

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

FORM S-1
REGISTRATION STATEMENT
UNDER THE SECURITIES ACT OF 1933

Bluejay Diagnostics, Inc.
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

3841
(Primary Standard Industrial
Classification Code Number)

47-3552922
(I.R.S. Employer
Identification Number)

360 Massachusetts Avenue, Suite 203
Acton, MA 01720
(844) 327-7078
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Neil Dey
Bluejay Diagnostics, Inc.
360 Massachusetts Avenue, Suite 203
Acton, MA 01720
(844) 327-7078
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Joseph E. Gilligan
Brian C. O'Fahey
Hogan Lovells US LLP
Columbia Square
555 Thirteenth Street, NW
Washington, DC 20004
(202) 637-5600

Approximate date of commencement of proposed sale to the public: As soon as practicable after this registration statement is declared effective.

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, 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, a non-accelerated filer, 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

Non-accelerated filer

Emerging growth company

Accelerated filer

Smaller reporting 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 or until this registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

The information in this 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 November 21, 2023

Preliminary Prospectus



BLUEJAY DIAGNOSTICS, INC.

Up to Shares of Common Stock

Prefunded Warrants to purchase up to Shares of Common Stock

Common Warrants to purchase up to Shares of Common Stock

Shares of Common Stock underlying Prefunded Warrants and Common Warrants

Placement Agent Warrants to Purchase up to Shares of Common Stock

Shares of Common Stock Underlying the Placement Agent Warrants

We are offering shares of common stock, together with warrants to purchase up to shares of common stock, each a Common Warrant, at an assumed combined public offering price of \$ per share and Common Warrant, which is equal to the closing price per share of our common stock on The Nasdaq Capital Market, or Nasdaq, on , 2023 (and the shares issuable from time to time upon exercise of the Common Warrants), pursuant to this prospectus. The shares of common stock and Common Warrants will be separately issued but must be purchased together in this offering. Each share of common stock is being offered together with a Common Warrant to purchase share of common stock. Each Common Warrant will have an exercise price of \$ per share, (representing % of the price at which a share of common stock and accompanying Common Warrant are sold to the public in this offering), will be exercisable upon issuance and will expire years from the date of issuance.

We are also offering prefunded warrants, or Prefunded Warrants, to purchase up to an aggregate of shares of common stock 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 Prefunded Warrant will be exercisable for one share of common stock at an exercise price of \$0.0001 per share. Each Prefunded Warrant is being offered together with the same Common Warrant described above being offered with each share of common stock. The assumed combined public offering price for each such Prefunded Warrant, together with the Common Warrant, is \$ which is equal to the closing price of our common stock on Nasdaq on , 2023, less the \$0.0001 per share exercise price of each such Prefunded Warrant. Each Prefunded Warrant will be exercisable upon issuance and will expire when exercised in full. The Prefunded Warrants and Common Warrants are immediately separable and will be issued separately in this offering, but must be purchased together in this offering. For each Prefunded Warrant we sell, the number of shares of common stock we are offering will be decreased on a one-for-one basis. This prospectus also relates to the shares of common stock issuable upon the exercise of the Prefunded Warrants and the Common Warrants, and placement agent warrants (as such term is defined below) and shares of common stock issuable upon exercise of the placement agent warrants.

This offering will terminate on _____, 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 Prefunded Warrant) and Common Warrant will be fixed for the duration of this offering.

We have engaged _____, 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 or dollar amount of securities. 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. Since we will deliver the securities to be issued in this offering upon our receipt of investor funds, there is no arrangement for funds to be received in escrow, trust or similar arrangement. There is no minimum offering requirement as a condition of closing of this offering. Because there is no minimum offering amount required as a condition to closing this offering, 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 pursue our business goals described in this prospectus. In addition, because there is no escrow account and no minimum offering amount, investors could be in a position where they have invested in our company, but we are unable to fulfill all of our contemplated objectives due to a lack of interest in this offering. Further, any proceeds from the sale of securities offered by us will be available for our immediate use, despite uncertainty about whether we would be able to use such funds to effectively implement our business plan. See the section entitled “Risk Factors” for more information. We will bear all costs associated with the offering. See “Plan of Distribution” on page 25 of this prospectus for more information regarding these arrangements.

Our common stock is listed on Nasdaq under the symbol “BJDX.” The closing price of our common stock on Nasdaq on November 20, 2023 was \$3.47 per share.

All share, Common Warrant, and Prefunded Warrant numbers are based on an assumed combined public offering price of \$ _____ per share and the accompanying Common Warrant and \$ _____ per Prefunded Warrant and the accompanying Common Warrant. The actual combined public offering price per share and Common Warrant and the actual combined public offering price per Prefunded Warrant and Common Warrant will be determined through negotiation among us, the placement agent and the investors in the offering 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 per share of common stock used throughout this prospectus as an assumed combined public offering price may not be indicative of the final offering price. There is no established trading market for the Prefunded Warrants or the Common Warrants, and we do not expect a market to develop. We do not intend to apply for a listing of the Prefunded Warrants or the Common Warrants on any securities exchange or other nationally recognized trading system. Without an active trading market, the liquidity of the Prefunded Warrants and the Common Warrants will be limited.

We are an “emerging growth company” as that term is used in the Jumpstart Our Business Startups Act of 2012 and as such, are subject to reduced public company disclosure standards for this prospectus supplement, the accompanying prospectus and our filings with the Securities and Exchange Commission. See “Prospectus Summary—Implications of Being an Emerging Growth Company.”

You should read this prospectus, together with additional information described under the headings “Information Incorporated by Reference” and “Where You Can Find Additional Information,” carefully before you invest in any of our securities.

Investing in our securities involves a high degree of risk. See “Risk Factors” beginning on page 8 of this prospectus for a discussion of risks that should be considered in connection with an investment in our securities.

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

	Per Share and Accompanying Common Warrant	Per Prefunded Warrant and Accompanying Common Warrant	Total
Public offering price	\$	\$	\$
Placement agent's fees ⁽¹⁾	\$	\$	\$
Proceeds to us, before expenses ⁽²⁾	\$	\$	\$

(1) We have also agreed to pay the placement agent a management fee of _____ % of the aggregate gross proceeds raised in this offering and to pay the placement agent for certain of its offering-related expenses. In addition, we have agreed to issue the placement agent or its designees, as compensation in connection with this offering, warrants, or the placement agent warrants, to purchase a number of shares of common stock equal to _____ % of the shares of common stock sold in this offering (including the shares of common stock issuable upon the exercise of the Prefunded Warrants), at an exercise price of \$ _____ per share, which represents _____ % of the combined public offering price per share of common stock and accompanying Common Warrant. See "Plan of Distribution" for a description of the compensation to be received by the placement agent.

(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. For more information, see "Plan of Distribution."

Delivery of the securities offered hereby is expected to be made on or about _____, 2023, subject to satisfaction of customary closing conditions.

The date of this prospectus is _____, 2023

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ABOUT THIS PROSPECTUS

The registration statement of which this prospectus forms a part that 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 and the related exhibits filed with the SEC, together with the additional information described under the headings “Where You Can Find Additional Information” and “Information Incorporated by Reference” before making your investment decision. You should rely only on the information provided in or incorporated by reference in this prospectus, in any prospectus supplement or in a related free writing prospectus, or documents to which we otherwise refer you. In addition, this prospectus contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information.

This prospectus includes important information about us, the securities being offered and other information you should know before investing in our securities. You should not assume that the information contained in this prospectus is accurate on any date subsequent to the date set forth on the front cover of this prospectus, even though this prospectus is delivered or securities are sold or otherwise disposed of on a later date. It is important for you to read and consider all information contained in this prospectus in making your investment decision. All of the summaries in this prospectus are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under the heading “Where You Can Find Additional Information.”

We have not, and the placement agent has not, authorized anyone to provide any information or to make any representations other than those contained or incorporated by reference in this prospectus or in any free writing prospectuses prepared by or on behalf of us or to which we have referred you. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. The information contained in this prospectus or incorporated by reference in this prospectus or contained in any applicable free writing prospectus is current only as of its date, regardless of its time of delivery or any sale of our securities. Our business, financial condition, results of operations and prospects may have changed since that date.

For investors outside the United States: We have not, and the placement agent has not, done anything that would permit this offering or possession or distribution of this 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 must inform themselves about, and observe any restrictions relating to, the offering of the securities and the distribution of this prospectus outside the United States.

Unless otherwise indicated, information contained in this prospectus or incorporated by reference in this prospectus concerning our industry, including our general expectations and market opportunity, is based on information from our own management estimates and research, as well as from industry and general publications and research, surveys and studies conducted by third parties. Management estimates are derived from publicly available information, our knowledge of our industry and assumptions based on such information and knowledge, which we believe to be reasonable. In addition, assumptions and estimates of our and our industry’s future performance are necessarily uncertain due to a variety of factors, including those described in “Risk Factors” beginning on page 8 of this prospectus. These and other factors could cause our future performance to differ materially from our assumptions and estimates.

This prospectus is an offer to sell only the securities offered hereby, and only under circumstances and in jurisdictions where it is lawful to do so. We are not, and the placement agent is not, making an offer to sell these securities in any state or jurisdiction where the offer or sale is not permitted.

Industry and Market Data

This prospectus and the documents incorporated by reference contain estimates, projections and other information concerning our industry, our business, the science of our products and the markets for our products, including data regarding the incidence of certain medical conditions and the scientific basis of our products. We obtained the industry, science, market and similar data set forth in this prospectus from our internal estimates and research and from academic and industry research, publications, surveys, and studies conducted by third parties. While we believe that these industry publications and third-party research, surveys and studies are reliable, we have not independently verified such data and we do not make any representation as to the accuracy of the information. The content of the above sources, except to the extent specifically set forth in this prospectus, does not constitute a portion of this prospectus and is not incorporated herein. Information that is based on estimates, forecasts, projections, market research, scientific research, or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances that are assumed in this information.

Note Regarding Trademarks

Unless the context otherwise requires, references in this prospectus to “Bluejay,” “the Company,” “we,” “us” and “our” refer to Bluejay Diagnostics, Inc. Our logo and all product names are our common law trademarks. Solely for convenience, trademarks and tradenames referred to in this prospectus may appear without the ® or ™ symbols, but such references are not intended to indicate in any way that we will not assert, to the fullest extent under applicable law, our rights, or that the applicable owner will not assert its rights, to these trademarks and tradenames. We do not intend the use or display of other companies’ trademarks and trade names to imply a relationship with, or endorsement or sponsorship of us by, any other companies, products or services.

Basis of Presentation

On July 21, 2023, we filed a Certificate of Amendment to our restated certificate of incorporation with the Secretary of State of the State of Delaware to effect a 1-for-20 reverse stock split of our issued and outstanding shares of common stock, par value \$0.0001 per share (the “Reverse Stock Split”), which became effective on July 24, 2023. All historical share and per share amounts reflected throughout this prospectus have been adjusted to reflect the Reverse Stock Split. However, our periodic and current reports, and all other documents incorporated by reference into this prospectus that were filed prior to July 24, 2023, do not give effect to the Reverse Stock Split.

PROSPECTUS SUMMARY

This summary highlights information contained in greater detail elsewhere in this prospectus or incorporated by reference into this prospectus from our filings with the SEC. This summary is not complete and does not contain all of the information you should consider in making your investment decision. You should read the entire prospectus and the information incorporated by reference herein carefully before making an investment in our securities. You should carefully consider, among other things, our financial statements and the related notes and the sections entitled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in, or incorporated by reference into, this prospectus. When we use the terms "Bluejay," "the Company," "us," "we" and "our," we refer to Bluejay Diagnostics, Inc., and its wholly owned subsidiary Bluejay SpinCo, LLC, taken as a whole.

Overview

We are a medical diagnostics company developing rapid tests using whole blood, plasma, and serum on our Symphony technology platform, ("Symphony"), to improve patient outcomes in critical care settings. Our Symphony platform is a combination of our intellectual property ("IP"), and exclusively licensed and patented IP that consists of a mobile analyzer and single-use test cartridges that if cleared, authorized, or approved by the U.S. Food and Drug Administration (the "FDA"), can provide a solution to a significant market need in the United States. Clinical trials indicate the Symphony analyzer produces laboratory-quality results in less than 20 minutes, important in intensive care units (ICUs) and emergency rooms (ERs) where rapid and reliable results are required.

Our first product, the Symphony IL-6 test, is for the monitoring of disease progression in critical care settings. A current challenge for healthcare professionals is the excessive time and cost associated with triage and risk stratifying patients. IL-6 is a clinically established biomarker, and is considered a 'first-responder' biomarker in the inflammatory cascade which can be used for the assessment of patient prognosis for many diseases and conditions, including sepsis. The Symphony IL-6 test has the ability to consistently monitor this important and clinically informative biomarker with rapid results.

In the future we plan to develop additional tests for the Symphony platform, including two cardiac biomarkers (hsTNT and NT pro-BNP) among others. We do not yet have regulatory clearance for our Symphony products, and our Symphony products will need to receive regulatory authorization from the FDA in order to be marketed as a diagnostic product in the United States.

Our operations to date have been funded primarily through the proceeds of (i) our initial public offering in November 2021, and (ii) the registered direct offering of common stock and concurrent private placement of warrants that we completed on August 28, 2023, which is described further below.

Our Market

The Symphony platform and our initial biomarker test, Symphony IL-6 test, is well suited to address a subset of the global in vitro diagnostics devices ("IVDs"), market, including sepsis, cardio-metabolic diseases, cancer and other diseases that require rapid tests. Symphony targets critical care markets where physicians must quickly determine patient acuity to identify optimal treatment regimens.

Our Business Model

Our goal is to become the first provider of rapid tests for infectious, inflammatory, and metabolic diseases by leveraging the strengths of our Symphony platform. We intend to target sales and marketing of Symphony to large critical care facilities in the United States. Our business model includes the following:

- **Attractive Financing Model.** We intend to offer various financing options for the analyzer itself. As such, our business model should not require customers to incur a significant capital outlay.
- **Recurring Revenue.** We intend to sell single-use diagnostic test cartridges. We believe that our cartridges can create a growing and recurring revenue stream, as adoption and utilization increases, and as we develop tests for additional indications. We expect the sale of our test cartridges will generate the majority of our revenue and gross profit.
- **Expand our Menu of Diagnostic Products.** As adoption increases, the customer use of the Symphony platform should also increase. As we expand our test menu to include more biomarkers, we hope to be able to increase our annual revenue per customer through the resulting increase in utilization.

The Symphony Platform

The Symphony platform is an innovative and proprietary technology platform that provides rapid and accurate measurements of key diagnostic biomarkers found in biological fluids, such as whole blood. Symphony is compact and can be deployed mobile as compared to current laboratory diagnostic platforms. Symphony incorporates a user-friendly interface where all sample preparation and reagents are integrated into disposable Symphony cartridges. Symphony uses a very small amount of blood (0.15cc or 0.15mL) to provide a measurement in less than 20 minutes.

The Symphony analyzer orchestrates whole blood processing, biomarker isolation, and immunoassay preparation using non-contact centrifugal force. All necessary reagents and components are integrated into the Symphony cartridges. Utilizing precision microchannel technology and high-specificity antibodies, whole blood is processed, and the biomarkers are isolated within the Symphony cartridge. Intermittent centrifugation cycles enable complex fluid movements, allowing sequential reagent additions and independent reaction steps inside the sealed Symphony cartridge. At the conclusion of the test, the Symphony analyzer measures the fluorescence signature correlating to a highly sensitive quantitation of the biomarker.

To perform a Symphony test, the test operator adds 0.15cc or 0.15mL (approximately three drops) of blood to the Symphony cartridge. After scanning in the patient ID, the Symphony cartridge is inserted into the Symphony analyzer and the test runs automatically. Each analyzer can run up to six cartridges simultaneously, either with six different patient samples or six different tests, in less than 20 minutes, providing quantitative measurements used for improved patient management and clinical decision-making.

Manufacturing

We plan to manufacture both our analyzers and cartridges through Contract Manufacturing Organizations (“CMOs”). We have contracts with Toray Industries, Inc (“Toray”), to license the intellectual property rights needed to manufacture our cartridges and Sanyoseiko Co. Ltd. (“Sanyoseiko”), to manufacture both our analyzers and cartridges. Each of our partners are well-established global manufacturing companies with capabilities to scale up, re-design and supply our analyzers and cartridges.

Sanyoseiko had been selected as our CMO, though in the near-term Toray will continue to manufacture certain product intermediary components for use in cartridges being manufactured for the Company by Sanyoseiko. These cartridges made using Toray intermediates are for the purpose of obtaining FDA approval and not for commercial sale. We expect to meet the demands of our global market. Both Toray’s and Sanyoseiko’s facilities are located in Japan. We license the technology for the Symphony cartridges from Toray. Our license grants us exclusive global use, with the exception of Japan.

FDA Regulatory Strategy

Our current regulatory strategy is designed to support commercialization of Symphony in the United States pending marketing authorization from the FDA. Previously, our regulatory strategy involved clinical studies involving COVID-19 patients. However, we have shifted our focus away from COVID-19 patients due to a significant decline in the number of COVID-19 related hospitalizations. Pursuant to this revised strategy, we plan to conduct a clinical study to support an FDA regulatory submission with an initial indication for risk stratification of hospitalized sepsis patients. We submitted a pre-submission application to the FDA presenting the new study design in May 2023 and participated in a pre-submission meeting on August 11, 2023. At the meeting, the FDA provided feedback on the new study design, determined that the submission of a 510(k) is the appropriate premarket submission pathway, and requested that certain data be provided in the 510(k). Based on this feedback, we intend to proceed on this basis, which considers the FDA’s feedback. The Company is working towards a Symphony IL-6 regulatory submission timeline of the first half of 2024.

We have targeted large, well-known medical and academic institutions for our study, which we believe will help support initial commercialization and market penetration. We believe that this clinical trial expansion could also support additional indications, but that any such expansion also could delay obtaining marketing authorization for the product. Based on the pre-submission meeting with the FDA, the focus of the clinical trial will to validate Symphony IL-6 as a risk stratification tool for hospitalized sepsis patients.

We maintain contracts with Toray to manufacture our cartridges and Sanyoseiko to manufacture both our analyzers and cartridges.

Sales and Marketing

Until Symphony products are authorized by the FDA, we expect to focus our sales and marketing efforts on brand awareness and market education to potential customers, emphasizing the value of monitoring a critical care patient’s IL-6 levels to improve decision making and patient outcomes. If cleared or approved by the FDA, we intend to target sales to ERs and ICUs at United States hospitals, as well as to long-term acute care facilities. We plan to establish a market presence by selling Symphony analyzers and tests both directly and through various distribution channels to maximize sales volume and market penetration.

License Agreement

On October 6, 2020, we entered into a License and Supply Agreement, as amended (the “License Agreement”), with Toray, providing us with an exclusive global license with Toray, excluding Japan, to use their patents and know-how related to the Symphony detection cartridges for the manufacturing, marketing and sale of the products (as defined in the License Agreement).

On October 23, 2023, we entered into an Amended and Restated License Agreement (the “New Toray License Agreement”) and a Master Supply Agreement (the “New Toray Supply Agreement” and, together, the “Toray Agreements”) with Toray. Under the New Toray License Agreement, we continue to license from Toray intellectual property rights needed to manufacture single-use test cartridges, and we have received the right to sublicense certain Toray intellectual property to Sanyoseiko in connection with our ongoing agreement with Sanyoseiko to manufacture our Symphony analyzers and cartridges. In addition, the New Toray License Agreement provides for the transfer of certain technology related to the cartridges to Sanyoseiko. The royalty payments we are required to pay Toray have been reduced under the New Toray License Agreement from 15% to 7.5% (or less in certain circumstances) of net sales of certain cartridges for a term of 10 years. A 50% reduction in the royalty rate applies upon expiry of applicable Toray patents on a product-by-product and country-by-country basis. The New Toray License Agreement contemplates that applicable royalty payment obligations from us to Toray for other products will be determined separately in the future.

Under the New Toray Supply Agreement, Toray will manufacture in the near-term (through its wholly owned subsidiary Kamakura Techno-Science, Inc.) certain product intermediary components for use in cartridges being manufactured for the Company by Sanyoseiko. These cartridges made using Toray intermediates are for the purpose of obtaining FDA approval and not for commercial sale. The New Toray Supply Agreement has a term ending on the earlier of October 23, 2025 or the date that we obtain FDA approval for our product, and may be extended for up to six months by mutual agreement. Once FDA approval has been obtained, the intermediates and cartridges will be manufactured by Sanyoseiko under a separate supply agreement between us and Sanyoseiko. The FDA may not clear or approve these product submissions or applications on a timely basis or at all. Such delays or refusals could have a material adverse effect on our business, financial condition, and results of operations.

Intellectual Property, Proprietary Technology

We do not currently hold any patents directly. We rely on a combination either directly or through the New Toray License Agreement with Toray of patent, copyright, trade secret, trademark, confidentiality agreements, and contractual protection to establish and protect our proprietary rights.

Competition

Our primary competition in the IL-6 market is laboratory size equipment including the Roche Cobas®, Siemens ADVIA Centaur® and Beckman Coulter Access 2®, which require pre-processing of whole blood prior to performing their test. We believe that our technology, which uses whole blood, provides us with a substantial competitive advantage over our existing competition that will sustain through commercialization, despite the major life science companies and consistent entry of innovative start-ups that define our competitive landscape.

Employees

As of November 16, 2023, we have 10 full-time employees. We also contract with several consultants and contractors performing accounting, finance, regulatory advisory, investor relations and manufacturing scale-up support. None of our employees are represented by labor unions or covered by collective bargaining agreements.

August 2023 Registered Direct Offering and Concurrent Private Placement

On August 24, 2023, we entered into a securities purchase agreement with certain institutional and accredited investors (the “August 2023 Purchase Agreement”) relating to the registered direct offering and sale of 216,000 shares (the “August 2023 Offering”) of our common stock, and a concurrent private placement (the “August 2023 Private Placement”) of unregistered warrants to purchase up to 216,000 shares of our common stock (the “August 2023 Warrants”). Each August 2023 Warrant is exercisable for one share of common stock (the “August 2023 Warrant Shares”) at an exercise price of \$7.24 per share, will be immediately exercisable upon issuance and will expire five years from the date of issuance.

The common stock sold in the August 2023 Offering was sold at a purchase price of \$7.365 per share (which amount included a purchase price of \$0.125 per accompanying August 2023 Warrant). Our gross proceeds from the August 2023 Offering and the August 2023 Private Placement were approximately \$1.59 million, before deducting placement agent fees and offering expenses.

Pursuant to an engagement letter, dated as of August 7, 2023, by and between us and H.C. Wainwright & Co., LLC (“Wainwright”), as a part of compensation, we issued to Wainwright or its designees, warrants to purchase up to 15,120 shares of common stock (the “August 2023 Placement Agent Warrants”). The August 2023 Placement Agent Warrants have substantially the same terms as the August 2023 Warrants, except that the August 2023 Placement Agent Warrants have an exercise price equal to \$9.2063 per share and a term of five years from the commencement of the sales pursuant to the August 2023 Offering.

The August 2023 Offering and August 2023 Private Placement closed on August 28, 2023.

Reverse Stock Split

On July 24, 2023, we effected a reverse stock split of our shares of common stock at a ratio of 1-for-20 (the “Reverse Stock Split”), with a corresponding reduction in the number of authorized outstanding number of shares of common stock from 100,000,000 to 7,500,000. The Reverse Stock Split became effective on July 24, 2023, when the Company’s common stock opened for trading on Nasdaq on a post-split basis under the Company’s existing trading symbol, “BJDX.” All historical share and per share amounts reflected throughout this prospectus have been adjusted to reflect the Reverse Stock Split. However, our periodic and current reports, and all other documents incorporated by reference into this prospectus that were filed prior to July 24, 2023, do not give effect to the Reverse Stock Split.

Nasdaq Minimum Bid Price Requirement

On October 25, 2022, we received a notification letter from the Nasdaq Listing Qualifications Staff of Nasdaq notifying us that the closing bid price for our common stock had been below \$1.00 for the previous 30 consecutive business days and that we therefore were not in compliance with the minimum bid price requirement for continued listing on Nasdaq under Nasdaq Listing Rule 5550(a)(2). On April 25, 2023, at our request, Nasdaq's Listing Qualifications Staff notified us that it has extended the time for the Company to regain compliance with the Minimum Bid Requirement until October 23, 2023.

On August 8, 2023, we received a letter from the Listing Qualifications Department of Nasdaq notifying us that, based on the closing bid price of our common stock having been at least \$1.00 per share for the required period, we have regained compliance with Nasdaq Listing Rule 5550(a)(2) and the minimum bid price deficiency matter is now closed.

Risks Associated with Our Business

Our business is subject to a number of risks of which you should be aware before making an investment decision. These risks are discussed more fully in the "Risk Factors" section of this prospectus immediately following this prospectus summary and in Part I, Item 1A "Risk Factors" of our Annual Report on Form 10-K for the fiscal year ended December 31, 2022 and in Part II, Item 1A "Risk Factors" of our Quarterly Reports on Form 10-Q for the fiscal quarters ended March 31, 2023, June 30, 2023 and September 30, 2023, which are each incorporated by reference in this prospectus. These risks include the following:

- We have incurred significant losses since inception and may not be able to achieve significant revenues or profitability.
- We will require substantial additional funding, which may not be available to us on acceptable terms, or at all, and, if not so available, may require us to delay, limit, reduce or cease our operations.
- The New License Agreement with Toray, which covers the license of the core technology used in our Symphony Cartridges, and the New Supply Agreement with Toray, which covers the supply of cartridge intermediates from Toray to Sanyoseiko for Sanyoseiko to manufacture our cartridges, contain significant risks that may threaten our viability or otherwise have a material adverse effect on us and our business, assets and prospects.
- We depend on, and are liable for, Sanyoseiko as our primary contract manufacturing organization (CMO), so its inability or failure to perform appropriately in that capacity may threaten our viability or have a material adverse effect on us and our business, assets and its prospects.
- We cannot accurately predict the volume or timing of any sales, making the timing of any revenues difficult to predict.
- If third-party payors do not provide coverage and reimbursement for the use of our platform, our business and prospects may be negatively impacted.
- If we are not able to attract and retain highly skilled managerial, scientific and technical personnel, we may not be able to implement our business model successfully.
- Significant raw material shortages, supplier capacity constraints, supplier disruptions, and sourcing issues may adversely impact or limited our products sales and or impact our product margins.
- The regulatory approval process which we may be required to navigate may be expensive, time-consuming, and uncertain and may prevent us from obtaining clearance for our planned products
- Product clearances and approvals can often be denied or significantly delayed.
- Clinical data obtained in the future may not meet the required objectives, which could delay, limit or prevent any regulatory approval.
- We may be unable to complete required clinical evaluations, or we may experience significant delays in completing such clinical evaluations, which could prevent or significantly delay our targeted product launch timeframe and impair our viability and business plan.
- We may be liable if the FDA or another regulatory agency concludes that we have engaged in the off-label promotion of our products.
- We depend on intellectual property licensed from Toray, and any dispute over the license would significantly harm our business.
- We face intense competition in the diagnostic testing market, particularly in the IL-6 space, and as a result we may be unable to effectively compete in our industry.
- If we or Toray fail to respond quickly to technological developments, our products may become uncompetitive and obsolete.
- Shares eligible for future sale may adversely affect the market for our common stock.

Implications of Being an Emerging Growth Company

We are an emerging growth company as defined in the Jumpstart Our Business Startups Act of 2012 (the “JOBS Act”). We may remain an “emerging growth company” until as late as December 31, 2027 (the fiscal year-end following the fifth anniversary of the completion of our initial public offering, though we may cease to be an “emerging growth company” earlier under certain circumstances, including (1) if the market value of our common stock that is held by nonaffiliates exceeds \$700 million as of any June 30, in which case we would cease to be an “emerging growth company” as of the following December 31, or (2) if our gross revenue exceeds \$1.235 billion in any fiscal year. “Emerging growth companies” may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies, including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. Investors could find our common stock less attractive because we may rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile.

In addition, Section 102 of the JOBS Act also provides that an “emerging growth company” can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act, for complying with new or revised accounting standards. An “emerging growth company” can therefore delay the adoption of certain accounting standards until those standards would otherwise apply to private companies.

Corporate Information

We were incorporated under the laws of the State of Delaware on March 20, 2015. Our principal executive offices are located at 360 Massachusetts Avenue, Suite 203, Acton, MA 01720 and our telephone number is (844) 327-7078. Our website address is www.bluejaydx.com. We do not incorporate the information on, or accessible through, our website into this prospectus, and you should not consider any information on, or accessible through, our website as part of this prospectus.

THE OFFERING

Common Stock to be Offered	shares based on the sale of our common stock at an assumed combined public offering price of \$ per share of common stock and accompanying Common Warrant, which is the closing price of our common stock on Nasdaq on , 2023, and assuming no sale of any Prefunded Warrants.
Prefunded Warrants to be Offered	<p>We are also offering to certain purchasers whose purchase of shares of common stock in this offering would otherwise 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 immediately following the consummation of this offering, the opportunity to purchase, if such purchasers so choose, Prefunded Warrants to purchase shares of common stock, in lieu of shares of common stock that would otherwise result in any such purchaser's beneficial ownership exceeding 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding common stock. Each Prefunded Warrant will be exercisable for one share of our common stock. The purchase price of each Prefunded Warrant and accompanying Common Warrant will equal the price at which the share of common stock and accompanying Common Warrant are being sold to the public in this offering, minus \$0.0001, and the exercise price of each Prefunded Warrant will be \$0.0001 per share. The Prefunded Warrants will be exercisable immediately and may be exercised at any time until all of the Prefunded Warrants are exercised in full.</p> <p>This offering also relates to the shares of common stock issuable upon exercise of the Prefunded Warrants sold in this offering. For each Prefunded Warrant we sell, the number of shares of common stock we are offering will be decreased on a one-for-one basis. Because we will issue a Common Warrant for each share of our common stock and for each Prefunded Warrant sold in this offering, the number of Common Warrants sold in this offering will not change as a result of a change in the mix of the shares of our common stock and Prefunded Warrants sold.</p>
Common Warrants to be Offered	<p>Each share of our common stock and each Prefunded Warrant to purchase one share of our common stock is being sold together with a Common Warrant to purchase share of our common stock. Each Common Warrant will have an exercise price of \$ per share (representing % of the price at which a share of common stock and accompanying Common Warrant are sold to the public in this offering), will be immediately exercisable and will expire on the anniversary of the original issuance date.</p> <p>The shares of common stock and Prefunded Warrants, and the accompanying Common Warrants, as the case may be, can only be purchased together in this offering but will be issued separately and will be immediately separable upon issuance. This prospectus also relates to the offering of the shares of common stock issuable upon exercise of the Common Warrants.</p>
Lock-up Agreements	We and all of our executive officers and directors will enter into lock-up agreements with the placement agent. Under these agreements, we and each of these persons may not, without the prior written approval of the placement agent, offer, sell, contract to sell or otherwise dispose of or hedge common stock or securities convertible into or exchangeable for common stock, subject to certain exceptions. The restrictions contained in these agreements will be in effect for a period of days after the date of the closing of this offering. For more information, see "Plan of Distribution."
Placement Agent Warrants	We have agreed to issue to the placement agent or its designees as compensation in connection with this offering, the placement agent warrants to purchase up to % of the aggregate number of shares of common stock sold in this offering (including the shares of common stock issuable upon the exercise of the Prefunded Warrants) at an exercise price equal to % of the combined public offering price per share and accompanying Common Warrant to be sold in this offering. The placement agent warrants will be exercisable upon issuance and will expire years from the commencement of sales under this offering.
Common Stock Outstanding After This Offering (1)	shares (assuming we sell only shares of common stock and no Prefunded Warrants and assuming no exercise of the Common Warrants).

Use of Proceeds We estimate that the net proceeds from this offering will be approximately \$ million, based on an assumed combined public offering price of \$ per share of common stock and accompanying Common Warrant which was the closing price of our common stock on Nasdaq on , 2023, after deducting the placement agent fees and estimated offering expenses payable by us, and assuming we sell only shares of common stock and no Prefunded Warrants and excluding the proceeds, if any, from the exercise of the Common Warrants in this offering.

We currently intend to use the net proceeds from the offering to fund matters related to obtaining FDA approval (including clinical studies related thereto), as well as for other research and development activities, and for general working capital needs. We may also use a portion of the net proceeds to acquire or invest in complementary businesses, products and technologies or to fund the development of any such complementary businesses, products or technologies. We currently have no plans for any such acquisitions or investments. See “Use of Proceeds” beginning on page 14.

Risk Factors See “Risk Factors” beginning on page 8 of this prospectus and other information included and incorporated by reference in this prospectus for a discussion of the risk factors you should consider carefully when making an investment decision.

Nasdaq Symbol Our common stock is listed on Nasdaq under the symbol “BJDX.” There is no established trading market for the Common Warrants or the Prefunded Warrants, and we do not expect a trading market to develop. We do not intend to list the Common Warrants or the Prefunded Warrants on any securities exchange or other trading market. Without a trading market, the liquidity of the Common Warrants and the Prefunded Warrants will be extremely limited.

(1) The number of shares of our common stock to be outstanding after this offering is based on 1,239,140 shares of our common stock outstanding as of November 16, 2023, and, unless otherwise indicated, excludes, as of that date:

- 31,361 shares of common stock issuable upon the exercise of stock options outstanding as of November 16, 2023 at a weighted average exercise price of \$36.28 per share;
- 216,000 shares of common stock issuable upon the exercise of the August 2023 Warrants outstanding as of as of November 16, 2023 at an exercise price of \$7.24 per share;
- 15,120 shares of common stock issuable upon the exercise of the August 2023 Placement Agent Warrants outstanding as of as of November 16, 2023 at an exercise price of \$9.2063 per share;
- 40,594 shares of common stock issuable upon the exercise of additional Common Stock warrants outstanding as of November 16, 2023 at a weighted average exercise price of \$64.73 per share;
- 124,200 shares of common stock issuable upon the exercise of Class A warrants outstanding as of November 16, 2023 at an exercise price of \$140.00;
- 3,770 shares of common stock issuable upon the exercise of Class B warrants outstanding as of November 16, 2023 at an exercise price of \$200.00;
- 13,113 shares of common stock available for future issuance under our 2018 Stock Incentive Plan as of November 16, 2023;
- 40,377 shares of common stock available for grant under the 2021 Stock Incentive Plan as of November 16, 2023; and
- 7,875 unvested restricted stock units outstanding as of November 16, 2023.

Except as otherwise indicated, the information in this prospectus assumes: (i) no sale of the Prefunded Warrants in this offering, which, if sold, would reduce the number of shares of common stock that we are offering on an one-for-one basis; (ii) no exercise of any Common Warrants issued in this offering; (iii) no exercise of the placement agent warrants to be issued to the placement agent or its designees as compensation in connection with this offering; and (iv) no exercise of the options or warrants described above.

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 fiscal year ended December 31, 2022 and our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2023, June 30, 2023 and September 30, 2023, which are incorporated by reference in this prospectus, together with the information included in this prospectus 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 harmed. In such event, the trading price of our common stock and value of the Prefunded Warrants and Common Warrants could decline and you might lose all or part of your investment. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently believe to be immaterial may also adversely affect our business. Certain statements below are forward-looking statements.

Risks Related to Our Financial Condition and Capital Requirements

We have incurred significant losses since our inception and may continue to incur losses and thus may never achieve or maintain profitability.

We have incurred substantial losses since our inception, and we expect to continue to incur additional losses for the next several years. For the three months ended September 30, 2023, we had a net loss of approximately \$2.3 million. From our inception through September 30, 2023, we had an accumulated deficit of \$24.6 million. We had cash and cash equivalents of \$5.1 million as of September 30, 2023. We continue to develop the Symphony analyzer and its first test for the measurement of IL-6. We remain committed to obtaining FDA clearance and plan to conduct clinical trials to obtain sufficient data to support its FDA submission, while also continuing to build its manufacturing operations with its contract manufacturing organizations. Expected future operating losses will have an adverse effect on our cash resources, stockholders' equity and working capital. Our liquidity position raises substantial doubt about our ability to continue as a going concern.

Our failure to become and remain profitable could depress the value of our common stock and impair our ability to raise capital, expand our business, maintain our development efforts, or continue our operations. A decline in the value of our common stock could also cause you to lose all or part of your investment.

The report of our independent registered public accounting firm on our financial statements for the year ended December 31, 2022 included an emphasis of matter paragraph stating that our recurring losses from operations and continued cash outflows from operating activities raised substantial doubt about our ability to continue as a going concern. Our consolidated financial statements do not include any adjustments that might result from the outcome of this going concern uncertainty and have been prepared under the assumption that we will continue to operate as a going concern, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. If we are unable to continue as a going concern, we may be forced to liquidate our assets which would have an adverse impact on our business and developmental activities. In such a scenario, the values we receive for our assets in liquidation or dissolution could be significantly lower than the values reflected in our financial statements. The reaction of investors to the inclusion of a going concern statement by our independent registered public accounting firm and our potential inability to continue as a going concern may materially adversely affect our stock price and our ability to raise new capital.

We will need to raise additional funding to fund our working capital needs. Additional financing may not be available on acceptable terms, or at all. Failure to obtain additional capital may force us to limit or terminate our operations.

Even if we sell all securities offered hereby, the expected net proceeds of this offering may not be sufficient for us to fund the working capital needs of our business. We will continue to seek funds through equity or debt financings, collaborative or other arrangements with corporate sources, or through other sources of financing. Additional funding may not be available to us on acceptable terms, or at all. If adequate funds are not available or are not available on acceptable terms, we may be required to delay our FDA regulatory strategy, and to delay or reduce the scope of our research or development programs, our commercialization efforts or our manufacturing commitments and capacity. Such inability to obtain additional financing when needed could have a material adverse effect on our business, results of operations, cash flow, financial condition and prospects.

Risks Related to this Offering and our Common Stock

Purchasers who purchase our securities in this offering pursuant to a securities purchase agreement may have rights not available to purchasers that purchase without the benefit of a securities purchase agreement.

In addition to rights and remedies available to all purchasers in this offering under federal securities and state law, the purchasers that enter into a securities purchase agreement will also be able to bring claims of breach of contract against us. The ability to pursue a claim for breach of contract provides those investors with the means to enforce the covenants uniquely available to them under the securities purchase agreement including: (i) timely delivery of shares; (ii) agreement to not enter into variable rate financings for from closing, subject to certain exceptions; (iii) agreement to not enter into any financings for from closing; and (iv) indemnification for breach of contract.

This is a best efforts offering, with 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, nor will investors in this offering receive a refund in the event that we do not sell an amount of securities sufficient to pursue the business goals outlined in this prospectus.

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. 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 business goals, 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, or at all.

There is no required minimum number of securities that must be sold as a condition to completion of this offering, and we have not, nor will we, establish an escrow account in connection with 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. Because there is no escrow account and no minimum offering amount, investors could be in a position where they have invested in us, but we are unable to fulfill our objectives due to a lack of interest in this offering. Further, because there is no escrow account in operation and no minimum investment amount, any proceeds from the sale of securities offered by us will be available for our immediate use, despite uncertainty about whether we would be able to use such funds to effectively implement our business plan. Investor funds will not be returned under any circumstances whether during or after the offering.

We have broad discretion in how we use the net proceeds of this offering, and we may not use these proceeds effectively or in ways with which you agree.

Our management will have broad discretion as to the application of the net proceeds of this offering and could use them for purposes other than those contemplated at the time of the offering. We currently intend to use the net proceeds from the offering to fund matters related to obtaining FDA approval (including clinical studies related thereto), as well as for other research and development activities, and for general working capital needs. We may also use a portion of the net proceeds to acquire or invest in complementary businesses, products and technologies or to fund the development of any such complementary businesses, products or technologies, though we currently have no plans for any such acquisitions or investments. Our stockholders may not agree with the manner in which our management chooses to allocate and spend the net proceeds. Moreover, our management may use the net proceeds for corporate purposes that may not increase the market price of our common stock.

If you purchase common stock sold in this offering, you will experience immediate dilution as a result of this offering.

Because the effective price per share of our common stock being offered may be higher than the net tangible book value per share of our common stock, you will experience dilution to the extent of the difference between the offering price per share of common stock you pay in this offering and the adjusted net tangible book value per share of our common stock immediately after this offering. Our net tangible book value as of September 30, 2023, was approximately \$5.2 million, or \$4.22 per share of common stock. Net tangible book value per share is equal to our total tangible assets minus total liabilities, all divided by the number of shares of common stock outstanding. See the section titled “Dilution” for a more detailed discussion of the dilution you will incur if you purchase shares in this offering.

If you purchase our securities in this offering, you may experience future dilution as a result of future equity offerings or other equity issuances.

In order to raise additional capital, we believe that we will offer and issue additional shares of our common stock or other securities convertible into or exchangeable for our common stock in the future. We are generally not restricted from issuing additional securities, including shares of common stock, securities that are convertible into or exchangeable for, or that represent the right to receive, common stock or substantially similar securities. Assuming the sale of _____ shares of our common stock and accompanying Common Warrants to purchase up to _____ shares of common stock at an assumed combined public offering price of \$ _____ per share and accompanying Common Warrant, the closing sale price per share of our common stock on Nasdaq on _____, 2023, assuming no sale of any Prefunded Warrants in this offering, no exercise of the Common Warrants being offered in this offering and after deducting the placement agent fees and estimated offering expenses payable by us, you will incur immediate dilution of approximately \$ _____ per share. As a result of the dilution in net tangible book value to investors purchasing securities in this offering, investors may receive significantly less than the purchase price paid in this offering, if anything, in the event of the liquidation of our company. The issuance of securities in future offerings may cause further dilution to our stockholders, including investors in this offering. We cannot assure you that we will be able to sell shares or other securities in any other offering at a price per share that is equal to or greater than the price per share paid by investors in this offering, and investors purchasing other securities in the future could have rights superior to existing stockholders. The price per share at which we sell additional shares of our common stock or other securities convertible into or exchangeable for our common stock in future transactions may be higher or lower than the price per share in this offering.

In addition, we have a significant number of stock options, restricted stock units and warrants outstanding. To the extent that outstanding stock options or warrants have been or may be exercised or other shares issued, you may experience further dilution. Further, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans.

The market price of our common stock and the trading volume of our common stock has been and may continue to be, highly volatile, and such volatility could cause the market price of our common stock to decrease.

During 2022 and 2023, the market price of our common stock was volatile, and our stock price continues to fluctuate. The market price and trading volume of our common stock may continue to fluctuate significantly in response to numerous factors, some of which are beyond our control, such as:

- the success of competitive products or technologies;
- regulatory actions with respect to our product candidates or our competitors' products;
- the ability of our third-party manufacturers and suppliers to meet our demand volume;
- actual or anticipated changes in our growth rate relative to our competitors;
- announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures, collaborations or capital commitments;
- developments or disputes concerning patent applications, issued patents or other proprietary rights;
- the level of expenses related to our clinical development programs;
- the results of our efforts to in-license or acquire additional product candidates or products;
- actual or anticipated changes in estimates as to financial results, development timelines or recommendations by securities analysts;

- variations in our financial results or those of companies that are perceived to be similar to us;
- fluctuations in the valuation of companies perceived by investors to be comparable to us;
- share price and volume fluctuations attributable to inconsistent trading volume levels of our shares;
- announcement or expectation of additional financing efforts;
- sales of our common stock by us, our insiders or our other stockholders; and
- other events or factors, many of which are beyond our control.

Further, the stock market in general, and the market for health care and life sciences companies in particular, has recently experienced extreme price and volume fluctuations. The volatility of our common stock is further exacerbated due to its low trading volume. Continued market fluctuations could result in extreme volatility in the price of our common stock, which could cause a decline in the value of our common stock and the loss of some or all of your investment.

Trading of our common stock is limited, making it difficult for our stockholders to sell their shares, and future sales of common stock could reduce our stock price.

Trading of our common stock is currently conducted on Nasdaq. The liquidity of our common stock is limited, including in terms of the number of shares that can be bought and sold at a given price and reduction in security analysts' and the media's coverage of us, if any. These factors may result in different prices for our common stock than might otherwise be obtained in a more liquid market and could also result in a larger spread between the bid and asked prices for our common stock. In addition, in the absence of a large market capitalization, our common stock is less liquid than the stock of companies with broader public ownership, and, as a result, the trading prices of our common stock may be more volatile. In the absence of an active public trading market, an investor may be unable to liquidate his investment in our common stock. Trading of a relatively small volume of our common stock may have a greater impact on the trading price of our stock. We cannot predict the prices at which our common stock will trade in the future, if at all.

The exercise of outstanding common stock purchase warrants and stock options and the settlement of outstanding restricted stock units will have a dilutive effect on the percentage ownership of our capital stock by existing stockholders.

As of November 16, 2023, we had outstanding warrants to acquire 399,684 shares of our common stock, stock options to purchase 31,361 shares of our common stock, and restricted stock units to acquire 7,875 shares of our common stock. All such warrants have exercise prices above our common stock's recent trading prices, but certain holders have the right to effect a cashless exercise of such warrants. If a significant number of such warrants and stock options are exercised by the holders, the percentage of our common stock owned by our existing stockholders will be diluted. Further, settlement of the outstanding restricted stock units will cause dilution to our existing stockholders.

We do not currently intend to pay dividends on our common stock in the foreseeable future, and consequently, your ability to achieve a return on your investment will depend on appreciation in the price of our common stock.

We do not anticipate paying any cash dividends to holders of our common stock in the foreseeable future. Consequently, investors must rely on sales of their common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investments. There is no guarantee that shares of our common stock will appreciate in value or even maintain the price at which our stockholders have purchased their shares.

There is no public market for the Common Warrants or Prefunded Warrants to purchase shares of our common stock being offered by us in this offering.

There is no established public trading market for the Common Warrants or the Prefunded Warrants to purchase shares of our common stock that are being offered as part of this offering, and we do not expect a market to develop. In addition, we do not intend to apply to list the Common Warrants or Prefunded Warrants on any national securities exchange or other nationally recognized trading system, including Nasdaq. Without an active market, the liquidity of the Common Warrants and Prefunded Warrants will be limited.

The Common Warrants are speculative in nature.

The Common Warrants offered hereby do not confer any rights of share 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. Specifically, commencing on the date of issuance, holders of the Common Warrants may acquire the shares of common stock issuable upon exercise of such warrants at an exercise price of \$ per share of common stock. Moreover, following this offering, the market value of the Common Warrants is uncertain and there can be no assurance that the market value of the Common Warrants, if any, will equal or exceed their public offering prices. There can be no assurance that the market price of the shares of common stock will ever equal or exceed the exercise price of the Common Warrants, and consequently, whether it will ever be profitable for holders of Common Warrants to exercise the Common Warrants.

Holders of the Prefunded Warrants and the Common Warrants offered hereby will have no rights as common stockholders with respect to the shares our common stock underlying the warrants until such holders exercise their warrants and acquire our common stock, except as otherwise provided in the Prefunded Warrants and the Common Warrants.

Until holders of the Common Warrants and the Prefunded Warrants acquire shares of our common stock upon exercise thereof, such holders will have no rights with respect to the shares of our common stock underlying such warrants, except to the extent that holders of such Common Warrants and Prefunded Warrants will have certain rights to participate in distributions or dividends paid on our common stock as set forth in the Common Warrants and the Prefunded Warrants. Upon exercise of the Common Warrants and the Prefunded Warrants, the holders will be entitled to exercise the rights of a common stockholder only as to matters for which the record date occurs after the exercise date.

This offering may cause the trading price of our shares of common stock to decrease.

The price per share, together with the number of shares of common stock we propose to issue and ultimately will issue if this offering is completed, may result in an immediate decrease in the market price of our shares. This decrease may continue after the completion of this offering.

Resales of our shares of common stock in the public market by our stockholders as a result of this offering may cause the market price of our shares of common stock to fall.

We are registering shares of common stock, as well as shares of common stock, in the aggregate, issuable upon the exercise of the Prefunded Warrants and the Common Warrants offered under this prospectus. Sales of substantial amounts of our shares of common stock in the public market, or the perception that such sales might occur, could adversely affect the market price of our shares of common stock. The issuance of new shares of common stock could result in resales of our shares of common stock by our current shareholders concerned about the potential ownership dilution of their holdings. Furthermore, in the future, we may issue additional shares of common stock or other equity or debt securities exercisable or convertible into shares of common stock. Any such issuance could result in substantial dilution to our existing shareholders and could cause our stock price to decline.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated herein by reference contain forward-looking statements which are made pursuant to the safe harbor provisions of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. In some cases, you can identify these statements by forward-looking words such as “may,” “might,” “should,” “would,” “could,” “expect,” “plan,” “anticipate,” “intend,” “believe,” “estimate,” “predict,” “potential” or “continue,” and the negative of these terms and other comparable terminology. These forward-looking statements, which are subject to known and unknown risks, uncertainties and assumptions about us, may include projections of our future financial performance based on our growth strategies and anticipated trends in our business. These statements are only predictions based on our current expectations and projections about future events. There are important factors that could cause our actual results, level of activity, performance or achievements to differ materially from the results, level of activity, performance or achievements expressed or implied by the forward-looking statements. We have included important factors in the cautionary statements included in this prospectus, particularly under “Risk Factors” on page 8 of this prospectus and the documents incorporated herein that we believe could cause actual results or events to differ materially from the forward-looking statements that we make.

While we believe we have identified material risks in our Annual Report on Form 10-K for the fiscal year ended December 31, 2022 and our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2023, June 30, 2023 and September 30, 2023, which are incorporated by reference in this prospectus, together with the information included in this prospectus and the documents incorporated by reference herein, and in any free writing prospectus that we have authorized for use in connection with this offering, these risks and uncertainties are not exhaustive. Other sections of this prospectus and the documents incorporated herein by reference may describe additional factors that could adversely impact our business and financial performance. Moreover, we operate in a very competitive and rapidly changing environment. New risks and uncertainties emerge from time to time, and it is not possible to predict all risks and uncertainties, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements.

Although we believe the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, level of activity, performance or achievements. Moreover, neither we nor any other person assumes responsibility for the accuracy or completeness of any of these forward-looking statements. You should not rely upon forward-looking statements as predictions of future events. You should read this prospectus and any free writing prospectus and the documents that we have incorporated by reference to this prospectus and filed as exhibits to this prospectus completely and with the understanding that our actual future results may be materially different from what we expect.

We caution you not to place undue reliance on the forward-looking statements, which speak only as of the date of this prospectus in the case of forward-looking statements contained in this prospectus.

You should not rely upon forward-looking statements as predictions of future events. Our actual results and financial condition may differ materially from those indicated in the forward-looking statements. We qualify all of our forward-looking statements by these cautionary statements. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. Therefore, you should not rely on any of the forward-looking statements. In addition, with respect to all of our forward-looking statements, we claim the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995.

Except as required by law, we undertake no obligation to update or revise any forward-looking statements to reflect new information or future events or developments. You should not assume that our silence over time means that actual events are bearing out as expressed or implied in such forward-looking statements. Before deciding to purchase our securities, you should carefully consider the risk factors discussed and incorporated by reference in this prospectus and the documents incorporated herein.

USE OF PROCEEDS

We estimate that the net proceeds from this offering, after deducting placement agent's fees and estimated offering expenses payable by us, will be approximately \$ million (based on an assumed public offering price of \$ per share and accompanying warrant, which was the last reported sales price of our common stock on Nasdaq on , 2023). We intend to use the net proceeds from the offering to fund matters related to obtaining FDA approval (including clinical studies related thereto), as well as for other research and development activities, and for general working capital needs. We may also use a portion of the net proceeds to acquire or invest in complementary businesses, products and technologies or to fund the development of any such complementary businesses, products or technologies. We currently have no plans for any such acquisitions or investments.

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, and we may not sell any or all of the securities we are offering. As a result, we may receive significantly less in net proceeds.

This expected use of net proceeds from this offering represents our intentions based upon our current plans and business conditions, which could change in the future as our plans and business conditions evolve. We cannot currently allocate specific percentages of the net proceeds to us from this offering that we may use for the purposes specified above. Our management will have broad discretion in the application of the net proceeds from this offering and could use them for purposes other than those contemplated at the time of this offering. Our stockholders may not agree with the manner in which our management chooses to allocate and spend the net proceeds. Moreover, our management may use the net proceeds for corporate purposes that may not result in our being profitable or that increases our market value.

Pending our use of the net proceeds from this offering, we intend to invest the net proceeds in a variety of capital preservation investments, including short-term, investment-grade, interest-bearing instruments and U.S. government securities.

DIVIDEND POLICY

We have never declared or paid any cash dividends on our capital stock. We currently intend to retain earnings, if any, to finance the growth and development of our business. We do not expect to pay any cash dividends on our common stock in the foreseeable future. Payment of future dividends, if any, will be at the discretion of our Board of Directors and will depend on our financial condition, results of operations, capital requirements, restrictions contained in any financing instruments, provisions of applicable law and other factors our Board of Directors deems relevant. On June 7, 2021, our Board of Directors declared a stock dividend of 2.15 shares of common stock for every share of common stock. This stock dividend was deemed a large stock dividend and was treated as a 1-for-3.15 stock split.

DILUTION

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

Our net tangible book value as of September 30, 2023 was approximately \$5.2 million, or \$4.22 per share. Net tangible book value per share is determined by dividing our total tangible assets, less total liabilities, by the number of shares of our common stock outstanding as of September 30, 2023. Dilution in net tangible book value per share represents the difference between the amount per share paid by purchasers of shares of common stock in this offering and the net tangible book value per share of our common stock immediately after this offering.

After giving effect to the sale by us in this offering of shares of our common stock and accompanying Common Warrants in this offering at an assumed combined public offering price of \$ per share and Common Warrant, based on the closing price of our common stock on Nasdaq on , 2023, assuming no sale of any Prefunded Warrants in this offering, no exercise of any of the Common Warrants being offered in this offering, including the placement agent warrants issued to the placement agent or its designees as compensation in connection with this offering, and after deducting the placement agent fees and estimated offering expenses payable by us, our as adjusted net tangible book value as of September 30, 2023 would have been approximately \$ million, or approximately \$ per share of common stock. This represents an immediate increase in net tangible book value of approximately \$ per share of common stock to our existing security holders and an immediate dilution in as adjusted net tangible book value of approximately \$ per share to purchasers of our securities in this offering, as illustrated by the following table:

Assumed public offering price per share and accompanying Common Warrant	\$	
Net tangible book value per share as of September 30, 2023	\$	4.22
in net tangible book value per share attributable to this offering	\$	
As adjusted net tangible book value per share as of September 30, 2023 after giving effect to this offering	\$	
Dilution in net tangible book value per share to investors participating in this offering	\$	

A \$0.10 increase in the assumed combined public offering price of \$ per share and Common Warrant would increase our as adjusted net tangible book value after this offering by \$ million, or \$ per share, and the dilution per share to investors purchasing securities in this offering would be approximately \$ per share, assuming that the maximum number of securities offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the placement agent fees and estimated offering expenses payable by us. Similarly, a \$0.10 decrease in the assumed combined public offering price of \$ per share and Common Warrant would decrease our as adjusted net tangible book value after this offering by \$ million, or \$ per share, and the dilution per share to investors purchasing securities in this offering would be \$ per share, assuming that the maximum number of securities offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the placement agent fees and estimated offering expenses payable by us.

We may also increase or decrease the number of securities we are offering from the assumed maximum number of securities set forth above. An increase of 100,000 shares from the assumed maximum number of shares set forth on the cover page of this prospectus would increase our as adjusted net tangible book value after this offering by \$ million, or \$ per share, and the dilution per share to investors purchasing securities in this offering would be approximately \$ per share, assuming that the assumed public offering price remains the same and after deducting the placement agent fees and estimated offering expenses payable by us. Similarly, a decrease of 100,000 shares from the assumed maximum number of shares set forth on the cover page of this prospectus would decrease our as adjusted net tangible book value after this offering by \$ million, or \$ per share, and the dilution per share to investors purchasing securities in this offering would be approximately \$ per share, assuming that the assumed public offering price remains the same and after deducting the placement agent fees and estimated offering expenses payable by us.

The information discussed above is illustrative only and will adjust based on the actual combined public offering price, the actual number of securities that we offer in this offering, and other terms of this offering determined at pricing. The foregoing discussion and table assumes no sale of Prefunded Warrants, which if sold, would reduce the number of shares of common stock that we are offering on a one-for-one basis and does not take into account further dilution to investors in this offering that could occur upon the exercise of outstanding options and warrants having a per share exercise price less than the combined public offering price per share and Common Warrant in this offering.

The information above is based on 1,239,140 shares of our common stock outstanding as of September 30, 2023, excludes any shares of common stock underlying either the Prefunded Warrants or Common Warrants, and excludes:

- 31,361 shares of common stock issuable upon the exercise of stock options outstanding as of September 30, 2023 at a weighted average exercise price of \$36.28 per share;
- 216,000 shares of common stock issuable upon the exercise of the August 2023 Warrants outstanding as of as of September 30, 2023 at an exercise price of \$7.24 per share;
- 15,120 shares of common stock issuable upon the exercise of the August 2023 Placement Agent Warrants outstanding as of as of September 30, 2023 at an exercise price of \$9.2063 per share;
- 40,594 shares of common stock issuable upon the exercise of Common Stock warrants outstanding as of September 30, 2023 at a weighted average exercise price of \$64.73 per share;
- 124,200 shares of common stock issuable upon the exercise of Class A warrants outstanding as of September 30, 2023 at an exercise price of \$140.00;
- 3,770 shares of common stock issuable upon the exercise of Class B warrants outstanding as of September 30, 2023 at an exercise price of \$200.00;
- 13,113 shares of common stock available for future issuance under our 2018 Stock Incentive Plan as of September 30, 2023;
- 40,377 shares of common stock available for grant under the 2021 Stock Incentive Plan as of September 30, 2023; and
- 7,875 unvested restricted stock units outstanding as of September 30, 2023.

Except as otherwise indicated, the information in this prospectus assumes: (i) no sale of the Prefunded Warrants in this offering, which, if sold, would reduce the number of shares of common stock that we are offering on an one-for-one basis; (ii) no exercise of any Common Warrants issued in this offering; (iii) no exercise of the placement agent warrants to be issued to the placement agent or its designees as compensation in connection with this offering; and (iv) no exercise of the options or warrants described above.

DESCRIPTION OF CAPITAL STOCK

The summary of general terms and provisions of our capital stock set forth below does not purport to be complete and is subject to and qualified by reference to the Company's Amended and Restated Certificate of Incorporation (the "Certificate of Incorporation") and Amended and Restated Bylaws (the "Bylaws," and together with the Certificate of Incorporation, the "Charter Documents"), each of which is included as an exhibit to the Company's most recent Annual Report on Form 10-K filed with the Securities and Exchange Commission and incorporated by reference herein. For additional information, please read the Charter Documents and the applicable provisions of the Delaware General Corporation Law (the "DGCL").

Authorized Capital Stock

We are authorized to issue up to 12,500,000 shares, of which (i) 7,500,000 have been designated common stock, par value \$0.0001 per share, and (ii) 5,000,000 have been designated preferred stock, par value \$0.0001 per share. As of November 16, 2023, there were 1,239,140 shares of our common stock outstanding, held by 15 stockholders of record. This figure does not reflect the number of beneficial owners of shares of our common stock as a single stockholder of record often holds shares in nominee name (also referred to as, in "street name") on behalf of multiple beneficial owners.

Common Stock

Voting

Each holder of common stock is entitled to one vote for each share of common stock held on all matters submitted to a vote of stockholders. Any action at a meeting at which a quorum is present will be decided by a majority of the voting power present in person or represented by proxy, except in the case of any election of directors, which will be decided by a plurality of votes cast. There is no cumulative voting.

Dividends

Holders of our common stock are entitled to receive dividends when, as and if declared by our Board of Directors out of funds legally available for payment, subject to the rights of holders, if any, of any class of stock having preference over the common stock. Any decision to pay dividends on our common stock will be at the discretion of our Board of Directors. Our Board of Directors may or may not determine to declare dividends in the future. See "Dividend Policy." The board's determination to issue dividends will depend upon our profitability and financial condition, any contractual restrictions, restrictions imposed by applicable law and the SEC, and other factors that our Board of Directors deems relevant.

Liquidation Rights

In the event of a voluntary or involuntary liquidation, dissolution or winding up of the Company, the holders of our common stock will be entitled to share ratably on the basis of the number of shares held in any of the assets available for distribution after we have paid in full, or provided for payment of, all of our debts and after the holders of all outstanding series of any class of stock have preference over the common stock, if any, have received their liquidation preferences in full.

Other

Our issued and outstanding shares of common stock are fully paid and nonassessable. Holders of shares of our common stock are not entitled to preemptive rights. Shares of our common stock are not convertible into shares of any other class of capital stock, nor are they subject to any redemption or sinking fund provisions.

Preferred Stock

We are authorized to issue up to 5,000,000 shares of preferred stock. Our amended and restated certificate of incorporation authorizes the board to issue these shares in one or more series, to determine the designations and the powers, preferences and relative, participating, optional or other special rights and the qualifications, limitations and restrictions thereof, including the dividend rights, conversion or exchange rights, voting rights (including the number of votes per share), redemption rights and terms, liquidation preferences, sinking fund provisions and the number of shares constituting the series. Our Board of Directors could, without stockholder approval, issue preferred stock with voting and other rights that could adversely affect the voting power and other rights of the holders of common stock and which could have the effect of making it more difficult for a third party to acquire, or of discouraging a third party from attempting to acquire, a majority of our outstanding voting stock. We have no shares of preferred stock outstanding.

Outstanding Warrants to Acquire Common Stock

As of November 16, 2023, we had outstanding:

- 216,000 shares of common stock issuable upon the exercise of the August 2023 Warrants at an exercise price of \$7.24 per share;
- 15,120 shares of common stock issuable upon the exercise of the August 2023 Placement Agent Warrants at an exercise price of \$9.2063 per share;
- 40,594 shares of common stock issuable upon the exercise of additional Common Stock warrants at a weighted average exercise price of \$64.73 per share;
- 124,200 shares of common stock issuable upon the exercise of Class A warrants at an exercise price of \$140.00; and
- 3,770 shares of common stock issuable upon the exercise of Class B warrants at an exercise price of \$200.00.

Outstanding Stock Options to Purchase our Common Stock

As of November 16, 2023, options to purchase an aggregate of 31,361 shares of our common stock, at a weighted average exercise price of \$36.28 per share, were outstanding.

Unvested Restricted Stock Units

As of November 16, 2023, 7,875 unvested restricted stock units were outstanding.

Anti-Takeover Effects of Provisions of Our Certificate of Incorporation, Our Bylaws and Delaware Law

Some provisions of Delaware law, our amended and restated certificate of incorporation and our amended and restated bylaws contain provisions that could make hostile takeovers, including the following transactions, more difficult: an acquisition of us by means of a tender offer; an acquisition of us by means of a proxy contest or otherwise; or the removal of our incumbent officers and directors. As a consequence, they may also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored hostile takeover attempts. These provisions may also have the effect of preventing changes in the composition of our board and management. It is possible that these provisions could make it more difficult to accomplish or could deter transactions that stockholders may otherwise consider to be in their best interest or in our best interests, including transactions which provide for payment of a premium over the market price for our shares.

These provisions, summarized below, are intended to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with our Board of Directors. We believe that the benefits of the increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us outweigh the disadvantages of discouraging these proposals because negotiation of these proposals could result in an improvement of their terms.

Delaware Anti-Takeover Statute

We are subject to Section 203 of the Delaware General Corporation Law, which prohibits persons deemed to be “interested stockholders” from engaging in a “business combination” with a publicly held Delaware corporation for three years following the date these persons become interested stockholders unless the business combination is, or the transaction in which the person became an interested stockholder was, approved in a prescribed manner or another prescribed exception applies. Generally, an “interested stockholder” is a person who, together with affiliates and associates, owns, or within three years prior to the determination of interested stockholder status did own, 15% or more of a corporation’s voting stock. Generally, a “business combination” includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. The existence of this provision may have an anti-takeover effect with respect to transactions not approved in advance by the Board of Directors. A Delaware corporation may “opt out” of these provisions with an express provision in its original certificate of incorporation or an express provision in its certificate of incorporation or bylaws resulting from a stockholders’ amendment approved by at least a majority of the outstanding voting shares. We have not opted out of these provisions. As a result, mergers or other takeover or change in control attempts of us may be discouraged or prevented.

Undesignated Preferred Stock

The ability of our Board of Directors, without action by the stockholders, to issue undesignated shares of preferred stock with voting or other rights or preferences as designated by our Board of Directors could impede the success of any attempt to change control of us. These and other provisions may have the effect of deferring hostile takeovers or delaying changes in control or management of our company.

Authorized Common Stock

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

Advance Notice Requirements for Stockholder Proposals and Director Nominations

Our amended and restated bylaws will provide advance notice procedures for stockholders seeking to bring business before our annual meeting of stockholders, or to nominate candidates for election as directors at any meeting of stockholders. Our amended and restated bylaws also will specify certain requirements regarding the form and content of a stockholder's notice. These provisions may preclude our stockholders from bringing matters before our annual meeting of stockholders or from making nominations for directors at our meetings of stockholders.

No Cumulative Voting; No Action Without a Meeting; Special Meeting of Stockholders

Stockholders will not be permitted to cumulate their votes for the election of directors. In addition, stockholders will not be able to take action by written consent and will only be able to take action at annual or special meetings of our stockholders. Furthermore, special meetings of our stockholders may be called only by our Chief Executive Officer, our President or our Board of Directors.

Exclusive Forum Selection

Our amended and restated certificate of incorporation will require, to the fullest extent permitted by law, subject to limited exceptions, that derivative actions brought in our name, actions against directors, officers and employees for breach of fiduciary duty and other similar actions may be brought only in the Court of Chancery in the State of Delaware and, if brought outside of Delaware, the stockholder bringing the suit will be deemed to have consented to service of process on such stockholder's counsel in any action brought to enforce the exclusive forum provision. Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock shall be deemed to have notice of and consented to the forum provisions in our amended and restated certificate of incorporation.

Notwithstanding the foregoing, Section 27 of the Exchange Act creates exclusive federal jurisdiction over all suits brought to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder. In addition, Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder. As a result, the exclusive forum provision will provide that the Court of Chancery and the federal district court for the District of Delaware will have concurrent jurisdiction over any action arising under the Securities Act or the rules and regulations thereunder, and the exclusive forum provision will not apply to suits brought to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder or any other claim for which the federal courts have exclusive jurisdiction. To the extent the exclusive forum provision restricts the courts in which our stockholders may bring claims arising under the Securities Act and the rules and regulations thereunder, there is uncertainty as to whether a court would enforce such provision. Investors cannot waive compliance with the federal securities laws and the rules and regulations promulgated thereunder.

Although we believe this provision benefits our company by providing increased consistency in the application of Delaware law in the types of lawsuits to which it applies, a court may determine that this provision is unenforceable, and to the extent it is enforceable, the provision may have the effect of discouraging lawsuits against our directors and officers and increasing the cost to stockholders of bringing such lawsuits.

Listing

The common stock is listed on Nasdaq under the symbol "BJDX."

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Continental Stock Transfer & Trust Company, 1 State Street, 30th Floor, New York, New York 10004.

DESCRIPTION OF SECURITIES WE ARE OFFERING

The following is a summary of the material terms of our common stock. For additional information about our authorized capital, including our common stock and our outstanding warrants to purchase common stock, we refer you to our amended and restated certificate of incorporation and amended and restated bylaws that are currently in effect, which are included herein as Exhibit 3.1, and Exhibit 3.3, respectively, and our filings with the SEC that are incorporated by reference in this prospectus, including our Annual Report on Form 10-K for the year ended December 31, 2022. For instructions on how to find copies of these documents, please read “Where You Can Find Additional Information” and “Information Incorporated by Reference.”

Common Stock

The material terms and provisions of our common stock and each other class of our securities which qualifies or limits our common stock are described under the caption “Description of Capital Stock” in this prospectus.

Common Warrants

The following summary of certain terms and provisions of the Common Warrants that are being offered hereby is not complete and is subject to, and qualified in its entirety by, the provisions of the Common 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 Common Warrant for a complete description of the terms and conditions of the Common Warrants.

Duration, Exercise Price and Form

Each Common Warrant offered hereby will have an exercise price equal to \$ _____ per share. The Common Warrants will be immediately exercisable and may be exercised until the _____ year anniversary of the original issuance date. 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 Common Warrants will be issued separately from the common stock or the Prefunded Warrants, as the case may be, and may be transferred separately immediately thereafter. The Common Warrants will be issued in certificated form only.

Exercisability

The Common 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 such holder’s warrants to the extent that the holder would own more than 4.99% of the outstanding common stock (or at the election of a holder prior to the date of issuance, 9.99%) immediately after exercise, except that upon at least 61 days’ prior notice from the holder to us, the holder may increase the amount of ownership of outstanding stock after exercising the holder’s 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 Common Warrants.

Cashless Exercise

If at the time of exercise there is no effective registration statement registering, or the prospectus contained therein is not available for the issuance of the underlying shares to the holder, 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 Common Warrant.

Fundamental Transactions

In the event of a fundamental transaction, as described in the Common 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 Common Warrants will be entitled to receive upon exercise of the Common Warrants the kind and amount of securities, cash or other property that the holders would have received had they exercised the Common Warrants immediately prior to such fundamental transaction. In addition, in certain circumstances, upon a fundamental transaction, the holder of a Common Warrant will have the right to require us to repurchase its Common Warrants at the Black-Scholes value; provided, however, that, if the fundamental transaction is not within our control, including not approved by our Board, then the holder will only be entitled to receive the same type or form of consideration (and in the same proportion), at the Black-Scholes value of the unexercised portion of the Common Warrant that is being offered and paid to the holders of our common stock in connection with the fundamental transaction.

Transferability

Subject to applicable laws, a Common Warrant may be transferred at the option of the holder upon surrender of the Common 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 Common Warrants. Rather, the number of shares of common stock to be issued will, at our election, either be rounded up to the nearest whole number or we will pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the exercise price.

Trading Market

There is no established trading market for the Common Warrants, and we do not expect a market to develop. We do not intend to apply for a listing of the Common Warrants on any securities exchange or other nationally recognized trading system. Without an active trading market, the liquidity of the Common Warrants will be limited. The common stock issuable upon exercise of the Common Warrants is currently listed on Nasdaq.

Rights as a Stockholder

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

Waivers and Amendments

No term of the Common Warrants may be amended or waived without the written consent of the majority of the holders of the Common Warrants purchased in this offering.

Prefunded Warrants

The following summary of certain terms and provisions of the Prefunded Warrants that are being offered hereby is not complete and is subject to, and qualified in its entirety by, the provisions of the Prefunded 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 Prefunded Warrant for a complete description of the terms and conditions of the Prefunded Warrants.

Duration, Exercise Price and Form

The Prefunded Warrants offered hereby will have an exercise price of \$0.0001 per share. The Prefunded Warrants will be immediately exercisable and may be exercised at any time after their original issuance until such Prefunded Warrants are exercised in full. The exercise price and number of shares of common stock issuable upon exercise are subject to appropriate adjustment in the event of share dividends, share splits, reorganizations or similar events affecting our shares of common stock. The Prefunded Warrants and Common Warrants are immediately separable and will be issued separately in this offering, but must be purchased together in this offering. The Prefunded Warrants will be issued in certificated form only.

Exercisability

The Prefunded 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 Prefunded Warrant to the extent that the holder would own more than 4.99% (or at the election of a holder prior to the date of issuance, 9.99%) of the outstanding common stock immediately after exercise; provided, however, that upon 61 days' notice to us, the holder may increase or decrease such beneficial ownership limitation, provided that in no event shall the beneficial ownership limitation exceed 9.99% and any increase in the beneficial ownership limitation will not be effective until 61 days following notice of such increase from the holder to us.

Cashless Exercise

At the time a holder exercises its Prefunded Warrants, 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 Prefunded Warrant.

Fundamental Transactions

In the event of a fundamental transaction, as described in the Prefunded 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 Prefunded Warrants will be entitled to receive upon exercise of the Prefunded Warrants the kind and amount of securities, cash or other property that the holders would have received had they exercised the Prefunded Warrants immediately prior to such fundamental transaction.

Transferability

Subject to applicable laws, a Prefunded Warrant may be transferred at the option of the holder upon surrender of the Prefunded 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 Prefunded Warrants. Rather, the number of shares of common stock to be issued will, at our election, either be rounded up to the nearest whole number or we will pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the exercise price.

Trading Market

There is no established trading market for the Prefunded Warrants, and we do not expect a market to develop. We do not intend to apply for a listing of the Prefunded Warrants on any securities exchange or other nationally recognized trading system. Without an active trading market, the liquidity of the Prefunded Warrants will be limited. The common stock issuable upon exercise of the Prefunded Warrants is currently listed on Nasdaq.

Rights as a Stockholder

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

Waivers and Amendments

No term of the Prefunded Warrants may be amended or waived without the written consent of the majority of the holders of the Prefunded Warrants purchased in this offering.

Placement Agent Warrants

We have also agreed to issue to the placement agent or its designees, placement agent warrants as compensation in connection with this offering to purchase up to _____ shares of common stock as compensation in connection with this offering. The placement agent warrants will be exercisable immediately and will have substantially the same terms as the Common Warrants described above, except that the placement agent warrants will have an exercise price of \$ _____ per share (representing _____ % of the offering price per share and accompanying Common Warrant) and a termination date that will be _____ years from the commencement of the sales pursuant to this offering. See "Plan of Distribution" below.

Anti-Takeover Effects of Provisions of Our Certificate of Incorporation, Our Bylaws and Delaware Law

Some provisions of Delaware law, our amended and restated certificate of incorporation and our amended and restated bylaws contain provisions that could make hostile takeovers, including the following transactions, more difficult: an acquisition of us by means of a tender offer; an acquisition of us by means of a proxy contest or otherwise; or the removal of our incumbent officers and directors. As a consequence, they may also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored hostile takeover attempts. These provisions may also have the effect of preventing changes in the composition of our board and management. It is possible that these provisions could make it more difficult to accomplish or could deter transactions that stockholders may otherwise consider to be in their best interest or in our best interests, including transactions which provide for payment of a premium over the market price for our shares.

These provisions, summarized below, are intended to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with our Board of Directors. We believe that the benefits of the increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us outweigh the disadvantages of discouraging these proposals because negotiation of these proposals could result in an improvement of their terms.

Delaware Anti-Takeover Statute

We are subject to Section 203 of the Delaware General Corporation Law, which prohibits persons deemed to be “interested stockholders” from engaging in a “business combination” with a publicly held Delaware corporation for three years following the date these persons become interested stockholders unless the business combination is, or the transaction in which the person became an interested stockholder was, approved in a prescribed manner or another prescribed exception applies. Generally, an “interested stockholder” is a person who, together with affiliates and associates, owns, or within three years prior to the determination of interested stockholder status did own, 15% or more of a corporation’s voting stock. Generally, a “business combination” includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. The existence of this provision may have an anti-takeover effect with respect to transactions not approved in advance by the Board of Directors. A Delaware corporation may “opt out” of these provisions with an express provision in its original certificate of incorporation or an express provision in its certificate of incorporation or bylaws resulting from a stockholders’ amendment approved by at least a majority of the outstanding voting shares. We have not opted out of these provisions. As a result, mergers or other takeover or change in control attempts of us may be discouraged or prevented.

Undesignated Preferred Stock

The ability of our Board of Directors, without action by the stockholders, to issue undesignated shares of preferred stock with voting or other rights or preferences as designated by our Board of Directors could impede the success of any attempt to change control of us. These and other provisions may have the effect of deferring hostile takeovers or delaying changes in control or management of our company.

Authorized Common Stock

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

Advance Notice Requirements for Stockholder Proposals and Director Nominations

Our amended and restated bylaws will provide advance notice procedures for stockholders seeking to bring business before our annual meeting of stockholders, or to nominate candidates for election as directors at any meeting of stockholders. Our amended and restated bylaws also will specify certain requirements regarding the form and content of a stockholder’s notice. These provisions may preclude our stockholders from bringing matters before our annual meeting of stockholders or from making nominations for directors at our meetings of stockholders.

No Cumulative Voting; No Action Without a Meeting; Special Meeting of Stockholders

Stockholders will not be permitted to cumulate their votes for the election of directors. In addition, stockholders will not be able to take action by written consent and will only be able to take action at annual or special meetings of our stockholders. Furthermore, special meetings of our stockholders may be called only by our Chief Executive Officer, our President or our Board of Directors.

Exclusive Forum Selection

Our amended and restated certificate of incorporation will require, to the fullest extent permitted by law, subject to limited exceptions, that derivative actions brought in our name, actions against directors, officers and employees for breach of fiduciary duty and other similar actions may be brought only in the Court of Chancery in the State of Delaware and, if brought outside of Delaware, the stockholder bringing the suit will be deemed to have consented to service of process on such stockholder's counsel in any action brought to enforce the exclusive forum provision. Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock shall be deemed to have notice of and consented to the forum provisions in our amended and restated certificate of incorporation.

Notwithstanding the foregoing, Section 27 of the Exchange Act creates exclusive federal jurisdiction over all suits brought to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder. In addition, Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder. As a result, the exclusive forum provision will provide that the Court of Chancery and the federal district court for the District of Delaware will have concurrent jurisdiction over any action arising under the Securities Act or the rules and regulations thereunder, and the exclusive forum provision will not apply to suits brought to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder or any other claim for which the federal courts have exclusive jurisdiction. To the extent the exclusive forum provision restricts the courts in which our stockholders may bring claims arising under the Securities Act and the rules and regulations thereunder, there is uncertainty as to whether a court would enforce such provision. Investors cannot waive compliance with the federal securities laws and the rules and regulations promulgated thereunder.

Although we believe this provision benefits our company by providing increased consistency in the application of Delaware law in the types of lawsuits to which it applies, a court may determine that this provision is unenforceable, and to the extent it is enforceable, the provision may have the effect of discouraging lawsuits against our directors and officers and increasing the cost to stockholders of bringing such lawsuits.

PLAN OF DISTRIBUTION

Pursuant to an engagement agreement, dated _____, 2023 (as amended, the “Engagement Agreement”), we have engaged _____ to act as our exclusive placement agent to solicit offers to purchase the securities offered pursuant to this prospectus on a reasonable best efforts basis. The Engagement Agreement does not give rise to any commitment by the placement agent to purchase any of our securities, and the placement agent will have no authority to bind us by virtue of the Engagement Agreement. The placement agent is not purchasing or selling any of the securities offered by us under this prospectus, nor is it required to arrange for the purchase or sale of any specific number or dollar amount of securities. This is a best efforts offering and there is no minimum offering amount required as a condition to the closing of this offering. The placement agent has agreed to use reasonable best efforts to arrange for the sale of the securities by us. Therefore, we may not sell all of the shares of common stock, Prefunded Warrants and Common Warrants being offered. The terms of this offering are subject to market conditions and negotiations between us, the placement agent and prospective investors. The placement agent does not guarantee that it will be able to raise new capital in any prospective offering. The placement agent may engage sub-agents or selected dealers to assist with the offering.

Investors purchasing securities offered hereby will have the option to execute a securities purchase agreement with us. In addition to rights and remedies available to all purchasers in this offering under federal securities and state law, the purchasers which enter into a securities purchase agreement will also be able to bring claims of breach of contract against us. The ability to pursue a claim for breach of contract is material to larger purchasers in this offering as a means to enforce the following covenants uniquely available to them under the securities purchase agreement: (i) a covenant to not enter into variable rate financings for a period of _____ following the closing of the offering, subject to an exception; and (ii) a covenant to not enter into any equity financings for _____ days from closing of the offering, subject to certain exceptions. The nature of the representations, warranties and covenants in the securities purchase agreements shall include:

- standard issuer representations and warranties on matters such as organization, qualification, authorization, no conflict, no governmental filings required, current in SEC filings, no litigation, labor or other compliance issues, environmental, intellectual property and title matters and compliance with various laws such as the Foreign Corrupt Practices Act; and
- covenants regarding matters such as registration of warrant shares, no integration with other offerings, filing of an 8-K to disclose entering into these securities purchase agreements, no stockholder rights plans, no material nonpublic information, use of proceeds, indemnification of purchasers, reservation and listing of shares of common stock, and no subsequent equity sales for _____ days.

We expect to deliver the securities being offered pursuant to this prospectus on or about _____, 2023. There is no minimum number of securities or amount of proceeds that is a condition to closing of this offering.

Fees and Expenses

We have agreed to pay the placement agent a total cash fee equal to _____ % of the aggregate gross proceeds raised in the offering and a management fee equal to _____ % of the gross proceeds raised in this offering. We will also pay the placement agent a nonaccountable expense allowance of \$ _____, its legal fees and expenses in an amount up to \$ _____ and its clearing fees in an amount up to \$ _____ in connection with this offering. 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 \$ _____ million.

Placement Agent Warrants

In addition, we have agreed to issue to the placement agent or its designees the placement agent warrants as compensation in connection with this offering, to purchase up to _____ % of the aggregate number of shares of common stock sold in this offering (including shares underlying any Prefunded Warrants), at an exercise price equal to _____ % of the public offering price per share and accompanying Common Warrant to be sold in this offering. The placement agent warrants will be exercisable upon issuance and will expire _____ years from the commencement of sales under this offering.

If at the time of exercise there is no effective registration statement registering, or the prospectus contained therein is not available for the resale of warrant shares by the holders of the placement agent warrants, then the placement agent warrants may be exercised, in whole or in part, at such time by means of a “cashless exercise” in which the holders shall be entitled to receive a number of warrant shares as calculated in the placement agent warrants.

The placement agent warrants provide for customary anti-dilution provisions (for share dividends, splits and recapitalizations and the like) consistent with FINRA Rule 5110.

Tail

In the event that any investors that were contacted by the placement agent or were introduced to the Company by the placement agent during the term of our engagement agreement with the placement agent provide any capital to us in a public or private offering or capital-raising transaction within 12 months following the termination or expiration of our engagement agreement with the placement agent, we shall pay the placement agent the cash and warrant compensation provided above on the gross proceeds from such investors. The placement agent will only be entitled to such fee to the extent that the parties are directly introduced to us by the placement agent, in accordance with FINRA Rule 2010.

Right of First Refusal

If, from the date of the Engagement Agreement until the 12-month anniversary following consummation of each offering of our securities during the term of the Engagement Agreement, we or any of our subsidiaries decides to raise funds by means of a public offering (excluding an at-the-market facility) or a private placement or any other capital-raising financing of equity, equity-linked or debt securities, the placement agent (or any affiliate designated by the placement agent) shall have the right to act as sole book-running manager, sole underwriter or sole placement agent for such financing. If the placement agent or one of its affiliates decides to accept any such engagement, the agreement governing such engagement will contain, among other things, provisions for customary fees for transactions of similar size and nature and the provisions of the Engagement Agreement, including indemnification, which are appropriate to such a transaction.

Lock-Up Agreements

Our officers and directors, representing beneficial ownership of % of our outstanding shares of common stock, have agreed with the placement agent to be subject to a lock-up period of days following the closing of this offering. This means that, during the applicable lock-up period, 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 shares of our common stock or any securities convertible into, or exercisable or exchangeable for, shares of our common stock. Certain limited transfers are permitted during the lock-up period if the transferee agrees to these lock-up restrictions. We have also agreed to similar lock-up restrictions on the issuance and sale of our securities for days following the closing of this offering, although we will be permitted to issue stock options or stock awards to directors, officers and employees under our existing plans. The lock-up period is subject to an additional extension to accommodate for our reports of financial results or material news releases. The placement agent may, in its sole discretion and without notice, waive the terms of any of these lock-up agreements.

In addition, subject to certain exceptions, 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 year following the closing date of this offering.

Indemnification

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

In addition, we will indemnify the purchasers of securities in this offering against liabilities arising out of or relating to (i) any breach of any of the representations, warranties, covenants or agreements made by us in the securities purchase agreement or related documents or (ii) any action instituted against a purchaser by a third party (other than a third party who is affiliated with such purchaser) with respect to the securities purchase agreement or related documents and the transactions contemplated thereby, subject to certain exceptions

Regulation M Compliance

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 our securities offered hereby 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.

Other Relationships

The placement agent and its affiliates have engaged, and may in the future engage, in investment banking transactions and other commercial dealings in the ordinary course of business with us or our affiliates. The placement agent has received, or may in the future receive, customary fees and commissions for these transactions.

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

The placement agent acted as the placement agent in connection with several registered offerings in the past three years and it received compensation for each such offering. However, except as disclosed in this prospectus, we have no present arrangements with the placement agent for any further services.

Electronic Distribution

A prospectus in electronic format may be made available on a website maintained by the placement agent 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 and/or endorsed by us or the placement agent and should not be relied upon by investors.

Transfer Agent

The transfer agent and registrar for our common stock is Continental Stock Transfer & Trust Company.

Nasdaq listing

Our shares of common stock are listed on Nasdaq under the symbol "BJDX."

LEGAL MATTERS

The validity of the securities offered hereby is being passed upon for us by Hogan Lovells US LLP. is acting as counsel for the placement agent in connection with this offering.

EXPERTS

Wolf & Company P.C., independent registered public accounting firm, has audited our consolidated financial statements included in our Annual Report on Form 10-K, as amended, for the year ended December 31, 2022, as set forth in their report (which contains an explanatory paragraph describing conditions that raise substantial doubt about our ability to continue as a going concern as described in Note 1 to the consolidated financial statements), which is incorporated by reference in this prospectus supplement and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on Wolf & Company P.C.'s report, given on their authority as experts in accounting and auditing.

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to “incorporate by reference” information into this prospectus, which means that we can disclose important information to you by referring you to another document filed separately with the SEC. The SEC file number for the documents incorporated by reference in this prospectus is 001-41031. The documents incorporated by reference into this prospectus contain important information that you should read about us. All documents incorporated by reference into this prospectus that were filed prior to July 24, 2023, do not give effect to the Reverse Stock Split.

The following documents are incorporated by reference into this document:

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2022, filed on [March 20, 2023](#), as amended by Amendment No. 1 thereto, filed on [May 1, 2023](#);
- our Quarterly Report on [Form 10-Q](#) for the fiscal quarter ended March 31, 2023, filed on May 11, 2023, our Quarterly Report on [Form 10-Q](#) for the fiscal quarter ended June 30, 2023, filed on August 14, 2023, and our Quarterly Report on [Form 10-Q](#) for the fiscal quarter ended September 30, 2023, filed on November 9, 2023;
- those portions of our Definitive Proxy Statement on [Schedule 14A](#) filed on May 18, 2023 that are deemed “filed” with the SEC;
- our Current Reports on Form 8-K (other than portions thereof furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits accompanying such reports that relate to such items) filed with the SEC on [January 27, 2023](#), [April 27, 2023](#), [May 19, 2023](#), [June 20, 2023](#), [July 21, 2023](#), [August 10, 2023](#), [August 28, 2023](#), [October 2, 2023](#), [October 16, 2023](#) and [October 26, 2023](#); and
- The description of our common stock, par value \$0.0001 per share contained in its Registration Statement on [Form 8-A](#), dated and filed with the SEC on November 5, 2021, as amended by the description of our common stock contained in [Exhibit 4.6](#) to our Annual Report on [Form 10-K](#) for the year ended December 31, 2022, including all amendments and reports updating that 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 the initial registration statement of which this prospectus is a part and prior to the effectiveness of such registration statement and all documents 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.

Any statement contained herein or in a document incorporated or deemed to be incorporated by reference into this prospectus will be deemed to be modified or superseded for purposes of the document to the extent that a statement contained in this prospectus or any other subsequently filed document that is deemed to be incorporated by reference into this document modifies or supersedes the statement.

We will provide without charge to each person, including any beneficial owner, to whom this prospectus is delivered, upon written or oral request, a copy of any or all documents that are incorporated by reference into this prospectus, but not delivered with the prospectus, other than exhibits to such documents unless such exhibits are specifically incorporated by reference into the documents that this prospectus incorporates. You should direct oral or written requests by one of the following methods. Attention: Investor Relations, Bluejay Diagnostics, Inc., 360 Massachusetts Avenue, Suite 203, Acton, MA, 01720, (844) 327-7078. You may also access these documents, free of charge on the SEC’s website at [www.sec.gov](#) or on the “Investors” page of our website at [www.bluejaydx.com](#). The information found on our website, or that may be accessed by links on our website, is not part of this prospectus. We have included our website address solely as an inactive textual reference. Investors should not rely on any such information in deciding whether to purchase our common stock.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We filed with the SEC a registration statement under the Securities Act for the securities offered by this prospectus. This prospectus does not contain all of the information in the registration statement and the exhibits and schedule that were filed with the registration statement. For further information with respect to us and our securities, we refer you to the registration statement and the exhibits and schedule that were filed with the registration statement. Statements contained in this prospectus about the contents of any contract or any other document that is filed as an exhibit to the registration statement are not necessarily complete, and we refer you to the full text of the contract or other document filed as an exhibit to the registration statement. The SEC maintains an Internet website at <http://www.sec.gov> that contains reports, proxy and information statements, and other information regarding registrants that file electronically with the SEC.

We file periodic reports and current reports under the Exchange Act, including Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, and other information with the Securities and Exchange Commission. These periodic reports and other information are available for inspection and copying at the SEC regional offices, public reference facilities and on the website of the SEC referred to above.

We make available free of charge on or through our internet website our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. The information found on our website, www.bluejaydx.com, other than as specifically incorporated by reference in this prospectus, is not part of this prospectus.



BLUEJAY DIAGNOSTICS, INC.

Up to Shares of Common Stock

Prefunded Warrants to purchase up to Shares of Common Stock

Common Warrants to purchase up to Shares of Common Stock

Shares of Common Stock underlying Prefunded Warrants and Common Warrants

Placement Agent Warrants to Purchase up to Shares of Common Stock

Shares of Common Stock Underlying the Placement Agent Warrants

Preliminary Prospectus

, 2023

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution.

The following table sets forth the estimated costs and expenses payable by the registrant expected to be incurred in connection with the sale and distribution of the securities being registered hereby (other than placement agent fees). All of such costs and expenses are estimates, except for the SEC registration fee and the Financial Industry Regulatory Authority ("FINRA") filing fee.

	Amount
SEC registration fee	\$ 1,848.69
FINRA filing fee	\$ 2,378.75
Accountant's fees and expenses	*
Legal fees and expenses	*
Transfer agent's fees and expenses	*
Printing fees and expenses	*
Miscellaneous	*
Total expenses	<u>\$ *</u>

* To be filed by amendment.

Item 14. Indemnification of Directors and Officers.

Pursuant to Section 145 of the DGCL, a corporation shall have the power to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than a derivative action by or in the right of such corporation) by reason of the fact that such person is or was a director, officer, employee or agent of such corporation, or serving at the request of such corporation in such capacity for another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding, if such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of such corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful.

The DGCL also permits indemnification by a corporation under similar circumstances for expenses (including attorneys' fees) actually and reasonably incurred by such persons in connection with the defense or settlement of a derivative action or suit, except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to such corporation unless the Delaware Court of Chancery or the court in which such action or suit was brought shall determine upon application that such person is fairly and reasonably entitled to indemnity for such expenses which such court shall deem proper.

To the extent a present or former director or officer is successful in the defense of such an action, suit or proceeding referenced above, or in defense of any claim, issue or matter therein, a corporation is required by the DGCL to indemnify such person for actual and reasonable expenses incurred in connection therewith. Expenses (including attorneys' fees) incurred by such persons in defending any action, suit or proceeding may be paid in advance of the final disposition of such action, suit or proceeding upon in the case of a current officer or director, receipt of an undertaking by or on behalf of such person to repay such amount if it is ultimately determined that such person is not entitled to be so indemnified.

The DGCL provides that the indemnification described above shall not be deemed exclusive of other indemnification that may be granted by a corporation pursuant to its bylaws, disinterested directors' vote, stockholders' vote and agreement or otherwise.

Section 102(b)(7) of the DGCL enables a corporation, in its certificate of incorporation or an amendment thereto, to eliminate or limit the personal liability of a director to the corporation or its stockholders for monetary damages for violations of the directors' fiduciary duty, except (i) for any breach of the director's duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) pursuant to Section 174 of the DGCL (providing for liability of directors for unlawful payment of dividends or unlawful stock purchases or redemptions) or (iv) for any transaction from which a director derived an improper personal benefit. The Company's amended and restated certificate of incorporation provides for such limitations on liability for its directors.

The DGCL also provides corporations with the power to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of such corporation, or is or was serving at the request of such corporation in a similar capacity for another corporation, partnership, joint venture, trust or other enterprise, against any liability asserted against him or her in any such capacity or arising out of his or her status as such, whether or not the corporation would have the power to indemnify him or her against such liability as described above. The Company has obtained liability insurance for its directors and officers. Such insurance would be available to its directors and officers in accordance with its terms.

The Company's amended and restated certificate of incorporation requires the Company to indemnify and hold harmless, to the fullest extent permitted by applicable law as it presently exists or may hereafter be amended, any person (a "covered person") who was or is made or is threatened to be made a party or is otherwise involved in any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (a "proceeding") by reason of the fact that he or she is or was a director, officer or member of a committee of the Company, or, while a director or officer of the Company, is or was serving at the request of the Company as a director or officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise or non-profit entity, including service with respect to employee benefit plans, against all liability and loss suffered and expenses (including attorneys' fees), judgment, fines and amounts paid in settlement actually and reasonably incurred by such covered person in connection with a proceeding.

In addition, under the Company's amended and restated certificate of incorporation, in certain circumstances, the Company shall pay the expenses (including attorneys' fees) incurred by a covered person in defending a proceeding in advance of the final disposition of such proceeding; provided, however, that the Company shall not be required to advance any expenses to a person against whom the Company directly brings an action, suit or proceeding alleging that such person (1) committed an act or omission not in good faith or (2) committed an act of intentional misconduct or a knowing violation of law. Additionally, an advancement of expenses incurred by a covered person shall be made only upon delivery to the Company of an undertaking, by or on behalf of such covered person, to repay all amounts so advanced if it shall ultimately be determined by final judicial decision from which there is no further right to appeal or otherwise in accordance with Delaware law that such covered person is not entitled to be indemnified for such expenses.

Item 15. Recent Sales of Unregistered Securities.

During the past three years, we sold the following shares of common stock, preferred stock, promissory notes and warrants without registration under the Securities Act:

On August 28, 2023, we issued unregistered warrants to purchase up to 216,000 shares of common stock (the "Warrants"). Each Warrant is exercisable for one share of common stock (the "Warrant Shares") at an exercise price of \$7.24 per share, were immediately exercisable upon issuance, and will expire five years from the date of issuance. In addition, we issued to the placement agent, or its designees, warrants to purchase up to 15,120 shares of common stock (the "Placement Agent Warrants"). The Placement Agent Warrants have substantially the same terms as the Warrants, except that the Placement Agent Warrants have an exercise price equal to \$9.2063, and a term of five years from the commencement of the sales pursuant to the Offering.

In June 2021, we entered into an agreement to issue a total of \$4.5 million of 7.5% Senior Secured Convertible Debentures (the "Debentures"), of which \$3.0 million in principal amount of the Debentures were issued at closing and \$1.5 million in principal amount of the Debentures were issued in August 2021. At the time of our initial public offering, the Debentures were converted into our Series D Preferred Stock at a conversion price of \$1,000 per share which were subsequently converted in common stock shares prior to December 31, 2021. These figures do not give effect to the Reverse Stock Split.

In December 2020, we issued 636 shares of Series C preferred stock at a purchase price of \$1,578.50 per share and received proceeds, net of issuance costs of approximately \$995,000. All shares were converted to common stock in June 2021. All of the foregoing issuances were made to accredited investors. These figures do not give effect to the Reverse Stock Split.

All of the securities above were issued in reliance on the exemption from registration provided by Section 4(a)(2) of the Securities Act or Regulation D promulgated thereunder.

Item 16. Exhibits and Financial Statement Schedules.

(a) Exhibits

See the Exhibit Index List below, which is incorporated by reference herein.

Exhibit Number	Exhibit Title	Filed with this	Incorporated by Reference		
		Form S-1	File No.	Date Filed	
3.1	Amended and Restated Certificate of Incorporation	S-1	333-260029 Exhibit 3.1		10/04/2021
3.2	Certificate of Amendment to the Amended and Restated Certificate of Incorporation	8-K	001-41031 Exhibit 3.1		07/21/2023
3.3	Amended and Restated Bylaws	S-1	333-260029 Exhibit 3.2		10/04/2021
4.1	Specimen Common Stock Certificate	S-1	333-260029 Exhibit 4.1		10/04/2021
4.2	Form of Class A Warrant	8-K	001-41031 Exhibit 4.1		11/16/2021
4.3	Form of Class B Warrant	S-1	333-260029 Exhibit 4.3		10/04/2021
4.4	Form of Warrant Agency Agreement	S-1	333-260029 Exhibit 4.4		10/04/2021
4.5	Form of IPO Underwriters' Warrant	S-1	333-260029 Exhibit 4.5		10/04/2021
4.6	Form of Private Warrant	8-K	001-41031 Exhibit 4.1		08/28/2023
4.7**	Form of Prefunded Warrant				
4.8**	Form of Common Warrant				
4.9**	Form of Placement Agent Warrant				
5.1**	Opinion of Hogan Lovells US LLP				

10.1+	2021 Stock Plan		S-1	333-260029 Exhibit 10.1	10/04/2021
10.2	License and Supply Agreement, dated October 6, 2020, by and between Toray Industries, Inc. and Bluejay Diagnostics, Inc.		S-1	333-260029 Exhibit 10.2	10/04/2021
10.3+	Employment Agreement, dated July 1, 2021, between Neil Dey and Bluejay Diagnostics, Inc.		S-1	333-260029 Exhibit 10.3	10/04/2021
10.4+	Employment Agreement, dated July 1, 2021, between Jason Cook and Bluejay Diagnostics, Inc.		S-1	333-260029 Exhibit 10.5	10/04/2021
10.5+	Employment Agreement, dated March 23, 2022, between Kenneth Fisher and Bluejay Diagnostics, Inc.		8-K	001-41031 Exhibit 10.1	03/28/2022
10.6+	Employment Agreement, dated July 1, 2021, between Kevin Vance and Bluejay Diagnostics, Inc.		S-1	333-260029 Exhibit 10.6	10/04/2021
10.7+	Separation Agreement, dated as of October 6, 2023, between Kenneth Fisher and Bluejay Diagnostics, Inc.		10-Q	001-41031 Exhibit 10.2	11/09/2023
10.8	Securities Purchase Agreement, dated June 7, 2021, between certain purchasers and Bluejay Diagnostics, Inc.		S-1	333-260029 Exhibit 10.7	10/04/2021
10.9	Registration Rights Agreement, dated June 7, 2021, between certain purchasers and Bluejay Diagnostics, Inc.		S-1	333-260029 Exhibit 10.8	10/04/2021
10.10	Amendment to License and Supply Agreement, dated July 21, 2021, by and between Toray Industries, Inc. and Bluejay Diagnostics, Inc.		S-1	333-260029 Exhibit 10.9	10/04/2021
10.11+	First Amendment to Employment Agreement, dated January 27, 2023, between Neil Dey and Bluejay Diagnostics, Inc.		8-K	001-41031 Exhibit 10.1	01/27/2023
10.12	Securities Purchase Agreement, dated August 24, 2023, between certain purchasers and Bluejay Diagnostics, Inc.		8-K	001-41031 Exhibit 10.1	08/28/2023
10.13**	Form of Securities Purchase Agreement				
10.14	Amended and Restated License Agreement, entered into on October 23, 2023, by and between Bluejay Diagnostics, Inc. and Toray Industries, Inc.		8-K	001-41031 Exhibit 10.1	10/26/2023
10.15	Master Supply Agreement, entered into on October 23, 2023 by and between Bluejay Diagnostics, Inc. and Toray Industries, Inc.		8-K	001-41031 Exhibit 10.2	10/26/2023
21.1	List of Subsidiaries		S-1	333-260029 Exhibit 21.1	10/04/2021
23.1	Consent of Wolf & Company, P.C.	X			
23.2**	Consent of Hogan Lovells US LLP (included in Exhibit 5.1)				
24.1	Power of Attorney (included on signature page to this registration statement)	X			
107	Filing Fee Table	X			

+ Management contract or compensatory plans or arrangements.

** To be filed by amendment.

Item 17. Undertakings.

(a) The undersigned registrant hereby undertakes:

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

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

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. *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 first use, 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 date of first use.

(5) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

- (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
- (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
- (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
- (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

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

The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act of 1933, as amended, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b) (1) or (4) or 497(h) under the Securities Act of 1933, as amended, shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act of 1933, as amended, 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.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized in the City of Acton, State of Massachusetts, on November 21, 2023.

BLUEJAY DIAGNOSTICS, INC.

By: /s/ Neil Dey

Neil Dey

President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Indranil "Neil" Dey and Frances Scally, and each of them, his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments, including post-effective amendments, to this Registration Statement, and any registration statement relating to the offering covered by this Registration Statement and filed pursuant to Rule 462(b) under the Securities Act of 1933, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done, as fully for all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that each of said attorneys in fact and agents or their 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 their capacities and on the dates indicated.

Signature	Title	Date
<u>/s/ Neil Dey</u> Neil Dey	President, Chief Executive Officer and Director (Principal Executive Officer)	November 21, 2023
<u>/s/ Frances Scally</u> Frances Scally	Interim Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	November 21, 2023
<u>/s/ Douglas Wurth</u> Douglas Wurth	Chairman of the Board	November 21, 2023
<u>/s/ Svetlana Dey</u> Svetlana Dey	Director	November 21, 2023
<u>/s/ Donald R. Chase</u> Donald R. Chase	Director	November 21, 2023
<u>/s/ Fred S. Zeidman</u> Fred S. Zeidman	Director	November 21, 2023
<u>/s/ Gary Gemignani</u> Gary Gemignani	Director	November 21, 2023

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in this Registration Statement on Form S-1 and related Prospectus of Bluejay Diagnostics, Inc. of our report dated March 20, 2023, relating to the consolidated financial statements of Bluejay Diagnostics, Inc., appearing in the Annual Report on Form 10-K of Bluejay Diagnostics, Inc. for the years ended December 31, 2022 and 2021.

We also consent to the reference to our firm under the heading “Experts” in such Prospectus.

/s/ Wolf & Company, P.C.

Boston, Massachusetts
November 21, 2023

Calculation of Filing Fee Tables

S-1
(Form Type)

BLUEJAY DIAGNOSTICS, INC.
(Exact Name of Registrant as Specified in its Charter)

Registrant Name in English, if applicable
(Translation of Registrant's Name into English)

Table 1: Newly Registered and Carry Forward Securities

	Security Type	Security Class Title	Fee Calculation or Carry Forward Rule	Amount Registered	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price (1)	Fee Rate	Amount of Registration Fee (2)	
Fees to Be Paid	Equity	Common Stock, \$0.0001 par value per share (2)(3)	457(o)	-	-	\$ 6,000,000.00	\$ 0.00014760	\$ 885.60	
	Other	Warrants to purchase Common Stock (4)	457(g)	-	-	-	-	\$ 0.00	
	Equity	Common Stock issuable upon exercise of Warrants to purchase Common Stock (2)	457(o)	-	-	\$ 6,000,000.00	\$ 0.00014760	\$ 885.60	
	Other	Prefunded Warrants to purchase Common Stock (3)(4)	457(g)	-	-	-	-	\$ 0.00	
	Equity	Common Stock issuable upon exercise of the Prefunded Warrants (2)(3)	457(o)	-	-	-	-	\$ 0.00	
	Other	Placement Agent Warrants to purchase Common Stock (4)	457(g)	-	-	-	-	\$ 0.00	
	Equity	Common Stock issuable upon exercise of the Placement Agent Warrants (2)	457(o)	-	-	\$ 525,000.00	\$ 0.00014760	\$ 77.49	
	Total Offering Amounts						\$ 12,525,000.00	\$ 0.00014760	\$ 1,848.69
	Total Fees Previously Paid								—
	Total Fee Offsets								—
Net Fee Due								<u>\$ 1,848.69</u>	

- (1) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended (the "Securities Act").
- (2) Pursuant to Rule 416 under the Securities Act, the securities being registered hereunder include such indeterminate number of additional securities as may be issuable to prevent dilution resulting from stock splits, dividends or similar transactions.
- (3) The proposed maximum aggregate offering price of the common stock will be reduced on a dollar-for-dollar basis based on the offering price of any prefunded warrants issued in the offering, and the proposed maximum aggregate offering price of the prefunded warrants to be issued in the offering will be reduced on a dollar-for-dollar basis based on the offering price of any common stock issued in the offering. Accordingly, the proposed maximum aggregate offering price of the common stock and prefunded warrants (including the common stock issuable upon exercise of the prefunded warrants), if any, is \$6,000,000.00.
- (4) Pursuant to Rule 457(g) under the Securities Act, no separate registration fee is required for the warrants because the warrants are being registered in the same registration statement as the common stock issuable upon exercise of such warrants.