UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-3 REGISTRATION STATEMENT

UNDER
THE SECURITIES ACT OF 1933

Baudax Bio, Inc.

(Exact name of registrant as specified in its charter)

490 Lapp Road

Pennsylvania					
(State or other jurisdiction of					
incorporation or organization)					

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

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 Baudax Bio, Inc. 490 Lapp Road Malvern, PA 19355

(484) 395-2440 (Name, address including zip code, and telephone number, including area code, of agent for service)

With copies to:

Rachael M. Bushey, Esq. Jennifer L. Porter, Esq. Goodwin Procter LLP 2005 Market Street, 32nd Floor Philadelphia, PA 19103 (445) 207-7800

Approximate date of commencement of proposed sale to the public: From time to time, after the effective date of this registration statement. If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. \Box If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. $\ oxtimes$ If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. \Box 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. $\hfill\Box$ If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box. Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. П Large accelerated filer Non-accelerated filer Smaller reporting company |X|Emerging growth company X 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 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 that specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act or until this Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

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

SUBJECT TO COMPLETION, DATED JUNE 28, 2023

PRELIMINARY PROSPECTUS



Baudax Bio, Inc.

785,402 Shares of Common Stock

This prospectus relates to the resale of up to an aggregate of 785,402 shares of our common stock, par value of \$0.01 per share, or the Resale Shares, by MAM Eagle Lender, LLC, or the Selling Shareholder, including its permitted transferees, donees, pledgees, assignees or successors-in-interest, or its respective successors, from time to time, issuable upon the exercise of warrants we issued to the Selling Shareholder in May 2020 and March 2023, respectively, which we refer to herein as the 2020 Warrants and the 2023 Warrants, respectively, and collectively, the Warrants. For information about the Selling Shareholder, see "The Selling Shareholder" on page 9.

We are not selling any shares of common stock and will not receive any of the proceeds from the sale of the Resale Shares by the Selling Shareholder, pursuant to this prospectus. However, we will receive the proceeds of any cash exercise of the Warrants, if any. See "Use of Proceeds" beginning on page 8 of this prospectus for more information.

We are registering the offer and sale of the Resale Shares pursuant to a Registration Rights Agreement entered into between us and the Selling Shareholder on March 29, 2023, or the Registration Rights Agreement, in connection with that certain Amendment No. 5 and Consent to Credit Agreement, or Amendment No. 5, entered into by and among us, Baudax Bio N.A. LLC, Baudax Bio Limited, Wilmington Trust, National Associate, solely in its capacity as administrative and collateral agent and the lenders party thereto, or Amendment No. 5. The Selling Shareholder identified in this prospectus may offer the Resale Shares from time to time through public or private transactions at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices. The registration of the Resale Shares on behalf of the Selling Shareholder, however, does not necessarily mean that the Selling Shareholder will offer or sell its Resale Shares under this registration statement at any time in the near future or at all. We cannot predict when, or in what amounts, the Selling Shareholder may sell any of the Resale Shares. The timing and amount of any sale of the Resale Shares is within the sole discretion of the Selling Shareholder. We will pay the expenses of registering these Resale Shares, including legal and accounting fees. All selling and other expenses incurred by the Selling Shareholder, see "Plan of Distribution" beginning on page 15 of this prospectus.

Investing in our common stock involves a high degree of risk. You should consider carefully the <u>risk factors</u> beginning on page 7 of this prospectus before purchasing any of the Resale Shares offered by this prospectus.

Our common stock is traded on the Nasdaq Capital Market, or Nasdaq, under the symbol "BXRX." The last reported sale price of our common stock on Nasdaq on June 27, 2023, was \$0.52 per share.

We may amend or supplement this prospectus from time to time by filing amendments or supplements as required. You should read the entire prospectus and any amendments or supplements carefully before you make your investment decision.

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

The date of this prospectus is , 2023.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 under the Securities Act of 1933, as amended, or the Securities Act, that we filed with the Securities and Exchange Commission, or the SEC, using the "shelf" registration process. Under this shelf registration process, the Selling Shareholder may offer and sell the common stock described in this prospectus in one or more offerings. Any accompanying prospectus supplement or any related free writing prospectus may also add, update or change information contained in this prospectus or in any documents incorporated by reference into this prospectus. If the information varies between this prospectus and the accompanying prospectus supplement, you should rely on the information in the accompanying prospectus supplement. You should read this prospectus, any accompanying prospectus supplement and any related free writing prospectus, together with the information incorporated herein by reference as described under the heading "Where You Can Find More Information," before investing in the common stock offered hereby.

You should rely only on the information contained in or incorporated by reference into this prospectus, any accompanying prospectus supplement and any applicable free writing prospectus. Neither we nor the Selling Shareholder have authorized anyone to provide you with different information. Neither we nor the Selling Shareholder are making an offer of these securities in any jurisdiction where the offer is not permitted. You should not assume that the information contained in this prospectus, any prospectus supplement, any applicable free writing prospectus or the documents incorporated by reference, is accurate as of any date other than the dates of those documents regardless of the time of delivery of this prospectus or prospectus supplement or any sale of the Resale Shares. Since the respective dates of this prospectus and the documents incorporated by reference into this prospectus, our business, financial condition, results of operations and prospects may have changed.

For investors outside the United States, neither we nor the Selling Shareholder have done anything that would permit this offering, or possession or distribution of this prospectus, any prospectus supplement or free writing prospectus, in any jurisdiction where action for that purpose is required other than in the United States. Persons outside the United States who come into possession of this prospectus, any applicable prospectus supplement or free writing prospectus must inform themselves about, and observe any restrictions relating to, the offering of the Resale Shares and the distribution of this prospectus outside of the United States.

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.

All references to "this prospectus" refer to this prospectus and any applicable prospectus supplement, including the documents incorporated by reference herein and therein, unless the context otherwise requires.

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," "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, 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 regain compliance with the Nasdaq listing rules and maintain the listing of our common stock on the Nasdaq Capital Market;
- our ability to obtain regulatory approval for any 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 market, commercialize and achieve broad market acceptance for any of our product candidates once approved;
- our ability and that of our third-party manufacturers to successfully scale-up our clinical and commercial manufacturing process for future products;
- · 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 product candidates, optimize formulations for stability and other characteristics;
- our relationships with licensors, collaborators, other third parties and our employees;
- 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, Inc.'s acute care business and transfer of such assets to us 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-parties involved with clinical trial execution, and third-party suppliers, manufacturers, 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 develop relationships with potential business development partners;
- · our ability to defend any material litigation filed against us and avoid liabilities resulting from any material litigation;

- · our ability to recruit or retain key scientific, technical, and management personnel or to retain our executive officers;
- our ability to raise future financing for continued development of our business and our product candidates and to meet any required debt payments, and any milestone payments we may owe;
- the volatility of capital markets and other macroeconomic factors, including inflationary pressures, banking stability issues, geopolitical tensions or the outbreak of hostilities or war;
- our ability to operate under leverage and comply with associated lending covenants; to pay existing required interest and principal
 amortization payments when due; and/or to obtain acceptable refinancing alternative; and
- our expectations regarding continuing effects of the COVID-19 pandemic, including manufacturing and supply chain interruptions, 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.

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 and incorporated by reference in this prospectus, 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 description about us and our business highlights selected information contained elsewhere in this prospectus or incorporated by reference into this prospectus. It does not contain all the information you should consider before investing in our securities. You should carefully read the entire prospectus, any applicable prospectus supplement and any related free writing prospectus, including the risks of investing in our common stock discussed under the heading "Risk Factors" contained in this prospectus, any applicable prospectus supplement and any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus. You should also carefully read the information incorporated by reference into this prospectus, including our financial statements, and the exhibits to the registration statement of which this prospectus forms a part.

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 payors to the acute care and related markets.

We hold exclusive global rights to two new molecular entities, which are centrally acting neuromuscular blocking agents, or NMBs, BX1000, an intermediate duration of action NMB that recently completed a Phase II clinical trial, and BX2000, an ultra-short acting NMB currently undergoing a Phase I clinical trial. A proprietary blockade reversal agent, BX3000, is currently being evaluated in preclinical studies intended to support an Investigational New Drug application, or IND, filing expected in 2023. BX3000 is an agent that is expected to rapidly reverse BX1000 and BX2000 blockade. All three agents are licensed from Cornell University. We believe these agents, when an NMB and BX3000 are administered in succession, allow for a rapid onset of centrally acting neuromuscular blockade, followed by a rapid reversal of the neuromuscular blockade with BX3000. These novel agents have the potential to meaningfully reduce time to onset and reversal of blockade and improve the reliability of onset and offset of neuromuscular blockade. The combination of the blocking agent, and the reversal agent can potentially reduce time in operating rooms resulting in potential clinical and cost advantages, as well as valuable cost savings for hospitals and ambulatory surgical centers and has the potential for an improved clinical profile in terms of safety compared to other NMBs and reversal agents.

The Top-line results for the Phase II clinical trial for BX1000 showed that BX1000 met the primary endpoint of readiness for intubation (evaluated as "Good" or "Excellent"—Viby-Mogensen 1996) at 60 seconds for all three dose levels of BX1000 compared to the active-control, rocuronium. Study treatments were generally well tolerated, with no occurrence of severe or serious adverse events. The frequency and severity of adverse events was similar across all four dose groups, and no notable events were aggregated in any one dose group.

In mid-2020, we launched our first commercial product, ANJESO, in the United States. ANJESO was the first and only24-hour, intravenous, or IV, analgesia agent. ANJESO is a cyclooxygenase-2 preferential, non-steroidal anti-inflammatory, or NSAID, for the management of moderate to severe pain, which could be administered alone or in combination with other non-NSAID analgesics. We discontinued commercial sales of ANJESO in December 2022 and further withdrew the New Drug Application, or NDA, in March 2023.

Our costs have consisted primarily of expenses incurred in conducting our manufacturing and commercialization of ANJESO, which was discontinued in December 2022, as well as public company and personnel costs, clinical trials and preclinical studies, regulatory activities, and manufacturing costs for our NMB blocking and reversal agents. We expect to incur operating losses for at least the next several years. We expect substantially all of our operating losses to result from costs incurred in connection with our development programs, including our clinical, nonclinical and formulation development, preclinical and manufacturing related activities. Our expenses over the next several years are expected to primarily relate to developing our 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.

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."

Corporate Information

We were incorporated under the laws of the Commonwealth of Pennsylvania in September 2019. Our principal executive offices are located at 490 Lapp Road, Malvern, PA 19355, and our telephone number is (484) 395-2440.

THE OFFERING

Common Stock to be offered: 785,402 shares of our common stock issuable upon exercise of the Warrants held by the

Selling Shareholder.

Terms of the Offering: The Selling Shareholder, including its permitted transferees, donees, pledgees, assignees or

successors-in-interest, may sell, transfer or otherwise dispose of any or all of the Resale Shares offered by this prospectus from time to time on The Nasdaq Capital Market or any other stock exchange, market or trading facility on which the shares are traded or in private transactions. The Resale Shares may be sold at fixed prices, at prevailing market prices, at prices related to prevailing market prices, at negotiated prices and/or at varying prices

determined at the time of sale. See "Plan of Distribution" on page 15.

Use of Proceeds: We will not receive any proceeds from the sale of Resale Shares covered by this prospectus.

Listing and Symbols: Our common stock is listed on Nasdaq under the symbol "BXRX".

Risk Factors: Investing in our securities involves substantial risks. You should read the "Risk Factors"

section of this prospectus and in the documents incorporated by reference in this prospectus

for a discussion of factors to consider before deciding to purchase our securities.

Throughout this prospectus, when we refer to the shares of our common stock being registered on behalf of the Selling Shareholder for offer and resale, we are referring to the shares of common stock issuable to the Selling Shareholder upon exercise of the Warrants. When we refer to the Selling Shareholder in this prospectus, we are referring to the Selling Shareholder identified in this prospectus and, as applicable, its permitted transferees, donees, pledgees, assignees or successors-in-interest that may be identified in a supplement to this prospectus or, if required, a post-effective amendment to the registration statement of which this prospectus is a part.

RISK FACTORS

An investment in our securities involves a high degree of risk. Before you decide to invest in our securities, you should carefully consider the risks discussed under the section entitled "Risk Factors" contained in our Annual Report on Form 10-K for the year ended December 31, 2022 and our subsequent Quarterly Reports, 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

A sale of a substantial number of shares of common stock by the Selling Shareholder could cause the price of our common stock to decline.

The Resale Shares represent a large number of shares of our common stock, and, following the effectiveness of the registration statement of which this prospectus forms a part and the issuance of the Resale Shares to the Selling Shareholder (or its permitted designees), such Resale Shares may be sold by the Selling Shareholder in the public market without restriction. If the Selling Shareholder sells, or the market perceives that the Selling Shareholder intends to sell for various reasons, substantial amounts of the Resale Shares in the public market, the price of our common stock may decline. Additionally, such conditions may make it more difficult for us to sell equity or equity-related securities in the future at a time and price that we deem reasonable or appropriate.

Risks Related to Our Finances and Capital Requirements

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 capital.

The listing standards of the Nasdaq Stock Market LLC provide, among other things, that a company, in order to qualify for continued listing, must (i) maintain stockholders' equity of at least \$2,500,000 pursuant to Nasdaq Listing Rule 5550(b)(1), or Rule 5550(b)(1), and (ii) maintain a minimum bid price of at least \$1.00 per share pursuant to Nasdaq Listing Rule 5550(a)(2), or Rule 5550(a)(2).

On November 18, 2022, the Nasdaq Listing Qualifications Department, or the Staff, informed us that we did not comply with Rule 5550(b)(1). The Staff granted our request for an extension until May 15, 2023, to comply with Rule 5550(b). On May 17, 2023, we received a delist determination letter from the Staff advising us that the Staff had determined that we did not meet the terms of such extension. We requested an appeal of the Staff's determination and submitted a hearing request to the Nasdaq Hearings Panel, or the Panel, which request stayed any delisting action by the Staff at least until the hearing process concludes and any extension granted by the Panel expires.

On June 9, 2023, we received a deficiency letter from the Staff notifying us that we are not in compliance with Rule 5550(a)(2) and because we effected two reverse stock splits over the previous two-year period with a cumulative ratio of 250 shares or more to one, we are not eligible for any compliance period specified in Nasdaq Listing Rule 5810(c)(3)(A). Our noncompliance with Rule 5550(a)(2) serves as an additional basis for delisting of our securities from the Nasdaq and the Panel will consider this matter in rendering a determination regarding the our continued listing on the Nasdaq. At the Panel hearing, we intend to present a plan to regain compliance with both Rule 5550(b) and Rule 5550(a)(2). There can be no assurance that our plan will be accepted by the Panel or that, if it is, we will be able to regain compliance with such applicable Nasdaq listing requirements. If our common stock is delisted, it could be more difficult to buy or sell our common stock or to obtain accurate quotations, and the price of our common stock could suffer a material decline. In addition, a delisting would impair our ability to raise capital through the public markets, could deter broker-dealers from making a market in or otherwise seeking or generating interest in our securities and might deter certain institutions and persons from investing in our securities at all.

USE OF PROCEEDS

We will not receive any proceeds from the sale of the Resale Shares by the Selling Shareholder.

The Selling Shareholder will receive all of the net proceeds from the sale of the Resale Shares under this prospectus. The Selling Shareholder will pay any underwriting, broker-dealer or agent discounts, concessions and commissions and expenses incurred by the Selling Shareholder for accounting, tax, and legal services and any other expenses incurred by the Selling Shareholder in disposing of the Resale Shares, unless otherwise agreed to by us. We will be responsible for the reasonable and documents fees and expenses of one firm of attorneys retained by the Selling Shareholder in connection with the sale of the Resale Shares and shall bear all other costs, fees and expenses incurred in effecting the registration of the Resale Shares covered by this prospectus.

THE SELLING SHAREHOLDER

This prospectus relates to resale by the Selling Shareholder from time to time of up to an aggregate of 785,402 shares of common stock issuable upon the exercise of the outstanding Warrants, referred to herein as the Resale Shares. Information concerning the Selling Shareholder may change after the date of this prospectus and changed information will be presented in a supplement to this prospectus if and when required.

The Warrants held by the Selling Shareholder contain limitations which prevent the holder from exercising such Warrants if such exercise would cause the Selling Shareholder, together with certain related parties, to beneficially own a number of shares of common stock which would exceed 9.99% of our then outstanding common stock following such exercise, excluding for purposes of such determination, shares of common stock issuable upon exercise of the Warrants which have not been exercised.

Certain Information Concerning the Selling Shareholder

The following table sets forth, based on information provided to us by or on behalf of the Selling Shareholder or known to us, the name of the Selling Shareholder, the nature of any position, office or other material relationship, if any, which the Selling Shareholder has had, within the past three years, with us or with any of our predecessors or affiliates, and the number of shares of our common stock beneficially owned by the Selling Shareholder before and after this offering. The number of shares owned are those beneficially owned, as determined under the rules of the Securities and Exchange Commission, or SEC, and the information is not necessarily indicative of beneficial ownership for any other purpose. Under these rules, beneficial ownership includes any shares of common stock as to which a person has sole or shared voting power or investment power and any shares of common stock that the person has the right to acquire within 60 days through the exercise of any option, warrant or right, through conversion of any security or pursuant to the automatic termination of a power of attorney or revocation of a trust, discretionary account or similar arrangement. Except as otherwise set forth herein, the Selling Shareholder is not a broker-dealer nor an affiliate of a broker-dealer.

The total number of Resale Shares saleable pursuant to this prospectus is 785,402.

For purposes of calculating the number of Resale Shares saleable pursuant to this prospectus, we have assumed that the Warrants are fully exercised and all of the Resale Shares issuable to the Selling Shareholder upon such exercise and covered by this prospectus are sold and that the Selling Shareholder acquires no additional shares of common stock before the completion of this offering. However, because the Selling Shareholder can offer all, some, or none of its Resale Shares, no definitive estimate can be given as to the number of Resale Shares that the Selling Shareholder will ultimately offer or sell under this prospectus or the number of Resale Shares that will be held by the Selling Shareholder upon termination of this offering. The table and information in the notes below are based upon information supplied to us by the Selling Shareholder.

	Shares of Comr	Shares of Common Stock					
	Beneficial	Beneficial Ownership of Common Stock After the Offering					
	of Comn						
	Prior to the						
	<u>- </u>		Common Stock	,			
	Number	Percent of	Saleable Pursuant	Number of	Percent		
Name	of shares	Class (2)	to this Prospectus	Shares	of Class (2)		
MAM Eagle Lender, LLC(3)	785,402	9.99%	785,402	0	0%		

- (1) The shares of common stock included in this prospectus and shown in the table for the Selling Shareholder are solely shares issuable upon the exercise of the Warrants, which are subject to a 9.99% beneficial ownership limitation described above.
- (2) Calculated based on 6,849,366 shares issued and outstanding as of June 27, 2023 (assuming the issuance of the shares of common stock upon exercise of the Warrants on that date and 6,063,964 shares of common stock outstanding as of June 27, 2023).

(3) The number of shares of common stock beneficially owned prior to this offering consists of 327 shares of common stock issuable upon exercise of the 2020 Warrants and 786,026 shares of common stock issuable upon exercise of the 2023 Warrants. Voting and investment power over the shares held by such entity resides with its investment manager, Marathon Asset Management, LP. Bruce Richards is the Chief Executive Officer of Marathon Asset Management, LP. and Louis Hanover is the Chief Investment Officer of Marathon Asset Management, LP. and each may be deemed to be the beneficial owner of the shares held by such entities. Mr. Richards and Mr. Hanover, however, each disclaim any beneficial ownership of the shares held by such entities. The address of the foregoing individuals and entities is c/o Marathon Asset Management, L.P., One Bryant Park, 38th Floor, New York, NY 10036.

Relationship with the Selling Shareholder

Credit Agreement and Warrants

On May 29, 2020, we entered in the Credit Agreement with the Selling Shareholder and the other parties thereto, or the Credit Agreement, pursuant to which we have drawn \$10.0 million as of the date hereof, and we may draw upon four additional tranches of term loans, in an aggregate original principal amount of \$40,000, or the Tranche Two Loans, Tranche Three Loans, Tranche Four Loans and Tranche Five Loans, or collectively, the Term Loans. As of the date hereof, no funds have been drawn from the additional tranches and are not expected to be drawn in the future. Based on the terms of the Credit Agreement, as amended, as of March 31, 2023, the effective interest rate was 14.51%, which takes into consideration the accretion of the exit fee. In connection with the entry into the Credit Agreement with the Selling Shareholder, we issued the Selling Shareholder the 2020 Warrant. The 2020 Warrant has an exercise price equal to \$6,426.00 per share, and is exercisable until the seventh anniversary of the issuance date thereof. The Selling Shareholder has the right to net exercise the 2020 Warrant for shares of Common Stock upon exercise.

On August 1, 2022, we entered into Amendment No. 1 and Waiver to Credit Agreement with the Selling Shareholder and the other parties thereto. Pursuant to the terms of the amendment, the Selling Shareholder waived any default under the Credit Agreement (including the imposition of a default interest rate with respect to the default) resulting from our failure to comply with the minimum cash covenant, which required us to maintain at least \$5.0 million in a liquidity account. In addition, the amendment, among other items, (i) provided that 30% of any cash proceeds received by us from certain potential strategic licensing transactions shall be used to prepay amounts outstanding under the Credit Agreement; and (ii) decreased the amount of cash we were required to maintain pursuant to the minimum liquidity covenant to \$3.0 million for a period beginning on August 1, 2022, and ending on August 31, 2022, at which point the amount required pursuant to the minimum liquidity covenant increased to \$5.0 million.

On October 24, 2022, we entered into Amendment No. 2 and Waiver to Credit Agreement with the Selling Shareholder and the other parties thereto. Pursuant to the terms of the amendment, the Credit Agreement was amended such that we would repay the principal thereunder (i) on the first business day of each month 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 \$0.3 million prior to December 31, 2022 and (iii) commencing on the interest payment pate on January 2, 2023 and on each interest payment date thereafter until the obligations have been repaid in full, the principal amount of \$0.5 million. In addition, the amendment decreased the minimum cash covenant we were required to maintain under the Credit Agreement to (i) \$3.0 million for the period beginning on October 1, 2022, and ending on November 30, 2022, (ii) \$4.5 million for the period beginning on December 1, 2022, and ending on February 28, 2023, and (iii) \$4.0 million from and after March 1, 2023. Further, we agreed that prior to December 31, 2022, we would not, without the prior written consent of the Selling Shareholder, make or permit any payment under its agreements with Alkermes plc, or Alkermes. In consideration for the amendment, we paid Wilmington Trust, National Associate, as administrative and collateral agent, an amendment fee of \$0.0 million and the Lenders an amendment fee of \$0.2 million.

On December 1, 2022, we entered into Amendment No. 3 to Credit Agreement with the Selling Shareholder and the other parties thereto. Pursuant to the terms of the amendment, the amendment decreased the minimum cash covenant we were required to maintain under the Credit Agreement (i) from October 1, 2022 to December 6, 2022 to not be less than \$3.0 million at any time, (ii) from December 7, 2022 to February 28, 2023 to not be less than \$4.5 million, and (iii) from and after March 1, 2023 to not be less than \$4.0 million.

On January 5, 2023, we entered into Amendment No. 4 to Credit Agreement with the Selling Shareholder and the other parties thereto. Pursuant to the terms of the amendment, the Credit Agreement was amended such that we would make (i) a payment of principal in the amount of \$0.5 million on January 3, 2023, (ii) a payment of principal in the amount of \$0.3 million on February 1, 2023 and March 1, 2023, and (iii) on the interest payment date on April 3, 2023 and on each interest payment date thereafter until the obligations are repaid in full, a payment in the principal amount of \$0.5 million. In addition, the amendment decreased the minimum cash covenant we were required to maintain under the Credit Agreement 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 January 10, 2023, (iii) \$2.225 million for the period beginning on January 11, 2023, and ending on February 28, 2023, and (iv) \$3.0 million from and after March 1, 2023. Further, we agreed that prior to April 30, 2023, we would not, without the prior written consent of the Selling Shareholder, make or permit any payment under our agreements with Alkermes.

On March 29, 2023, we entered into Amendment No. 5 with the Selling Shareholder and the other parties thereto. Pursuant to the terms of the amendment, the credit agreement was amended such that the Selling Shareholder consented to the transactions contemplated by the a transfer agreement with Alkermes to transfer the rights to certain patents, trademarks, equipment, data and other rights related to ANJESO® and agreed to release and discharge any liens granted or held by the Selling Shareholder in respect of such assets. Pursuant to the terms of such transfer agreement, the parties also agreed to, among other things, amend the cash covenant under the Credit Agreement to require that we maintain \$2.5 million of liquidity at all times. In connection with the entry into Amendment No. 5 with the Selling Shareholder, we issued the Selling Shareholder the 2023 Warrant. The 2023 Warrant has an exercise price equal to \$1.8951 per share, and is exercisable until the tenth anniversary of the issuance date thereof. The Selling Shareholder has the right to net exercise the 2023 Warrant for shares of Common Stock upon exercise.

Registration Rights Agreement

In connection with Amendment No. 5, we issued to the Selling Shareholder the 2023 Warrant, and entered into the Registration Rights Agreement with the Selling Shareholder. Pursuant to the Registration Rights Agreement with the Selling Shareholder, we agreed to prepare and file with the SEC a registration statement on Form S-3, of which this prospectus forms a part, that permits the resale of the Resale Shares and, subject to certain exceptions, to use reasonable best efforts to keep the registration statement of which this prospectus forms a part effective under the Securities Act for a period ending on the earlier of (i) 24 months after the effective date of such registration statement, (ii) the date when all restrictive legends on the Resale Shares have been removed or (iii) the date on which all the Resale Shares held by any holder, as defined in the Registration Rights Agreement, cease to be registrable securities.

We have also agreed, among other things, to indemnify the Selling Shareholder, and each of its employees, advisors, agents, representatives, partners, officers, and directors and each person who controls such Selling Shareholder (within the meaning of the Securities Act) and any agent or investment advisor thereof from all losses and liabilities arising under this registration statement and any securities laws applicable to this registration statement and to pay all fees and expenses (including all reasonable and documented costs of preparation and the our attorneys' and accountants' fees).

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, as amended, 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 June 27, 2023, there were 6,063,964 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 and 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.

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 the 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 Nasdaq under the symbol "BXRX."

PLAN OF DISTRIBUTION

Resales by Selling Shareholder

We are registering the resale of the Resale Shares on behalf of the Selling Shareholder pursuant to the terms of the Registration Rights Agreement, which agreement is incorporated herein by reference.

The term "Selling Shareholder" also includes persons who obtain the Resale Shares from the Selling Shareholder as a gift, on foreclosure of a pledge, in a distribution or dividend of assets by an entity to its equity holders or partners, as an assignee, transferee or other successor-in-interest, or in another private transaction.

Types of Sale Transactions

The Selling Shareholder may offer and sell, from time to time, the shares of common stock issuable upon exercise of the Warrants. The Selling Shareholder will act independently of us in making decisions with respect to the timing, manner and size of each sale. Such sales may be made on one or more exchanges or in the over-the-counter market or otherwise, at prices and under terms then prevailing or at prices related to the then current market price or in negotiated transactions. The Selling Shareholder may sell its Resale Shares by one or more of, or a combination of, the following methods:

- disposition on any national securities exchange on which our common stock may be listed at the time of the sale;
- disposition in the over-the-counter markets;
- · ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent, but may position and resell a portion of the block as principal
 to facilitate the transaction:
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- · privately negotiated transactions;
- · short sales;
- writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- disposition in one or more underwritten offerings in a best efforts basis or firm commitment basis;
- broker-dealers may agree with the selling shareholder to sell a specified number of such shares at a stipulated price per share;
- under Rule 144, Rule 144A or Regulation S under the Securities Act, if available, rather than under this prospectus;
- a combination of any such methods of sale; or
- any other method permitted by applicable law.

We do not know of specific arrangements by the Selling Shareholder for the sale of its Resale Shares. The aggregate proceeds to the Selling Shareholder from any sale of the Resale Shares offered by it will be the purchase price of the Resale Shares less discounts or commissions, if any. The Selling Shareholder reserves the right to accept and, together with its respective agents from time to time, to reject, in whole or in part, any proposed purchase of the Resale Shares to be made directly or through agents. We will not receive any of the proceeds from any such sale.

Broker-dealers engaged by the Selling Shareholder may arrange for otherbrokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the Selling Shareholder (or, if any broker-dealer acts

as agent for the purchaser of securities, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this Prospectus, in the case of an agency transaction not in excess of a customary brokerage commission in compliance with FINRA Rule 2121; and in the case of a principal transaction a markup or markdown in compliance with FINRA 2121.

In connection with the sale of the securities or interests therein, the Selling Shareholder may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the securities in the course of hedging the positions they assume. The Selling Shareholder may also sell securities short and deliver these securities to close out their short positions, or loan or pledge the securities to broker-dealers that in turn may sell these securities. The Selling Shareholder may also enter into option or other transactions with broker-dealers or other financial institutions or create one or more derivative securities which require the delivery to such broker-dealer or other financial institution of securities offered by this prospectus, which securities such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The Selling Shareholder and any broker-dealers or agents that participate in the sale of the Resale Shares may be deemed to be "underwriters" within the meaning of Section 2(11) of the Securities Act. Any discounts, commissions, concessions or profit they earn on any resale of the shares may be underwriting discounts and commissions under the Securities Act. The Selling Shareholder is subject to the prospectus delivery requirements of the Securities Act.

We have agreed to indemnify each seller of Resale Shares, and each of its employees, advisors, agents, representatives, partners, officers, and directors and each person who controls such seller (within the meaning of the Securities Act) and any agent or investment advisor thereof against certain liabilities arising under the Securities Act from sales of the Resale Shares. The Selling Shareholder may agree to indemnify any agent, broker or dealer that participates in sales of the Resale Shares against liabilities arising under the Securities Act from sales of the Resale Shares.

We have agreed to pay certain expenses incurred in connection with the registration and sale of the Resale Shares covered by this prospectus, including, among other things, all registration and filing fees (including SEC, Nasdaq and state blue sky registration and filing fees), printing expenses, and the fees and disbursements of our outside counsel and independent accountants, but excluding underwriting discounts and commissions.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the shares of our common stock may not simultaneously engage in market making activities with respect to the common stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the Selling Shareholder will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of the common stock by the Selling Shareholder or any other person. We will make copies of this prospectus available to the Selling Shareholder and have informed it of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale (including by compliance with Rule 172 under the Securities Act). Once sold under the registration statement of which this prospectus forms a part, the shares of our common stock will be freely tradable in the hands of persons other than our affiliates.

LEGAL MATTERS

The validity of the issuance of the common stock offered hereby will be passed upon for us by Goodwin Procter LLP, Philadelphia, Pennsylvania.

EXPERTS

The consolidated balance sheets of Baudax Bio, Inc. and subsidiaries as of December 31, 2022, and the related consolidated statements of operations, shareholders' equity (deficit), and cash flows for the year then ended, and the effects of both the reverse stock split discussed in Note 1 to the financial statements, and the retrospective adjustments upon adoption of ASU No. 2020-06 discussed in Note 3(j) to the financial statements (collectively, the "retrospective adjustments") to the 2021 financial statements, have been audited by EisnerAmper LLP, independent registered public accounting firm, as stated in their report which is incorporated herein by reference, which report includes an explanatory paragraph about the existence of substantial doubt concerning the Company's ability to continue as a going concern. Such financial statements have been incorporated herein by reference in reliance on the report of such firm given upon their authority as experts in accounting and auditing.

KPMG LLP, independent registered public accounting firm, audited the consolidated financial statements as of December 31, 2021, and for the year then ended, before the effects of the retrospective adjustments, which financial statements are not incorporated by reference herein. EisnerAmper LLP, an independent registered public accounting firm, audited the retrospective adjustments. The consolidated financial statements of Baudax Bio, Inc, as of December 31, 2021, and for the year then ended, have been incorporated by reference herein in reliance upon the reports of (i) KPMG LLP, solely with respect to the financial statements before the effects of the retrospective adjustments, and (ii) EisnerAmper LLP, solely with respect to the retrospective adjustments, incorporated by reference herein, and upon the authority of said firms as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus forms part of a registration statement on FormS-3 filed with the SEC under the Securities Act. 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.

INCORPORATION OF DOCUMENTS 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, 2022 filed with the SEC on February 23, 2023 (Items 7 and 8 from such Annual Report have been recast for discontinued operations as reflected in the Current Report on Form 8-K filed on June 28, 2023);
- Our Quarterly Report on Form 10-Q for the quarter ended March 31, 2023 filed with the SEC on May 11, 2023;
- The information specifically incorporated by reference into our Annual Report on Forml 0-K for the year ended December 31, 2022 from our Definitive Proxy Statement on Form DEF 14-A filed on April 28, 2023;
- 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 Form8-K and exhibits accompanying such reports that are related to such items) on <u>January 9, 2023, January 24, 2023, March 3, 2023, March 27, 2023, March 31, 2023, April 4, 2023, April 25, 2023; April 28, 2023; May 19, 2023; June 15, 2023; June 27, 2023; and June 28, 2023
 </u>
- 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 Form8-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

785,402 Shares of Common Stock

PROSPECTUS

, 2023

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution.

The following is an estimate of the expenses (all of which are to be paid by the registrant) that we may incur in connection with the securities being registered hereby, other than the SEC registration fee.

SEC registration fee	\$	45.01
Legal fees and expenses	\$	50,000
Accounting fees and expenses	\$	75,000
Printing and miscellaneous fees and expenses	<u>\$_</u>	10,000
Total	\$_	135,045.01

Item 14. Indemnification of Officers and Directors.

Our Amended and Restated Bylaws and Amended and Restated Articles of Incorporation, as amended, 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

None.

Item 16. Exhibits.

a) Exhibits.

Description	Method of Filing
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).
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).
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' Current Report on Form 8-K filed on August 11, 2021 (File No. 001-39101).
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' Current Report on Form 8-K filed February 15, 2022 (File No. 001-39101).
Second Amended and Restated Bylaws of Baudax Bio, Inc.	Incorporated herein by reference to Exhibit 3.1 to the Company Quarterly Report on Form 10-Q filed on May 11, 2023 (File No. 001-39101).
Common Stock Purchase Warrant, dated May 29, 2020, in favor of MAM Eagle Lender, LLC.	Incorporated herein by reference to Exhibit 4.1 to the Company Current Report on Form 8-K filed on June 2, 2020 (File No. 001-39101).
Form of Common Stock Purchase Warrant, dated March 29, 2023, in favor of MAM Eagle Lender, LLC	Incorporated herein by reference to Exhibit 4.1 to the Company Current Report on Form 8-K filed on April 4, 2023 (File No. 001-39101).
Registration Rights Agreement between the Baudax Bio, Inc. and MAM Eagle Lender, LLC, dated March 29, 2023	Incorporated herein by reference to Exhibit 10.2 to the Company Current Report on Form 8-K filed on April 4, 2023 (File No. 001-39101).
Opinion of Goodwin Procter LLP	Filed herewith.
Consent of KPMG LLP, Independent Registered Public Accounting Firm.	Filed herewith.
Consent of EisnerAmper LLP, Independent Registered Public Accounting Firm.	Filed herewith.
Consent of Goodwin Procter LLP (included in Exhibit 5.1)	(included in Exhibit 5.1)
Power of Attorney	Incorporated by reference to the signature page hereto.
Filing Fee Table	Filed herewith.

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;
 - (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 SEC 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

- (A) paragraphs (1)(i), (1)(ii) and (1)(iii) do not apply if the registration statement is on FormS-8 and the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the registrant pursuant to Section 13 or Section 15(d) of 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; and
- (B) paragraphs (a)(1)(i), (ii), and (iii) of this section do not apply if the registration statement is on Form S-1, Form S-3, Form SF-3 or Form F-3 and 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 Exchange Act that are incorporated by reference in the registration statement, or, as to a registration statement on Form S-3, Form SF-3 or Form F-3, is contained in a form of prospectus filed that is part of the registration statement.
- (C) Provided further, however, that paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the registration statement is for an offering of asset-backed securities on Form SF–1 or Form SF–3, and the information required to be included in a post-effective amendment is provided pursuant to Item 1100(c) of Regulation AB.
 - (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 under the Securities Act of 1933 to any purchaser:
 - (i) each prospectus filed pursuant to Rule 424(b)(3) as part of a registration statement as of the date the filed prospectus was deemed part of and included in the registration statement.
 - (ii) each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act shall be deemed to be part of and included in the registration

statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. *Provided*, *however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

- (5) That, for the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:
- (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
- (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
- (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
- (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.
- (6) 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.
- (h) 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 June 28, 2023.

Baudax Bio, Inc.

By: /s/ Gerri A. Henwood

Name: Gerri A. Henwood

Title: President and 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.

POWER OF ATTORNEY

We, the undersigned officers and directors of Baudax Bio, Inc., hereby severally constitute and appoint Gerri A. Henwood and Jillian Dilmore, our true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution in her or him for her or him and in her or his name, place and stead, and in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite or necessary to be done in and about the premises, as full to all intents and purposes as she or he might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or her or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

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

Signature	Title	Date
/s/ Gerri A. Henwood Gerri A. Henwood	President, Chief Executive Officer and Director (Principal Executive Officer)	June 28, 2023
/s/ Jillian Dilmore Jillian Dilmore	Corporate Controller (Principal Financial Officer and Principal Accounting Officer)	June 28, 2023
/s. Wayne B. Weisman Wayne B. Weisman	Director and Chairman of the Board	June 28, 2023
/s/ William L. Ashton William L. Ashton	Director	June 28, 2023
/s/ Arnold Baskies, M.D. Arnold Baskies, M.D.	Director	June 28, 2023
/s/ Winston J. Churchill Winston J. Churchill	Director	June 28, 2023
/s/ Andrew Drechsler Andrew Drechsler	Director	June 28, 2023



Goodwin Procter LLP One Commerce Square 2005 Market Street, 32nd Floor Philadelphia, Pennsylvania 19103

goodwinlaw.com +1 (415) 207-7800

June 28, 2023

Baudax Bio, Inc. 490 Lapp Road Malvern, Pennsylvania 19355

Re: SecuritiesRegistered under Registration Statement on Form S-3

We have acted as counsel to you in connection with your filing of a Registration Statement on Form S-3 (as amended or supplemented, the "Registration Statement") filed on June 28, 2023 with the Securities and Exchange Commission (the "Commission") pursuant to the Securities Act of 1933, as amended (the "Securities Act"), relating to the registration of the offering by Baudax Bio, Inc., a Pennsylvania corporation (the "Company"), of up to 785,402 shares (the "Shares") of the Company's common stock, par value \$0.01 per share ("Common Stock"), issuable upon exercise of certain warrants issued by the Company (the "Warrants"), to be sold by the selling shareholder listed in the Registration Statement under "The Selling Shareholder" (the "Selling Shareholder").

We have reviewed such documents and made such examination of law as we have deemed appropriate to give the opinions set forth below. We have relied, without independent verification, on certificates of public officials and, as to matters of fact material to the opinions set forth below, on certificates of officers of the Company. For purposes of the opinion set forth below, we have assumed that before the Shares are issued the Company does not issue shares of Common Stock or reduce the total number of shares of Common Stock the Company is authorized to issue under its certificate of incorporation such that the number of unissued shares of Common Stock authorized under the Company's certificate of incorporation is less than the number of Shares.

The opinion set forth below is limited to the Pennsylvania Business Corporation Law of 1988, as amended.

Based on the foregoing, we are of the opinion that the Shares, when and if issued upon exercise of the Warrants in accordance with the terms of the Warrants, will have been duly authorized and will be validly issued, fully paid and non-assessable.

This opinion letter and the opinion it contains shall be interpreted in accordance with the Core Opinion Principles as published in 74Business Lawyer 815 (Summer 2019).

Baudax Bio, Inc. June 28, 2023 Page 2

We hereby consent to the inclusion of this opinion as Exhibit 5.1 to the Registration Statement and to the references to our firm under the caption "Legal Matters" in the Registration Statement. In giving our consent, we do not admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations thereunder.

Very truly yours,

/s/ Goodwin Procter LLP GOODWIN PROCTER LLP

Consent of Independent Registered Public Accounting Firm

We consent to the use of our report dated March 16, 2022, except for Note 4, as to which the date is June 28, 2023, with respect to the consolidated financial statements of Baudax Bio, Inc. incorporated herein by reference, and to the reference to our firm under the heading "Experts" in the prospectus.

/s/ KPMG LLP

Philadelphia, Pennsylvania

June 28, 2023

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement of Baudax Bio, Inc. onForm S-3 to be filed on or about June 28, 2023 of our report dated February 23, 2023, except for Note 4, as to which date is June 28, 2023, on our audit of (i) the financial statements as of December 31, 2022 and for the year then ended, and (ii) the retrospective adjustments to the 2021 financial statements discussed in Notes 1 and 3(j) to the financial statements, which report was included in the Annual Report on Form 10-K filed February 23, 2023. Our report includes an explanatory paragraph about the existence of substantial doubt concerning the Company's ability to continue as a going concern. We also consent to the reference to our firm under the caption "Experts" in this Registration Statement.

/s/ EisnerAmper LLP

EISNERAMPER LLP Philadelphia, Pennsylvania June 28, 2023

Calculation of Filing Fee Tables

Form S-3

(Form Type)

Baudax Bio, Inc.

(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered and Carry Forward Securities

			Table 1. Iv	ewiy Kegis	tereu anu v	carry Forward	a Securities					
	Security Type	Security Class Title	Fee Calculation or Carry Forward Rule	Amount Registered ⁽¹⁾	Proposed Maximum Offering Price Per Unit ⁽²⁾	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee	Carry Forward Form Type	Carry Forward File Number	Carry Forward Initial effective date	Filing Fee Previously Paid In Connection with Unsold Securities to be Carried Forward
				New	ly Register	ed Securities						
Fees to Be Paid	Equity	Common Stock, \$0.01 par value per share	Other ⁽²⁾	785,402	\$0.52 ⁽²⁾	\$408,409.04	.00011020	\$45.01				
			•	Car	ry Forward	l Securities						
Carry Forward Securities												
	Total Offering Amounts					\$408,409.04		\$45.01				
	Total Fees Previously Paid							\$0.00				
	Total Fee Offsets							\$0.00				
Net Fee Due								\$45.01				

⁽¹⁾ The Registrant is hereby registering for resale from time to time by the selling stockholder named herein of up to 785,402 shares of its common stock issuable upon the exercise of certain warrants, issued to the selling stockholder in May 2020 and March 2023. Pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement also covers an indeterminate number of shares of common stock that may be issued as a result of stock splits, stock dividends, or similar transactions.

⁽²⁾ Estimated in accordance with Rule 457(c) under the Securities Act solely for the purpose of calculating the registration fee, based on the average of the high and low prices of the registrant's common shares, as reported on the Nasdaq Capital Market on June 23, 2023, a date within five business days prior to the initial filing of this registration statement on June 28, 2023.