended and Restated Articles of Incorporation do not provide for exemption from the applicability of these or other anti-takeover provisions in the PBCL.

The provisions noted above may have the effect of discouraging a future takeover attempt that is not approved by our board of directors but which individual shareholders may consider to be in their best interests or in which shareholders may receive a substantial premium for their shares over the then current market price. As a result, shareholders who might wish to participate in such a transaction may not have an opportunity to do so. The provisions may make the removal of our board of directors or management more difficult. Furthermore, such provisions could result in our company being deemed less attractive to a potential acquiror and/or could result in our shareholders receiving a lesser amount of consideration for their shares of our common stock than otherwise could have been available either in the market generally and/or in a takeover.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Broadridge Corporate Issuer Solutions, Inc.

Stock Market Listing

Our shares of common stock are listed for trading on the Nasdaq Capital Market under the symbol “BXXR.”

DESCRIPTION OF SECURITIES WE ARE OFFERING

We are offering up to 1,794,688 shares of common stock, together with Series A-3 warrants to purchase 1,794,688 shares of common stock (the “Series A-3 warrants”) and Series A-4 warrants to purchase 1,794,688 shares of common stock (the “Series A-4 warrants,” and together with the Series A-3 warrants, the “Series A warrants”). We are also offering up to 1,794,688 Series C pre-funded warrants, together with Series A-3 warrants to purchase 1,794,688 shares of common stock and Series A-4 warrants to purchase 1,794,688 shares of common stock (collectively with the Series A warrants, the “warrants”) to those purchasers, whose purchase of shares of common stock in this offering would result in the purchaser, together with its affiliates and certain related parties, beneficially owning more than 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding common stock following the consummation of this offering in lieu of the shares of our common stock that would result in ownership in excess of 4.99% (or, at the election of the purchaser, 9.99%). Each Series C pre-funded warrant will be exercisable for one share of common stock. Each Series C pre-funded warrant is being issued together with the same Series A warrant described above being issued with each share common stock. The shares of common stock or Series C pre-funded warrants, as the case may be, and the Series A warrants, can only be purchased together in this offering, but the shares of common stock and Series C pre-funded warrants and Series A warrants are immediately separable and will be issued separately in this offering. We are also registering the shares of common stock and the shares of common stock issuable from time to time upon exercise of the Series C pre-funded warrants and Series A warrants offered hereby.

Common Stock

The description of our common stock under the section “Description of Our Capital Stock” in this prospectus is incorporated herein by reference.

Series A-3 Warrants

The following summary of certain terms and provisions of the Series A-3 warrants included with the shares of common stock and the Series C pre-funded warrants that are being issued hereby is not complete and is subject to, and qualified in its entirety by, the provisions of the Series A-3 warrants, the form of which will be filed as an exhibit to the registration statement of which this prospectus forms a part. Prospective investors should carefully review the terms and provisions of the form of Series A-3 warrant for a complete description of the terms and conditions of the Series A-3 warrants.

Duration and Exercise Price

Each Series A-3 warrant offered hereby will have an initial exercise price equal to \$ _____ per share of common stock. The Series A-3 warrants will be immediately exercisable and will expire five years from the date of issuance. The exercise price and number of shares of common stock issuable upon exercise is subject to appropriate adjustment in the event of stock dividends, stock splits, reorganizations or similar events affecting our common stock and the exercise price. The Series A-3 warrants will be issued separately from the common stock, or the Series C pre-funded warrants, as the case may be, in certificated form only.

Exercisability

The Series A-3 warrants will be exercisable, at the option of each holder, in whole or in part, by delivering to us a duly executed exercise notice accompanied by payment in full for the number of shares of our common stock purchased upon such exercise (except in the case of a cashless exercise as discussed below). A holder (together with its affiliates) may not exercise any portion of the Series A-3 warrant to the extent that the holder would own more than 4.99% (or, at the election of the purchaser prior to the issuance of the Series A-3 warrants, 9.99%) of the outstanding common stock immediately after exercise. Following the issuance of the Series A-3 warrants, upon notice from the holder to us, the holder may increase or decrease the amount of beneficial ownership of

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outstanding stock after exercising the holder's Series A-3 warrants up to 9.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the Series A-3 warrants and in accordance with the rules and regulations of the Securities and Exchange Commission, or the SEC, provided that any increase in the beneficial ownership limitation shall not be effective until 61 days following notice to us.

Cashless Exercise

If, at the time a holder exercises its Series A-3 warrants, a registration statement registering the issuance of the shares of common stock underlying the Series A-3 warrants under the Securities Act is not then effective or available for the issuance of such shares, then in lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of shares of common stock determined according to a formula set forth in the Series A-3 warrants.

Fractional Shares

No fractional shares of common stock will be issued upon the exercise of the Series A-3 warrants. Rather, the number of shares of common stock to be issued will be rounded up to the next whole share or we will pay a cash adjustment equal to such fraction multiplied by the exercise price to the holder.

Transferability

Subject to applicable laws, a Series A-3 warrant may be transferred at the option of the holder upon surrender of the Series A-3 warrant to us together with the appropriate instruments of transfer.

Trading Market

There is no trading market available for the Series A-3 warrants on any securities exchange or nationally recognized trading system, and we do not expect a trading market to develop. We do not intend to list the Series A-3 warrants on any securities exchange or other trading market. Without a trading market, the liquidity of the Series A-3 warrants will be extremely limited. The common stock issuable upon exercise of the Series A-3 warrants is currently listed on the Nasdaq Capital Market.

Right as a Shareholder

Except as otherwise provided in the Series A-3 warrants or by virtue of such holder's ownership of shares of our common stock, the holders of the Series A-3 warrants do not have the rights or privileges of holders of our common stock, including any voting rights, until they exercise their Series A-3 warrants.

Fundamental Transaction

In the event of a fundamental transaction, as described in the Series A-3 warrants and generally including any reorganization, recapitalization or reclassification of our common stock, the sale, transfer or other disposition of all or substantially all of our properties or assets, our consolidation or merger with or into another person, the acquisition of more than 50% of our outstanding common stock, or any person or group becoming the beneficial owner of 50% of the voting power represented by our outstanding common stock, the holders of the Series A-3 warrants will be entitled to receive upon exercise of the Series A-3 warrants the kind and amount of securities, cash or other property that the holders would have received had they exercised the Series A-3 warrants immediately prior to such fundamental transaction. In addition, in the event of a fundamental transaction which is approved by our board of directors, the holders of the Series A-3 warrants have the right to require us or a successor entity to redeem the Series A-3 warrant for cash in the amount of the Black-Scholes value of the

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unexercised portion of the Series A-3 warrant on the date of the consummation of the fundamental transaction. In the event of a fundamental transaction which is not approved by our board of directors, the holders of the Series A-3 warrants have the right to require us or a successor entity to redeem the Series A-3 warrant for the consideration paid in the fundamental transaction in the amount of the Black-Scholes value of the unexercised portion of the Series A-3 warrant on the date of the consummation of the fundamental transaction.

Series A-4 Warrants

The following summary of certain terms and provisions of the Series A-4 warrants included with the shares of common stock and the Series Cpre-funded warrants that are being issued hereby is not complete and is subject to, and qualified in its entirety by, the provisions of the Series A-4 warrants, the form of which will be filed as an exhibit to the registration statement of which this prospectus forms a part. Prospective investors should carefully review the terms and provisions of the form of Series A-4 warrant for a complete description of the terms and conditions of the Series A-4 warrants.

Duration and Exercise Price

Each Series A-4 warrant offered hereby will have an initial exercise price equal to \$ per share of common stock. The Series A-4 warrants will be immediately exercisable and will expire thirteen months from the date of issuance. The exercise price and number of shares of common stock issuable upon exercise is subject to appropriate adjustment in the event of stock dividends, stock splits, reorganizations or similar events affecting our common stock and the exercise price. The Series A-4 warrants will be issued separately from the common stock, or the Series Cpre-funded warrants, as the case may be, in certificated form only.

Exercisability

The Series A-4 warrants will be exercisable, at the option of each holder, in whole or in part, by delivering to us a duly executed exercise notice accompanied by payment in full for the number of shares of our common stock purchased upon such exercise (except in the case of a cashless exercise as discussed below). A holder (together with its affiliates) may not exercise any portion of the Series A-4 warrant to the extent that the holder would own more than 4.99% (or, at the election of the purchaser prior to the issuance of the Series A-4 warrants, 9.99%) of the outstanding common stock immediately after exercise. Following the issuance of the Series A-4 warrants, upon notice from the holder to us, the holder may increase or decrease the amount of beneficial ownership of outstanding stock after exercising the holder's Series A-4 warrants up to 9.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the Series A-4 warrants and in accordance with the rules and regulations of the Securities and Exchange Commission, or the SEC, provided that any increase in the beneficial ownership limitation shall not be effective until 61 days following notice to us.

Cashless Exercise

If, at the time a holder exercises its Series A-4 warrants, a registration statement registering the issuance of the shares of common stock underlying the Series A-4 warrants under the Securities Act is not then effective or available for the issuance of such shares, then in lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of shares of common stock determined according to a formula set forth in the Series A-4 warrants.

Fractional Shares

No fractional shares of common stock will be issued upon the exercise of the Series A-4 warrants. Rather, the number of shares of common stock to be issued will be rounded up to the next whole share or we will pay a cash adjustment equal to such fraction multiplied by the exercise price to the holder.

Transferability

Subject to applicable laws, a Series A-4 warrant may be transferred at the option of the holder upon surrender of the SeriesA-4 warrant to us together with the appropriate instruments of transfer.

Trading Market

There is no trading market available for the Series A-4 warrants on any securities exchange or nationally recognized trading system, and we do not expect a trading market to develop. We do not intend to list the Series A-4 warrants on any securities exchange or other trading market. Without a trading market, the liquidity of the Series A-4 warrants will be extremely limited. The common stock issuable upon exercise of the SeriesA-4 warrants is currently listed on the Nasdaq Capital Market.

Right as a Shareholder

Except as otherwise provided in the Series A-4 warrants or by virtue of such holder's ownership of shares of our common stock, the holders of the Series A-4 warrants do not have the rights or privileges of holders of our common stock, including any voting rights, until they exercise their SeriesA-4 warrants.

Fundamental Transaction

In the event of a fundamental transaction, as described in the Series A-4 warrants and generally including any reorganization, recapitalization or reclassification of our common stock, the sale, transfer or other disposition of all or substantially all of our properties or assets, our consolidation or merger with or into another person, the acquisition of more than 50% of our outstanding common stock, or any person or group becoming the beneficial owner of 50% of the voting power represented by our outstanding common stock, the holders of the Series A-4 warrants will be entitled to receive upon exercise of the Series A-4 warrants the kind and amount of securities, cash or other property that the holders would have received had they exercised the Series A-4 warrants immediately prior to such fundamental transaction. In addition, in the event of a fundamental transaction which is approved by our Board, the holders of the Series A-4 warrants have the right to require us or a successor entity to redeem the Series A-4 warrant for cash in the amount of the Black-Scholes value of the unexercised portion of the Series A-4 warrant on the date of the consummation of the fundamental transaction. In the event of a fundamental transaction which is not approved by our board of directors, the holders of the Series A-4 warrants have the right to require us or a successor entity to redeem the Series A-4 warrant for the consideration paid in the fundamental transaction in the amount of the Black-Scholes value of the unexercised portion of the Series A-4 warrant on the date of the consummation of the fundamental transaction.

Series C Pre-Funded Warrants

The following summary of certain terms and provisions of the Series C pre-funded warrants that are being issued hereby is not complete and is subject to, and qualified in its entirety by, the provisions of the Series C pre-funded warrant, the form of which will be filed as an exhibit to the registration statement of which this prospectus forms a part. Prospective investors should carefully review the terms and provisions of the form of Series C pre-funded warrant for a complete description of the terms and conditions of the Series C pre-funded warrants.

Duration and Exercise Price

Each Series C pre-funded warrant offered hereby will have an initial exercise price per share equal to \$0.01. The Series Cpre-funded warrants will be immediately exercisable and may be exercised at any time until all of the pre-funded warrants are exercised in full. The exercise price and number of shares of common stock issuable upon exercise is subject to appropriate adjustment in the event of stock dividends, stock splits, reorganizations or similar events affecting our common stock and the exercise price. The Series C pre-funded warrants will be issued separately from the accompanying Series A warrants, in certificated form only.

Exercisability

The Series C pre-funded warrants will be exercisable, at the option of each holder, in whole or in part, by delivering to us a duly executed exercise notice accompanied by payment in full for the number of shares of our common stock purchased upon such exercise (except in the case of a cashless exercise as discussed below). A holder (together with its affiliates) may not exercise any portion of the Series C pre-funded warrant to the extent that the holder would own more than 4.99% (or, at the election of the purchaser prior to the issuance of the Series C pre-funded warrant, 9.99%) of the outstanding common stock immediately after exercise. Following the issuance of the Series C pre-funded warrants, upon notice from the holder to us, the holder may increase or decrease the amount of beneficial ownership of outstanding stock after exercising the holder's Series C pre-funded warrants up to 9.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the Series C pre-funded warrants and in accordance with the rules and regulations of the SEC. Purchasers of Series C pre-funded warrants in this offering may also elect prior to the issuance of the Series C pre-funded warrants to have the initial exercise limitation set at 9.99% of our outstanding common stock, provided that any increase in the beneficial ownership limitation shall not be effective until 61 days following notice to us.

Cashless Exercise

In lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of shares of common stock determined according to a formula set forth in the Series C pre-funded warrants.

Transferability

Subject to applicable laws, a Series C pre-funded warrant may be transferred at the option of the holder upon surrender of the Series C pre-funded warrant to us together with the appropriate instruments of transfer.

Fractional Shares

No fractional shares of common stock will be issued upon the exercise of the Series C pre-funded warrants. Rather, the number of shares of common stock to be issued will be rounded up to the next whole share or we will pay a cash adjustment to such fraction multiplied by the exercise price to the holder.

Trading Market

There is no trading market available for the Series C pre-funded warrants on any securities exchange or nationally recognized trading system, and we do not expect a trading market to develop. We do not intend to list the Series C pre-funded warrants on any securities exchange or other trading market. Without a trading market, the liquidity of the Series C pre-funded warrants will be extremely limited. The common stock issuable upon exercise of the Series C pre-funded warrants is currently listed on the Nasdaq Capital Market.

Right as a Shareholder

Except as otherwise provided in the Series C pre-funded warrants or by virtue of such holder's ownership of shares of our common stock, the holders of the Series C pre-funded warrants do not have the rights or privileges of holders of our common stock, including any voting rights, until they exercise their Series C pre-funded warrants. The Series C pre-funded warrants will provide that holders have the right to participate in distributions or dividends paid on our common stock.

Fundamental Transaction

In the event of a fundamental transaction, as described in the Series C pre-funded warrants and generally including any reorganization, recapitalization or reclassification of our common stock, the sale, transfer or other

disposition of all or substantially all of our properties or assets, our consolidation or merger with or into another person, the acquisition of more than 50% of our outstanding common stock, or any person or group becoming the beneficial owner of 50% of the voting power represented by our outstanding common stock, the holders of the Series C pre-funded warrants will be entitled to receive upon exercise of the Series C pre-funded warrants the kind and amount of securities, cash or other property that the holders would have received had they exercised the Series C pre-funded warrants immediately prior to such fundamental transaction.

Placement Agent Warrants

The following summary of certain terms and provisions of the Placement Agent Warrants that are being issued hereby is not complete and is subject to, and qualified in its entirety by, the provisions of the Placement Agent Warrants, the form of which will be filed as an exhibit to the registration statement of which this prospectus forms a part. Prospective investors should carefully review the terms and provisions of the form of Placement Agent Warrant for a complete description of the terms and conditions of the Placement Agent Warrant.

Duration and Exercise Price

Each Placement Agent Warrant offered hereby will have an initial exercise price equal to \$ _____ per share of common stock (125% of the combined public offering price per share of common stock and Series A warrants). The Placement Agent Warrants will be immediately exercisable and will expire five years from the commencement of sales in this offering. The exercise price and number of shares of common stock issuable upon exercise is subject to appropriate adjustment in the event of stock dividends, stock splits, reorganizations or similar events affecting our common stock and the exercise price.

Exercisability

The Placement Agent Warrants will be exercisable, at the option of each holder, in whole or in part, by delivering to us a duly executed exercise notice accompanied by payment in full for the number of shares of our common stock purchased upon such exercise (except in the case of a cashless exercise as discussed below). A holder (together with its affiliates) may not exercise any portion of the Placement Agent Warrant to the extent that the holder would own more than 4.99% (or, at the election of the purchaser prior to the issuance of the Series A-3 warrants, 9.99%) of the outstanding common stock immediately after exercise, except that upon notice from the holder to us, the holder may increase or decrease the amount of beneficial ownership of outstanding stock after exercising the holder's Placement Agent Warrant up to 9.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the Placement Agent Warrants and in accordance with the rules and regulations of the SEC, provided that any increase in the beneficial ownership limitation shall not be effective until 61 days following notice to us.

Cashless Exercise

If, at the time a holder exercises its Placement Agent Warrants, a registration statement registering the issuance of the shares of common stock underlying the Placement Agent Warrants under the Securities Act is not then effective or available for the issuance of such shares, then in lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of shares of common stock determined according to a formula set forth in the Placement Agent Warrants.

Fractional Shares

No fractional shares of common stock will be issued upon the exercise of the Placement Agent Warrants. Rather, the number of shares of common stock to be issued will be rounded up to the next whole share or we will pay a cash adjustment equal to such fraction multiplied by the exercise price to the holder.

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Transferability

Subject to applicable laws, a Placement Agent Warrant may be transferred at the option of the holder upon surrender of the Placement Agent Warrant to us together with the appropriate instruments of transfer.

Trading Market

There is no trading market available for the Placement Agent Warrants on any securities exchange or nationally recognized trading system, and we do not expect a trading market to develop. We do not intend to list the Placement Agent Warrants on any securities exchange or other trading market. Without a trading market, the liquidity of the Placement Agent Warrants will be extremely limited. The common stock issuable upon exercise of the Placement Agent Warrants is currently listed on the Nasdaq Capital Market.

Right as a Shareholder

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

Fundamental Transaction

In the event of a fundamental transaction, as described in the Placement Agent Warrants and generally including any reorganization, recapitalization or reclassification of our common stock, the sale, transfer or other disposition of all or substantially all of our properties or assets, our consolidation or merger with or into another person, the acquisition of more than 50% of our outstanding common stock, or any person or group becoming the beneficial owner of 50% of the voting power represented by our outstanding common stock, the holders of the Placement Agent Warrants will be entitled to receive upon exercise of the Placement Agent Warrants the kind and amount of securities, cash or other property that the holders would have received had they exercised the Placement Agent Warrants immediately prior to such fundamental transaction. In addition, in the event of a fundamental transaction which is approved by our board of directors, the holders of the Placement Agent Warrants have the right to require us or a successor entity to redeem the Placement Agent Warrant for cash in the amount of the Black-Scholes value of the unexercised portion of the Placement Agent Warrant on the date of the consummation of the fundamental transaction. In the event of a fundamental transaction which is not approved by our board of directors, the holders of the Placement Agent Warrants have the right to require us or a successor entity to redeem the Placement Agent Warrants for the consideration paid in the fundamental transaction in the amount of the Black Scholes value of the unexercised portion of the Placement Agent Warrant on the date of the consummation of the fundamental transaction.

PLAN OF DISTRIBUTION

We have engaged H.C. Wainwright & Co., LLC, or the placement agent, to act as our exclusive placement agent to solicit offers to purchase the securities offered by this prospectus on a reasonable best efforts basis. The placement agent is not purchasing or selling any securities, nor are they required to arrange for the purchase and sale of any specific number or dollar amount of securities, other than to use their “reasonable best efforts” to arrange for the sale of the securities by us. Therefore, we may not sell the entire amount of securities being offered. There is no minimum amount of proceeds that is a condition to closing of this offering. The placement agent does not guarantee that it will be able to raise new capital in this offering. We will enter into a securities purchase agreement directly with investors in connection with this offering. The placement agent may engage one or more sub-placement agents or selected dealers to assist with the offering. The placement agent is not required to sell any specific number or dollar amount of securities but will use their best efforts to sell the securities offered. This offering will terminate on December 16, 2022, unless we decide to terminate the offering (which we may do at any time in our discretion) prior to that date. We will have one closing for all the securities purchased in this offering. The combined public offering price per share (or pre-funded warrant) and warrants will be fixed for the duration of this offering.

Fees and Expenses

The following table shows the per share and Series A warrants and Series C pre-funded warrant and Series A warrant placement agent fees and total placement agent fees we will pay in connection with the sale of the securities in this offering, assuming the purchase of all of the securities we are offering.

Per share and Series A warrants placement agent cash fees	\$
Per Series C pre-funded warrant and Series A warrants placement agent cash fees	\$
Total	\$

We have agreed to pay the placement agent a total cash fee equal to 7.0% of the gross proceeds of this offering and a management fee equal to 1.0% of the gross proceeds raised in this offering. We will also pay the placement agent a non-accountable expense allowance of \$20,000, \$15,950 for the expenses of its clearing firm, and will reimburse the placement agent’s legal fees and expenses in an amount up to \$90,000. We estimate the total offering expenses of this offering that will be payable by us, excluding the placement agent fees and expenses, will be approximately \$0.3 million. After deducting the placement agent fees and our estimated offering expenses, we expect the net proceeds from this offering to be approximately \$8.8 million.

Placement Agent Warrants

We have agreed to grant Placement Agent Warrants to the placement agent to purchase a number of shares of our common stock equal to 6.0% of the aggregate number of shares of common stock and Series C pre-funded warrants sold to the investors in this offering. The Placement Agent Warrants will have an exercise price of \$ (125% of the combined public offering price per share of common stock and Series A warrant) and will terminate on the five year anniversary of commencement of sales in this offering. The Placement Agent Warrants are registered on the registration statement of which this prospectus is a part. The form of the Placement Agent Warrants is included as an exhibit to this registration statement of which this prospectus forms a part.

Tail

We have also agreed to pay the placement agent a tail fee equal to the cash and warrant compensation in this offering, if any investor, who was contacted or introduced to us by the placement agent during the term of its engagement, provides us with capital in any public or private offering or other financing or capital raising transaction during the 12-month period following expiration or termination of our engagement of the placement agent.

Other Relationships

The placement agent acted as our exclusive placement agent for the registered direct offerings we consummated in November 2020, December 2020, January 2021, February 2021, May 2021, December 2021, May 2022 and as our underwriter in connection with an underwritten public offering we consummated in February 2022 and as our exclusive placement agent for a best efforts public offering in September 2022, in each case for which it received compensation.

From time to time, the placement agent may provide in the future, various advisory, investment and commercial banking and other services to us in the ordinary course of business, for which it may receive customary fees and commissions. Except as disclosed in this prospectus, we have no present arrangements with the placement agent for any services.

Determination of Offering Price

The combined public offering price per share and accompanying Series A warrant and the combined public offering price per Series Cpre-funded warrant and accompanying Series A warrant we are offering and the exercise prices and other terms of the warrants were negotiated between us and the investors, in consultation with the placement agent based on the trading of our common stock prior to this offering, among other things. Other factors considered in determining the public offering prices of the securities we are offering and the exercise prices and other terms of the warrants include the history and prospects of our company, the stage of development of our business, our business plans for the future and the extent to which they have been implemented, an assessment of our management, general conditions of the securities markets at the time of the offering and such other factors as were deemed relevant.

Lock-up Agreements

We and each of our officers and directors have agreed with the Placement Agent to be subject to a lock-up period of 60 days following the date of closing of the offering pursuant to this prospectus. This means that, during the applicable lock-up period, we and such persons may not offer for sale, contract to sell, sell, distribute, grant any option, right or warrant to purchase, pledge, hypothecate or otherwise dispose of, directly or indirectly, any of our shares of common stock or any securities convertible into, or exercisable or exchangeable for, shares of common stock, subject to customary exceptions. The Placement Agent may waive the terms of these lock-up agreements in its sole discretion and without notice. In addition, we have agreed to not issue any securities that are subject to a price reset based on the trading prices of our common stock or upon a specified or contingent event in the future or enter into any agreement to issue securities at a future determined price for a period of one year following the closing date of this offering, subject to an exception. The Placement Agent may waive this prohibition in its sole discretion and without notice.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Broadridge Corporate Issuer Solutions, Inc.

Nasdaq Listing

Our common stock is currently listed on the Nasdaq Capital Market under the symbol “BXRX.” On November 29, 2022, the reported closing price per share of our common stock was \$0.1393 (\$5.572 after giving effect to a one-for-forty (1 for 40) reverse stock split). We do not plan to list the warrants on the Nasdaq Capital Market or any other securities exchange or trading market.

Indemnification

We have agreed to indemnify the placement agent against certain liabilities, including liabilities under the Securities Act, or to contribute to payments the placement agent may be required to make with respect to any of these liabilities.

Regulation M

The placement agent may be deemed to be an underwriter within the meaning of Section 2(a)(11) of the Securities Act and any fees received by it and any profit realized on the sale of the securities by it while acting as principal might be deemed to be underwriting discounts or commissions under the Securities Act. The placement agent will be required to comply with the requirements of the Securities Act and the Exchange Act, including, without limitation, Rule 10b-5 and Regulation M under the Exchange Act. These rules and regulations may limit the timing of purchases and sales of our securities by the placement agent. Under these rules and regulations, the placement agent may not (i) engage in any stabilization activity in connection with our securities; and (ii) bid for or purchase any of our securities or attempt to induce any person to purchase any of our securities, other than as permitted under the Exchange Act, until they have completed their participation in the distribution.

Electronic Offer, Sale and Distribution of Securities

A prospectus in electronic format may be made available on the websites maintained by the placement agent, if any, participating in this offering and the placement agent may distribute prospectuses electronically. Other than the prospectus in electronic format, the information on these websites is not part of this prospectus or the registration statement of which this prospectus forms a part, has not been approved or endorsed by us or the placement agent, and should not be relied upon by investors.

LEGAL MATTERS

The validity of the issuance of the securities offered hereby will be passed upon for us by Troutman Pepper Hamilton Sanders LLP. The placement agent is being represented by Ellenoff Grossman & Schole LLP, New York, New York, in connection with this offering.

EXPERTS

The consolidated financial statements of Baudax Bio, Inc. as of December 31, 2021 and 2020, and for each of the years then ended, have been incorporated by reference herein 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.

The audit report covering the December 31, 2021 consolidated financial statements contains an explanatory paragraph that states that Baudax Bio, Inc. has recurring losses and negative cash flows from operations and has an accumulated deficit of \$132.1 million as of December 31, 2021 that raise substantial doubt about the entity's ability to continue as a going concern. The consolidated financial statements do not include any adjustments that might result from the outcome of that uncertainty.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus forms part of a registration statement on FormS-1 that we filed with the SEC. This prospectus does not contain all of the information set forth in the registration statement and the exhibits to the registration statement or the documents incorporated by reference herein and therein. For further information with respect to us and the securities that we are offering under this prospectus, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement and the documents incorporated by reference herein and therein. You should rely only on the information contained in this prospectus or incorporated by reference herein or therein. We have not authorized anyone else to provide you with different information. We are not making an offer of these securities in any state where the offer is not permitted. You should not assume that the information in this prospectus is accurate as of any date other than the date on the front page of this prospectus, regardless of the time of delivery of this prospectus or any sale of the securities offered hereby. We file annual, quarterly and current reports, proxy statements and other information with the SEC. The SEC maintains a website that contains reports, proxy statements and other information regarding issuers that file electronically with the SEC, including Baudax Bio. The address of the SEC website is www.sec.gov.

We maintain a website at www.baudaxbio.com. Information contained in or accessible through our website does not constitute a part of this prospectus.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to “incorporate by reference” information from other documents that we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus. Information in this prospectus supersedes information incorporated by reference that we filed with the SEC prior to the date of this prospectus, while information that we file later with the SEC will automatically update and supersede the information in this prospectus. We incorporate by reference into this prospectus and the registration statement of which this prospectus is a part the information or documents listed below that we have filed with the SEC:

- Our Annual Report on [Form 10-K](#) for the year ended December 31, 2021 filed with the SEC on March 16, 2022;
- Our Quarterly Reports on Form 10-Q for the period ended March 31, 2022 filed with the SEC on [May 5, 2022](#) and for the period ended June 30, 2022 filed with the SEC on [August 11, 2022](#) and for the period ended September 30, 2022 filed with the SEC on [November 8, 2022](#);
- The information specifically incorporated by reference into our Annual Report on [Form 10-K](#) for the year ended December 31, 2021 from our Definitive Proxy Statement on Form [DEF 14A](#), filed on March 31, 2022;
- Our Current Reports on Form 8-K filed with the SEC (other than portions thereof furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits accompanying such reports that are related to such items) on [February 10, 2022](#), [February 15, 2022](#), [March 1, 2022](#), [March 2, 2022](#), [March 7, 2022](#), [March 31, 2022](#), [May 4, 2022](#), [May 5, 2022](#), [May 18, 2022](#), [May 20, 2022](#), [June 27, 2022](#), [July 8, 2022](#), [August 3, 2022](#), [August 25, 2022](#), [August 31, 2022](#), [September 20, 2022](#), [October 28, 2022](#), November 18, 2022, [November 30, 2022](#) and December 1, 2022 (in each case other than any portions thereof deemed furnished and not filed); and
- The description of our common stock contained in our [Form 10](#) filed with the SEC on November 8, 2019 (File No. 001-39101), including any amendment or report filed for the purpose of updating such description.

We also incorporate by reference into this prospectus all documents (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items) that are filed by us with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this prospectus but prior to the termination of the offering. These documents include periodic reports, such as Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, as well as proxy statements.

We will furnish without charge to you, upon written or oral request, a copy of any or all of the documents incorporated by reference, including exhibits to these documents by writing or telephoning us at the following address or phone number below. You may also access this information on our website at www.baudaxbio.com by viewing the “Financial & Filings” subsection of the “News & Investors” menu. No additional information is deemed to be part of or incorporated by reference into this prospectus.

Baudax Bio, Inc.
490 Lapp Road
Malvern, PA 19355
(484) 395-2440

BaudaX BIO

**Up to 1,794,688 Shares of Common Stock and
Series A-3 Warrants to Purchase up to 1,794,688 Shares of Common Stock
and Series A-4 Warrants to Purchase up to 1,794,688 Shares of Common Stock
or**

**Series C Pre-funded Warrants to Purchase up to 1,794,688 Shares of
Common Stock and**

**Series A-3 Warrants to Purchase up to 1,794,688 Shares of Common Stock
and Series A-4 Warrants to purchase up to 1,794,688 Shares of Common Stock**

Placement Agent Warrants to Purchase up to 107,681 Shares of Common Stock

Preliminary Prospectus

H.C. Wainwright & Co.

, 2022

PART II**INFORMATION NOT REQUIRED IN PROSPECTUS****Item 13. Other Expenses of Issuance and Distribution.**

The following table sets forth the fees and expenses in connection with the issuance and distribution of the securities being registered (excluding the underwriting discount). Except for the Securities and Exchange Commission registration fee and the FINRA filing fee, all amounts are estimates.

	Amount Paid or to be Paid
SEC registration fee	\$ 3,388.65
FINRA filing fee	\$ 2,000.00
Legal fees and expenses	\$ 190,000.00
Accounting fees and expenses	\$ 175,000.00
Printing expenses	\$ 40,000.00
Transfer agent fees and expenses	\$ 15,950.00
Miscellaneous	\$ —
Total	\$ 426,338.65

Item 14. Indemnification of Directors and Officers.

Our Amended and Restated Bylaws and Amended and Restated Articles of Incorporation provide that, to the fullest extent permitted by Pennsylvania law, any of our officers or directors who was or is a party or is threatened to be made a party to, any threatened, or pending or completed action, suit or proceeding, whether civil, criminal, administrative, investigative or through arbitration, by reason of fact that he/she is or was our director or officer, or is or was serving in any capacity at the request or for our benefit as a director, officer, employee, agent, partner, or fiduciary of, or in any other capacity for, another corporation or any partnership, joint venture, trust, employee benefit plan or other enterprise, shall be indemnified by us for any expense, liability and loss (including, without limitation, attorneys' fees, judgments, fines, taxes, penalties, and amounts paid or to be paid in settlement) reasonably incurred in connection with such proceeding, unless where the individual's act or failure to act giving rise to the claim for indemnification is determined by a court to have constituted self-dealing, willful misconduct or recklessness. Indemnification shall not be made in respect of any claim, issue or matter as to which the person has been adjudged to be liable to us unless and only to the extent that a court determines that, despite the adjudication of liability but in view of all the circumstances of the case, the person is fairly and reasonably entitled to indemnity for the expenses that the court deems proper.

Pennsylvania law requires that to the extent that one of our directors or officers has been successful on the merits or otherwise in defense of any action or proceeding referred to above or in defense of any claim, issue or matter therein, that director or officer shall be indemnified against expenses (including attorney fees) actually and reasonably incurred by him in connection therewith. Our Amended and Restated Bylaws further provide that the right to indemnification includes the right to have expenses reasonably incurred in defending any action or proceeding described above paid by us in advance of the final disposition of the action or proceeding to the fullest extent permitted by Pennsylvania law; provided that, if required by Pennsylvania law, the payment of such expenses incurred in advance of the final disposition of the action or proceeding shall be made only upon delivery to us of an undertaking to repay all amounts so advanced without interest if it is ultimately determined that the director or officer is not entitled to be indemnified.

We have entered into indemnification agreements with each of our directors and executive officers. These agreements require us to, among other things, indemnify each director and officer to the fullest extent permitted by law and advance expenses to each indemnitee in connection with any proceeding in which indemnification is available.

Item 15. Recent Sales of Unregistered Securities

On May 17, 2022, we entered into a Securities Purchase Agreement with certain investors named therein, pursuant to which we agreed to issue and sell, in exchange for cash, (i) in a registered direct offering, 1,646,091 shares of common stock, and, (ii) in a concurrent private placement, warrants exercisable for up to an aggregate of 1,646,091 shares of common stock, or the May Warrants, at a combined offering price of \$1.215 per share and associated May Warrant, or the May Offering. The May Warrants have an exercise price of \$1.09 per share. As compensation to the placement agent in connection with the May Offering, we paid to the placement agent a cash fee of 7.0% of the aggregate gross proceeds raised in the May Offering, plus a management fee equal to 1.0% of the gross proceeds raised in the May Offering and certain expenses. In addition, we issued warrant to purchase up to 98,765 shares of common stock at an exercise price of \$1.5188 per share, to certain designees of the placement agent, or the May Placement Agent Warrants. The May Offering closed on May 19, 2022. Neither the issuance of the May Warrants, the May Placement Agent Warrants nor the shares of common stock issuable upon the exercise of the May Warrants or the May Placement Agent Warrants are registered under the Securities Act or any state securities laws. The May Warrants, the May Placement Agent Warrant and the shares of common stock issuable upon the exercise of the May Warrants and the May Placement Agent Warrants were issued in reliance on the exemptions from registration provided by Section 4(a)(2) under the Securities Act.

Item 16. Exhibits.

(a) Exhibits

Exhibit No.	Description	Method of Filing
2.1	Separation Agreement, dated November 20, 2019, by and between Recro Pharma, Inc. and Baudax Bio, Inc.	Incorporated herein by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed on November 26, 2019 (File No. 001-39101).
3.1	Amended and Restated Articles of Organization of Baudax Bio, Inc.	Incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on November 26, 2019 (File No. 001-39101).
3.2	Articles of Amendment to the Amended and Restated Articles of Incorporation of Baudax Bio, Inc.	Incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on August 11, 2021 (File No. 001-39101).
3.3	Articles of Amendment to the Amended and Restated Articles of Incorporation of Baudax Bio, Inc.	Incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed February 15, 2022 (File No. 001-39101).
3.4	Amended and Restated Bylaws of Baudax Bio, Inc.	Incorporated herein by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K filed on November 26, 2019 (File No. 001-39101).
4.1	Form of Series A-3 Warrant	Previously filed.
4.1	Form of Series A-4 Warrant	Previously filed.
4.2	Form of Series C Pre-Funded Warrant	Previously filed.
4.3	Form of Placement Agent Warrant	Previously filed.
5.1	Opinion of Troutman Pepper Hamilton LLP	Previously filed.

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Exhibit No.	Description	Method of Filing
10.1•	<u>Form of Indemnification Agreement between Baudax Bio, Inc. and individual directors and officers.</u>	Incorporated herein by reference to Exhibit 10.4 to the Company's Registration Statement on Form 10 filed on November 5, 2019 (File No. 001-39101).
10.2†	<u>Purchase and Sale Agreement, dated March 7, 2015, by and among Recro Pharma, Inc., Recro Pharma LLC, Daravita Limited, Alkermes Pharma Ireland Limited and Eagle Holdings USA, Inc.</u>	Incorporated herein by reference to Exhibit 10.5 to the Company's Registration Statement on Form 10 filed on October 22, 2019 (File No. 001-39101).
10.3	<u>First Amendment, dated December 8, 2016 to Purchase and Sale Agreement, dated March 7, 2015, by and among Recro Pharma, Inc., Recro Pharma LLC, Daravita Limited, Alkermes Pharma Ireland Limited and Eagle Holdings USA, Inc.</u>	Incorporated herein by reference to Exhibit 10.6 to the Company's Registration Statement on Form 10 filed on October 22, 2019 (File No. 001-39101).
10.4	<u>Second Amendment, dated December 20, 2018 to Purchase and Sale Agreement, dated March 7, 2015, by and among Recro Pharma, Inc., Recro Pharma LLC, Daravita Limited, Alkermes Pharma Ireland Limited and Eagle Holdings USA, Inc.</u>	Incorporated herein by reference to Exhibit 10.7 to the Company's Registration Statement on Form 10 filed on October 22, 2019 (File No. 001-39101).
10.5	<u>Third Amendment to the Purchase and Sale Agreement, dated August 17, 2020 by and among Alkermes Pharma Ireland Limited, Daravita Limited, Alkermes US Holdings, Inc. and Baudax Bio, Inc.</u>	Incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on August 21, 2020 (File No. 001-39101).
10.6†	<u>Dexmedetomidine License Agreement, dated August 22, 2008, by and between Recro Pharma, Inc. and Orion Corporation.</u>	Incorporated herein by reference to Exhibit 10.8 to the Company's Registration Statement on Form 10 filed on October 22, 2019 (File No. 001-39101).
10.7†	<u>First Amendment to Dexmedetomidine License Agreement, dated January 17, 2009, by and between Recro Pharma, Inc., and Orion Corporation.</u>	Incorporated herein by reference to Exhibit 10.9 to the Company's Registration Statement on Form 10 filed on October 22, 2019 (File No. 001-39101).
10.8†	<u>Dexmedetomidine API Supply Agreement, dated August 22, 2008, by and between Recro Pharma, Inc., and Orion Corporation.</u>	Incorporated herein by reference to Exhibit 10.10 to the Company's Registration Statement on Form 10 filed on October 22, 2019 (File No. 001-39101).
10.9•	<u>Baudax Bio, Inc. 2019 Equity Incentive Plan.</u>	Incorporated herein by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K filed on November 26, 2019 (File No. 001-39101).
10.10†	<u>Asset Transfer and License Agreement, dated as of April 10, 2015, by and between Alkermes Pharma Ireland Limited and DV Technology LLC.</u>	Incorporated herein by reference to Exhibit 10.12 to the Company's Registration Statement on Form 10 filed on October 22, 2019 (File No. 001-39101).

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Exhibit No.	Description	Method of Filing
10.11	<u>Amendment to Asset Transfer and License Agreement, dated December 23, 2015, by and between Alkermes Pharma Ireland Limited and Recro Gainesville LLC.</u>	Incorporated herein by reference to Exhibit 10.13 to the Company's Registration Statement on Form 10 filed on October 22, 2019 (File No. 001-39101).
10.12	<u>Second Amendment to Asset Transfer and License Agreement, dated December 20, 2018, by and between Alkermes Pharma Ireland Limited and Recro Gainesville LLC.</u>	Incorporated herein by reference to Exhibit 10.14 to the Company's Registration Statement on Form 10 filed on October 22, 2019 (File No. 001-39101).
10.13	<u>Third Amendment to Asset Transfer and License Agreement, dated August 17, 2020, by and among Alkermes Pharma Ireland Limited, Recro Gainesville LLC and Baudax Bio, Inc.</u>	Incorporated herein by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on August 21, 2020 (File No. 001-39101).
10.14†	<u>Development, Manufacturing and Supply Agreement, dated July 10, 2015, by and between Alkermes Pharma Ireland Limited and Recro Pharma, Inc.</u>	Incorporated herein by reference to Exhibit 10.15 to the Company's Registration Statement on Form 10 filed on October 22, 2019 (File No. 001-39101).
10.15†	<u>First Amendment to the Development, Manufacturing and Supply Agreement, dated October 19, 2016, by and between Alkermes Pharma Ireland Limited and Recro Pharma, Inc.</u>	Incorporated herein by reference to Exhibit 10.16 to the Company's Registration Statement on Form 10 filed on October 22, 2019 (File No. 001-39101).
10.16†	<u>Second Amendment to the Development, Manufacturing and Supply Agreement, dated February 1, 2017, by and between Alkermes Pharma Ireland Limited and Recro Pharma, Inc.</u>	Incorporated herein by reference to Exhibit 10.17 to the Company's Registration Statement on Form 10 filed on October 22, 2019 (File No. 001-39101).
10.17†	<u>Third Amendment to the Development, Manufacturing and Supply Agreement, dated June 15, 2017, by and between Alkermes Pharma Ireland Limited and Recro Pharma, Inc.</u>	Incorporated herein by reference to Exhibit 10.18 to the Company's Registration Statement on Form 10 filed on October 22, 2019 (File No. 001-39101).
10.18	<u>Assignment, Assumption and Bifurcation Agreement, dated November 20, 2019, by and among Alkermes Pharma Ireland Limited, Recro Gainesville LLC, Recro Pharma, Inc. and Baudax Bio, Inc.</u>	Incorporated herein by reference to Exhibit 10.5 to the Company's Current Report on Form 8-K filed on November 26, 2019 (File No. 001-39101).
10.19†	<u>License Agreement, dated June 30, 2017, by and between Cornell University and Recro Pharma, Inc.</u>	Incorporated herein by reference to Exhibit 10.19 to the Company's Registration Statement on Form 10 filed on October 22, 2019 (File No. 001-39101).
10.20†	<u>Amendment to License Agreement, dated October 31, 2018, by and between Cornell University and Recro Pharma, Inc.</u>	Incorporated herein by reference to Exhibit 10.20 to the Company's Registration Statement on Form 10 filed on October 22, 2019 (File No. 001-39101).
10.21†	<u>Amendment to License Agreement, dated October 21, 2019, by and between Cornell University and Recro Pharma, Inc.</u>	Incorporated herein by reference to Exhibit 10.26 to the Company's Annual Report on Form 10-K filed on February 13, 2020 (File No. 001-39101).

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Exhibit No.	Description	Method of Filing
10.22†	<u>Master Manufacturing Services Agreement, dated July 14, 2017, by and between Patheon UK Limited and Recro Ireland Limited.</u>	Incorporated herein by reference to Exhibit 10.21 to the Company's Registration Statement on Form 10 filed on October 22, 2019 (File No. 001-39101).
10.23†	<u>Product Agreement, dated July 14, 2017, by and between Patheon UK Limited and Recro Ireland Limited.</u>	Incorporated herein by reference to Exhibit 10.22 to the Company's Registration Statement on Form 10 filed on October 22, 2019 (File No. 001-39101).
10.24•	<u>Form of Employment Agreement to be entered into between Baudax Bio, Inc. and its executive officers.</u>	Incorporated herein by reference to Exhibit 10.23 to the Company's Registration Statement on Form 10 filed on November 5, 2019 (File No. 001-39101).
10.25†	<u>Credit Agreement, dated as of May 29, 2020, among the Company, the lenders party thereto and Wilmington Trust, National Association.</u>	Incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on June 2, 2020 (File No. 001-39101).
10.26	<u>Security Agreement, dated as of May 29, 2020, by and among the Company, Baudax Bio N.A. LLC, Baudax Bio Limited and Wilmington Trust, National Association.</u>	Incorporated herein by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on June 2, 2020 (File No. 001-39101).
10.27	<u>Intellectual Property Security Agreement, dated as of May 29, 2020, by and among the Company, Baudax Bio N.A. LLC, Baudax Bio Limited and Wilmington Trust, National Association.</u>	Incorporated herein by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed on June 2, 2020 (File No. 001-39101).
10.28•	<u>Employment Agreement, dated February 12, 2020, between Baudax Bio, Inc. and Gerri Henwood.</u>	Incorporated herein by reference to Exhibit 10.26 to the Company's Annual Report on Form 10-K filed on February 13, 2020 (File No. 001-39101).
10.29•	<u>Employment Agreement, dated March 8, 2021, between Baudax Bio, Inc. and Richard S. Casten.</u>	Incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on March 11, 2021 (File No. 001-39101).
10.30•	<u>Form of Stock Option Award Agreement.</u>	Incorporated herein by reference to Exhibit 10.34 to the Company's Annual Report on Form 10-K filed on February 16, 2021 (File No. 001-39101).
10.31•	<u>Form of Restricted Stock Unit Award Agreement.</u>	Incorporated herein by reference to Exhibit 10.35 to the Company's Annual Report on Form 10-K filed on February 16, 2021 (File No. 001-39101).
10.32•	<u>Form of Performance-Based Restricted Stock Unit Award Agreement.</u>	Incorporated herein by reference to Exhibit 10.36 to the Company's Annual Report on Form 10-K filed on February 16, 2021 (File No. 001-39101).
10.33•	<u>Form of Award Agreement for Option Inducement Award.</u>	Incorporated herein by reference to Exhibit 10.37 to the Company's Annual Report on Form 10-K filed on February 16, 2021 (File No. 001-39101).
10.34•	<u>Form of Award Agreement for Restricted Stock Unit Inducement Award.</u>	Incorporated herein by reference to Exhibit 10.38 to the Company's Annual Report on Form 10-K filed on February 16, 2021 (File No. 001-39101).

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Exhibit No.	Description	Method of Filing
10.35	Form of Securities Purchase Agreement, by and between Baudax Bio, Inc. and the purchasers party thereto.	Previously filed.
10.36†	Amendment No. 1 and Waiver to Credit Agreement, dated August 1, 2022, by among and Baudax Bio, Inc., Baudax Bio N.A. LLC, Baudax Bio Limited, Wilmington Trust, National Association, and the Lenders party thereto	Incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on August 3, 2022 (File No. 001-39101).
10.37	Amendment No. 2 to Credit Agreement, dated October 24, 2022, by among and Baudax Bio, Inc., Baudax Bio N.A. LLC, Baudax Bio Limited, Wilmington Trust, National Association, and the Lenders party thereto	Incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on October 28, 2022 (File No. 001-39101).
10.38	Amendment No. 3 to Credit Agreement, dated December 1, 2022, by among and Baudax Bio, Inc., Baudax Bio N.A. LLC, Baudax Bio Limited, Wilmington Trust, National Association, and the Lenders party thereto.	Incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on December 1, 2022 (File No. 001-39101).
21.1	Subsidiaries of Baudax Bio, Inc.	Incorporated herein by reference to Exhibit 21.1 to the Company's Annual Report on Form 10-K filed on February 16, 2021 (File No. 001-39101).
23.1	Consent of KPMG LLP, Independent Registered Public Accounting Firm.	Incorporated herein by reference to Exhibit 23.1 to the Company's Registration Statement on Form S-1 filed on November 8, 2022 (File No. 333-268251)
23.2	Consent of Troutman Pepper Hamilton Sanders LLP (included in Exhibit 5.1)	(included in Exhibit 5.1)
24.1	Power of Attorney	Incorporated herein by reference to Exhibit 24.1 to the Company's Registration Statement on Form S-1 filed on November 8, 2022 (File No. 333-268251)
107	Filing Fee Table	Previously filed.

- Management contract or compensatory plan or arrangement.

† Certain identified information in the exhibit has been omitted because it is both (i) not material and (ii) would likely cause competitive harm to the Company if publicly disclosed.

(b) Financial Statement Schedules

All financial statement schedules have been omitted because they are not required or because the required information is given in the financial statements or notes to those statements.

Item 17. Undertakings.

The undersigned registrant hereby undertakes:

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

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

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

- (2) That, for the purposes of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at the time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (4) That, for the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:
 - (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
 - (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
 - (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
 - (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

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- (5) That, for purposes of determining any liability under the Securities Act:
- (i) the information omitted from the form of prospectus filed as part of the registration statement in reliance upon Rule 430A and contained in the form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of the registration statement as of the time it was declared effective; and
 - (ii) each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

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

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

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Malvern, Commonwealth of Pennsylvania on December 1, 2022.

Baudax Bio, Inc.

By: /s/ Gerri A. Henwood

Name: Gerri A. Henwood

Title: Chief Executive Officer

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

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Gerri A. Henwood</u> Gerri A. Henwood	President, Chief Executive Officer and Director (principal executive officer)	December 1, 2022
<u>*</u> Jillian Dilmore	Corporate Controller (principal financial and accounting officer)	December 1, 2022
<u>*</u> William L. Ashton	Director	December 1, 2022
<u>*</u> Arnold Baskies, M.D.	Director	December 1, 2022
<u>*</u> Winston J. Churchill	Director	December 1, 2022
<u>*</u> Andrew Drechsler	Director	December 1, 2022
<u>*</u> Wayne Weisman	Director	December 1, 2022

*By: /s/ Gerri A. Henwood

Gerri A. Henwood

Attorney-In-Fact