

Prospectus



BLUEJAY DIAGNOSTICS, INC.

5,368,098 Units

Each Consisting of One Share of Common Stock or One Prefunded Warrant to Purchase One Share of Common Stock, Two Class C Warrants each to Purchase One Share of Common Stock and One Class D Warrant to Purchase such number of Shares of Common Stock as determined in the Class D Warrant

Up to 4,791,025 Shares of Common Stock underlying the Prefunded Warrants

Up to 53,680,980 Shares of Common Stock underlying the Class C Warrants

Up to 21,472,392 Shares of Common Stock underlying the Class D Warrants

We are offering, on a firm commitment, underwritten basis 5,368,098, units (“Units”), each Unit consisting of one share of our common stock, par value \$0.0001 per share (the “common stock”), two Class C warrants each to purchase one share of our common stock (each, a “Class C Warrant”) and one Class D Warrant to purchase such number of shares of common stock as determined in the Class D Warrant (each, a “Class D Warrant” and together with the Class C Warrants, the “Common Warrants”). The public offering price for each Unit is \$1.63.

The Units have no stand-alone rights and will not be certificated or issued as stand-alone securities. Each Class C Warrant offered hereby is exercisable upon Warrant Stockholder Approval (defined below) at an exercise price of \$1.96 per share of common stock, and will expire five (5) years from the date of such stockholder approval. Each Class D Warrant offered hereby will be exercisable immediately. The exercise price and number of shares of common stock issuable under the Class D Warrants are subject to adjustment as described in the Class D Warrant.

Beginning on the date of the Warrant Stockholder Approval, the Class C Warrants will contain a reset of the exercise price to a price equal to the lesser of (i) the then exercise price and (ii) lowest volume weighted average price (VWAP) during the period commencing five (5) trading days immediately preceding and the five (5) trading days commencing on the date we effect any reverse stock split in the future with a proportionate adjustment to the number of shares underlying the Class C Warrants. Finally, beginning on the date of the Warrant Stockholder Approval, with certain exceptions, the Class C Warrants will provide for an adjustment to the exercise price and number of shares underlying the Class C Warrants upon our issuance of our common stock or common stock equivalents at a price per share that is less than the exercise price of the Class C Warrant. The Class D Warrants will be exercisable immediately. The exercise price and number of shares of common stock issuable under the Class D Warrants are subject to adjustment based on the weighted average price of our common stock over a rolling five (5)-trading day period, subject to certain floor prices in accordance with the terms of the Class D Warrants.

The adjustment provisions described in the above paragraph included in the Class C Warrants and Class D Warrants will be available, in some cases, only upon receipt of such stockholder approval as may be required by the applicable rules and regulations of the Nasdaq Capital Market to permit the adjustment provisions described in the above paragraph included in the Class C Warrants and Class D Warrants (the “Warrant Stockholder Approval”). In the event that we are unable to obtain the Warrant Stockholder Approval, the Class C Warrants will not be exercisable and certain adjustment provisions described in the above paragraph included in the Class D Warrants will not be effective, and therefore the Class C Warrants and Class D Warrants may have substantially less value. See the Risk Factor on page 13 relating to the Class C Warrants and Class D Warrants and Warrant Stockholder Approval, and see the section entitled “Warrant Stockholder Approval” on page 27 for additional details regarding the Warrant Stockholder Approval.

We are also offering to each purchaser of Units that would otherwise result in the purchaser's beneficial ownership exceeding 4.99% of our outstanding common stock immediately following the consummation of this offering, the opportunity to purchase Units consisting of one pre-funded warrant (in lieu of one share of common stock, each a "Prefunded Warrant"), two Class C Warrants and one Class D Warrant. Subject to limited exceptions, a holder of Prefunded Warrants will not have the right to exercise any portion of its Prefunded Warrants if the holder, together with its affiliates, would beneficially own in excess of 4.99% (or, at the election of the holder, such limit may be increased to up to 9.99%) of the number of shares of common stock outstanding immediately after giving effect to such exercise. Each Prefunded Warrant will be exercisable for one share of common stock. The purchase price of each Unit including a Prefunded Warrant will be equal to the price per Unit including one share of common stock, minus \$0.0001, and the remaining exercise price of each Prefunded Warrant will equal \$0.0001 per share. The Prefunded Warrants will be immediately exercisable (subject to the beneficial ownership cap) and may be exercised at any time until all of the Prefunded Warrants are exercised in full. For each Unit including a Prefunded Warrant we sell (without regard to any limitation on exercise set forth therein), the number of Units including a share of common stock we are offering will be decreased on a one-for-one basis.

This prospectus also includes the shares of common stock issuable upon exercise of the Class C Warrants, Class D Warrants, and the Prefunded Warrants.

The common stock and Prefunded Warrants can each be purchased in this offering only with the accompanying Class C Warrants and Class D Warrants that are part of a Unit, but the components of the Units will be immediately separable and will be issued separately in this offering. See "Description of Capital Stock" in this prospectus for more information.

Our common stock is listed on The Nasdaq Capital Market under the symbol "BJDX." The last reported sale price of our common stock on The Nasdaq Capital Market on June 26, 2024 was \$1.63 per share. There is no established public trading market for the Class C Warrants, Class D Warrants, or the Prefunded Warrants, and we do not intend to list the Class C Warrants, Class D Warrants, or the Prefunded Warrants on any national securities exchange or trading system. Without an active trading market, the liquidity of the Class C Warrants, Class D Warrants, and the Prefunded Warrants will be limited.

We have granted Aegis Capital Corp., as underwriter, an option, exercisable for 45 days from the closing date of this offering, to purchase up to 805,214 additional shares of common stock and/or Prefunded Warrants, representing 15% of the shares of common stock and/or Prefunded Warrants sold in the offering, and/or up to 1,610,429 Class C Warrants, representing 15% of the Class C Warrants sold in the offering, and/or up to 805,214 Class D Warrants, representing 15% of the Class D Warrants sold in the offering. The underwriter may exercise the over-allotment option with respect to shares of common stock only, Prefunded Warrants only, Class C Warrants only, Class D Warrants only, or any combination thereof.

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.

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 and our filings with the Securities and Exchange Commission. See “Prospectus Summary—Implications of Being an Emerging Growth Company.”

Investing in our securities involves a high degree of risk. See “Risk Factors” beginning on page 13 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 Unit	Total
Public offering price	\$ 1.63	\$ 8,750,000
Underwriting discounts and commissions (8.5%) ⁽¹⁾	\$ 0.13855	\$ 743,750
Proceeds to us, before expenses	\$ 1.49145	\$ 8,006,250

(1) Does not include a non-accountable expense allowance equal to \$75,000. See “Underwriting” for a description of compensation payable to the underwriter.

The underwriter expects to deliver our securities to purchasers in the offering on or about June 28, 2024.

Aegis Capital Corp.

The date of this prospectus is June 27, 2024

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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 underwriter 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 underwriter 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 13 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 underwriter 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 June 17, 2024, 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-8 reverse stock split of our issued and outstanding shares of common stock, par value \$0.0001 per share (the “2024 Reverse Stock Split”), which became effective on June 20, 2024. All historical share and per share amounts reflected throughout this prospectus have been adjusted to reflect the 2024 Reverse Stock Split. However, our periodic and current reports, and all other documents incorporated by reference into this prospectus that were filed prior to June 20, 2024, do not give effect to the 2024 Reverse Stock Split.

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 “2023 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 2023 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 2023 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. 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 Symphony including two cardiac biomarkers (hsTNT and NT pro-BNP), as well as other tests using the Symphony platform. 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, (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 and (iii) the public offering of common stock and warrants that we completed on January 2, 2024, 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 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 and Status of Clinical Trials

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 have completed a pilot clinical study (SYMOM-I) and plan to begin a second clinical study (SYMOM-II) to validate the results of the pilot 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 determined to proceed on this basis, which considers the FDA’s feedback.

In the first quarter of 2024, we initiated multicenter Symphony IL-6 MONitoring Sepsis (“SYMON”) clinical studies investigating the role of interleukin-6 (IL-6) in patients diagnosed with sepsis and septic shock. This prospective study aims to assess the performance of IL-6 upon initial presentation to the intensive care unit (ICU). The primary analysis of the SYMON-I study (registered clinical trial number NCT06181604) highlighted that IL-6 levels within 24 hours of sepsis or septic shock diagnosis and admission to the ICU may predict patient mortality out to 28 days. These findings will be validated in the SYMON-II pivotal study. A secondary outcome of the SYMON-I study showed that IL-6 levels within 24 hours of sepsis or septic shock diagnosis and admission to the ICU is a predictor of patient mortality during their hospitalization. Other secondary outcomes showed that lactate and Sequential Organ Failure Assessment (SOFA), standard clinical tests used for sepsis and septic shock patients, were not predictors of patient mortality out to 28 days. We believe that the findings underscore the potential importance of IL-6 as a predictor and provide new insights into the potential pathways for improving sepsis outcomes.

We are planning to initiate the SYMON-II pivotal clinical study in the third quarter of 2024. If the results are positive, the Company intends to use SYMON-II as support in a 510(k) application to the FDA in 2025 for the following intended use: “Symphony IL-6 is intended for use to determine the IL-6 concentration as an aid in assessing the cumulative 28-day risk of all-cause mortality in conjunction with other laboratory findings and clinical assessments for patients diagnosed with sepsis or septic shock in the ICU.” The Company intends to present the SYMON-I and SYMON-II results at future national scientific meetings and publish them in peer-reviewed publications. The Company’s ability to engage in and complete these activities will be contingent upon it raising additional capital to continue funding its operations and remain a going concern.

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 is manufacturing (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. If FDA approval is obtained, Sanyoseiko will be required to manufacture the intermediates and cartridges 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 June 21, 2024, we have 9 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.

Nasdaq Deficiency

Our common stock currently is listed for quotation on the Nasdaq Capital Market. We are required to meet specified financial requirements in order to maintain such listing, including a requirement that the bid price for our common stock remain above \$1.00, and that the market value of our publicly held securities be at least \$1 million.

On February 28, 2024, we received a notification letter from the Nasdaq's Listing Qualifications Staff 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 are not in compliance with the minimum bid price requirement for continued inclusion on the Nasdaq Capital Market under Nasdaq Listing Rule 5550(a)(2). The notification has no immediate effect on the listing of our common stock on the Nasdaq Capital Market.

Under the Nasdaq Listing Rules, we have a period of 180 calendar days to regain compliance. To regain compliance, the closing bid price of our common stock must be at least \$1.00 or higher for a minimum of ten consecutive business days, and in such case, Nasdaq will provide us with written confirmation of compliance. If we do not regain compliance by August 26, 2024, we may be eligible for an additional 180 calendar days, provided that we meet the continued listing requirement for market value of publicly held shares and all other initial listing standards for Nasdaq, except the bid price requirement. If we are not eligible or it appears to Nasdaq that we will not be able to cure the deficiency during the second compliance period, Nasdaq will provide written notice to us that our common stock will be subject to delisting. In the event of such notification, we may appeal Nasdaq's determination to delist its securities, but there can be no assurance that Nasdaq would grant our request for continued listing.

We intend to take all reasonable measures available to us to achieve compliance to allow for continued listing on the Nasdaq Capital Market. However, there can be no assurance that we will be able to regain compliance with the minimum bid price requirement or will otherwise be in compliance with other Nasdaq listing criteria.

As of the close of business on June 21, 2024, the market value of our publicly held common stock (which is our only outstanding class of capital stock) was approximately \$1.5 million. If the value of our publicly held common stock declines below \$1 million, we would also be subject to Nasdaq delisting proceedings on that basis. Nasdaq's staff also maintains discretionary authority under its listing rules to delist companies whose capital structure or public offerings raise public interest and investor protection concerns, including as a result of highly dilutive issuances, and it is possible that Nasdaq could assert that our present offering, past offerings that we have consummated, or future offerings we may consummate, raise such concerns.

If our common stock is delisted, we may seek to have our common stock quoted on an over-the-counter marketplace, such as on the OTCQX. The OTCQX is not a stock exchange, and if our common stock trades on the OTCQX rather than a securities exchange, there may be significantly less trading volume and analyst coverage of, and significantly less investor interest in, our common stock, which may lead to lower trading prices for our common stock.

Any potential delisting of our common stock from the Nasdaq Capital Market may have materially adverse consequences to our stockholders, including:

- a reduced market price and liquidity with respect to our shares of common stock, which could make our ability to raise new investment capital more difficult;
- limited dissemination of the market price of our common stock;
- limited news coverage;
- limited interest by investors in our common stock;
- volatility of the prices of our common stock, due to low trading volume;
- our common stock being considered a "penny stock," which would result in broker-dealers participating in sales of our common stock being subject to the regulations set forth in Rules 15c-2 through 15c-9 promulgated under the Exchange Act;
- increased difficulty in selling our common stock in certain states due to "blue sky" restrictions; and
- limited ability to issue additional securities or to secure additional financing.

Going Concern Uncertainty

We incurred substantial losses of approximately \$10.0 million and \$9.3 million for fiscal years 2023 and 2022, respectively, and approximately \$2.3 million for the three months ended March 31, 2024, and from our inception through March 31, 2024, we had an accumulated deficit of approximately \$29.3 million. We do not currently generate any operating income. As of March 31, 2024, we possessed cash and cash equivalents of approximately \$2.7 million, while having current liabilities of approximately \$1.5 million. We expect that our net cash used in operating activities will continue to be negative over at least the next 12 months as we continue to conduct clinical trial work and, if such trials are successful, begin preparation of an FDA submission. These financial results and financial position, and our expected forward-looking outlook of significant negative cash flow in the future, raise substantial doubt with respect to our ability to continue as a going concern. As a result of our lack of cash, we have slowed the timeline of our clinical trial work to preserve cash resources in the near-term, and we expect that this will delay our Symphony platform regulatory submission timeline until 2025, if we are even able to generate sufficient clinical trial results to support such a submission. In addition, as described below, we have recently obtained \$2 million of bridge financing that will need to be repaid in full (at a repayment level of \$2.3 million) from the proceeds of this offering. If we fail to obtain additional material financing in the near-term, our clinical trials and targeted FDA submission timeline could be delayed further, and we could be forced to abandon such activities entirely and cease operations, with the possible loss of such properties or assets. If we are unable to obtain a material quantum of financing in the imminent future or unable to continue to obtain additional financing over at least the next 12 months as we continue to generate negative cash flow, our board of directors could determine to cause the Company to undertake a process of liquidation under Chapter 7 of applicable U.S. bankruptcy laws, or otherwise seek other protection under such laws. In such event, we expect that holders of shares of our common stock would recoup little if any material value in such process (and that the Class C Warrants and Class D Warrants being sold in this offering would have little or no recoupable value).

May 2024 Bridge Financing

On May 31, 2024, we entered into a Note Purchase Agreement with an accredited investor (the “NPA”), and a Securities Purchase Agreement with three accredited investors (the “SPA”), which transactions closed on June 3, 2024.

Under the terms of the NPA, an investor provided us \$1,000,000 in cash in exchange for the issuance of a senior secured note, which is repayable in an amount equal to \$1,176,470, with the difference between such amount and the subscription amount being an original issue discount.

Under the terms of the SPA, the three investors collectively provided us \$1,000,000 in cash in exchange for the issuance of senior secured notes, and the collective issuance of 72,537 shares of common stock. These notes will collectively be repayable in an amount equal to \$1,111,110, with the difference between such amount and the subscription amount also being an original issue discount.

We are required under the terms of the notes to use the proceeds of this offering to fully repay the notes. If such an offering does not occur, the notes will each mature and be repayable in cash on September 1, 2024, other than in the case of an event of default or change in control event. The Company has granted to the collective holders of the notes issued under the NPA and SPA a first lien and continuing first priority security interest in and to substantially all assets of the Company. The notes will not otherwise accrue interest beyond the original issue discount amounts unless an event of default occurs.

January 2024 Public Offering

On December 27, 2023, we commenced a public offering (“the January 2024 Public Offering”) for the issuance and sale of (i) 67,221 shares (the “January 2024 Shares”) of our common stock, par value \$0.0001 per share and (ii) prefunded warrants to purchase up to an aggregate 269,317 shares of common stock (the “January 2024 Prefunded Warrants”). The January 2024 Shares and January 2024 Prefunded Warrants were sold together with warrants to purchase up to an aggregate of 336,538 shares of common stock at an exercise price of \$10.40 per share (the “January 2024 Warrants”).

On December 27, 2023, we entered into a securities purchase agreement with certain institutional and accredited investors (the “January 2024 Purchase Agreement”). The combined public offering price was \$10.40 per January 2024 Share and related January 2024 Warrant and \$10.3992 per January 2024 Prefunded Warrant and related January 2024 Warrant. The Company intends to use the net proceeds from the January 2024 Public 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.

Pursuant to an engagement letter, dated as of August 7, 2023, as amended October 11, 2023, by and between the Company and H.C. Wainwright & Co., LLC (“Wainwright”), we paid Wainwright a total cash fee equal to 7.0% of the gross proceeds received in the Offering. We also paid Wainwright in connection with the January 2024 Public Offering a management fee equal to 1.0% of the gross proceeds raised in the offering and certain expenses incurred in connection with the offering.

In addition, we issued to Wainwright, or its designees, warrants to purchase up to an aggregate 23,557 shares of common stock (the “January 2024 Placement Agent Warrants”), which represents 7.0% of the aggregate number of shares of common stock and Prefunded Warrants sold in the January 2024 Public Offering. The January 2024 Placement Agent Warrants have substantially the same terms as the January 2024 Warrants, except that the January 2024 Placement Agent Warrants have an exercise price equal to \$13.00, or 125% of the offering price per share of common stock and related Warrant sold in the offering and expire on the fifth anniversary from the date of the commencement of sales in the offering.

The January 2024 Public Offering closed on January 2, 2024. Since the closing, all of the January 2024 Prefunded Warrants have been exercised in full.

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 27,000 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 27,000 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 \$57.92 per share, will be immediately exercisable upon issuance and will expire five (5) years from the date of issuance.

The common stock sold in the August 2023 Offering was sold at a purchase price of \$58.92 per share (which amount included a purchase price of \$1.00 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 Wainwright, as a part of compensation, we issued to Wainwright or its designees, warrants to purchase up to 1,890 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 \$73.65 per share and a term of five (5) 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 Splits

On June 20, 2024, we effected a reverse stock split of our shares of common stock at a ratio of 1-for-8 (the “2024 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 “2023 Reverse Stock Split,” and together with the 2024 Reverse Stock Split, the “Reverse Stock Splits”). In each case, the Company’s common stock continued 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 Splits. However, our periodic and current reports and all other documents incorporated by reference into this prospectus that were filed prior to June 20, 2024 do not give effect to the 2024 Reverse Stock Split, and 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 2023 Reverse Stock Split.

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, 2023 and in Part II, Item 1A “Risk Factors” of our Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2024, which are each incorporated by reference in this prospectus. These risks include the following:

- We have incurred significant losses since inception and we will continue to incur net losses for the foreseeable future as we continue to complete clinical trial work intended to support a future FDA submission for our product, during which period we expect to generate little or no revenue from operations.
- We have not yet launched any products and the ability to do so will depend on the acceptance of our Symphony platform in the healthcare market.
- We cannot accurately predict the volume or timing of any sales, making the timing of any revenues difficult to predict.

- We will require substantial additional funding over the next 12 months (and potentially longer) to finance our operations to continue as a going concern, which may not be available to us on acceptable terms, or at all, and our lack of cash resources has slowed the timeline of our clinical trial work and could cause us to run out of cash resources in the near- or medium-term.
- If we are unable to continue as a going concern, we may be required to undertake a process of liquidation under U.S. bankruptcy laws, which we expect would holders of our common stock not recouping any material value for their shares.
- The number of shares of common stock underlying our outstanding warrants is significant in relation to our currently outstanding common stock, which could have a negative effect on the market price of our common stock and make it more difficult for us to raise funds through future equity offerings. In addition, in connection with any merger, consolidation or sale of all or substantially all of our assets, holders of our outstanding warrants would be entitled to receive consideration in excess of their reported beneficial ownership of our common stock, or to continue to hold such warrants after such a transaction, and this could adversely impact the consideration our other stockholders would receive or otherwise deter a purchaser from entering into such a transaction with us.
- Our ability to raise additional capital via a registered public offering on Form S-3 will be limited in the near-term as a result of the SEC’s “baby shelf” rules.
- We have received a notification letter from the Nasdaq Listing Qualifications Staff that our common stock does not satisfy Nasdaq’s \$1.00 minimum price per share rule and we could face delisting by Nasdaq if we are unable to regain compliance with this requirement, which could adversely affect our ability to sell stock in the public markets, the liquidity of our common stock and our general ability to raise additional capital.
- In addition to our current non-compliance with Nasdaq’s \$1.00 minimum bid price requirement, a further decline in the price of our common stock could cause us to be delisted by Nasdaq on the basis that the market value of our publicly held securities is less than Nasdaq’s \$1 million minimum requirement.
- 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 cartridges for Bluejay, contain significant risks that may threaten our viability or otherwise have a material adverse effect on us and our business, assets and its 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.
- If third-party payors do not provide coverage and reimbursement for the use of our platform, our business and prospects may be negatively impacted.
- Our Symphony platform, including its software and systems, may contain undetected errors, which could limit our ability to provide our products and diminish the attractiveness of our offerings.
- We will rely on the proper function, security and availability of our information technology systems and data to operate our business, and a breach, cyber-attack or other disruption to these systems or data could materially and adversely affect our business, results of operations, financial condition, cash flows, reputation, or competitive position.
- 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, and our limited cash resources could require us to make further cost reductions.

- To reduce expenses, our President and Chief Executive Officer, in addition to serving as principal executive officer, currently serves as our principal financial and accounting officer, and we have no employees devoted on a full-time basis to our finance, accounting, legal or compliance functions, which may substantially increase the likelihood that we will fail to successfully maintain effective internal controls over financial reporting, or effective disclosure controls and procedures.
- If we or our manufacturers fail to comply with the regulatory quality system regulations or any applicable equivalent regulations, our proposed operations could be interrupted, and our operating results would suffer.
- Product liability suits, whether or not meritorious, could be brought against us due to an alleged defective product or for the misuse of our Symphony platform or test cartridges. These suits could result in expensive and time-consuming litigation, payment of substantial damages, and an increase in our insurance rates.
- If we are found to have violated laws protecting the confidentiality of patient health information, we could be subject to civil or criminal penalties, which could increase our liabilities and harm our reputation or our business.
- Significant raw material shortages, supplier capacity constraints, supplier disruptions, and sourcing issues may adversely impact or limit our products sales and or impact our product margins.

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

Units to be Offered	<p>5,368,098 Units based on an offering price of \$1.63 per Unit on a firm commitment basis. Each Unit will consist of one share of common stock (or Prefunded Warrant to purchase one share of our common stock in lieu thereof), two Class C Warrants each to purchase one share of common stock and one Class D Warrant to purchase such number of shares of common stock as determined in accordance with the terms set forth in the Class D Warrant. The Units have no stand-alone rights and will not be certificated or issued as stand-alone securities. The shares of common stock and Prefunded Warrants, if any, can each be purchased in this offering only with the accompanying Class C Warrants and Class D Warrants as part of Units (other than pursuant to the underwriter's option to purchase additional shares of Common Stock and/or Prefunded Warrants and/or Class C Warrants and/or Class D Warrants), but the components of the Units will be immediately separable and will be issued separately in this offering.</p>
Prefunded Units to be Offered	<p>We are also offering to certain purchasers whose purchase of Units 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, Units including Prefunded Warrants to purchase shares of common stock, in lieu of Units including 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. The purchase price of each Unit including a Prefunded Warrant will be equal to the price at which a Unit is sold to the public in this offering, minus \$0.0001, and the exercise price of each Prefunded Warrant will be \$0.0001 per share.</p> <p>Each Prefunded Warrant will be exercisable for one share of our common stock and will be exercisable at any time after its original issuance until exercised in full, provided that the purchaser will be prohibited from exercising Prefunded Warrants for shares of our common stock if, as a result of such exercise, the purchaser, together with its affiliates and certain related parties, would own more than 4.99% of the total number of shares of our common stock then issued and outstanding. However, any holder may increase such percentage to any other percentage not in excess of 9.99%, provided that any increase in such percentage shall not be effective until 61 days after such notice to us.</p> <p>This prospectus also relates to the offering of the common stock issuable upon exercise of the Prefunded Warrants. See "Description of Securities We Are Offering—Prefunded Warrants"</p>
Class C Warrants and Class D Warrants to be Offered	<p>10,736,196 Class C Warrants and 5,368,098 Class D Warrants. Each Unit includes one share of common stock, two Class C Warrants and one Class D Warrant. Each Class C Warrant is exercisable at a price of \$1.96 per share. The Class C Warrants will be exercisable beginning on the first trading day following Warrant Stockholder Approval and will expire five (5) years from such first exercisable date. The Class D Warrants will be exercisable immediately after issuance. The exercise price and number of shares of common stock issuable under the Class D Warrants are subject to adjustment as described in the Class D Warrant. See "Description of Securities We Are Offering—Class C Warrants and Class D Warrants."</p>

Over-allotment option	The offering is being underwritten on a firm commitment basis. We have granted the underwriter a 45-day option to purchase up to 805,214 additional shares of common stock, representing 15% of the Common Units sold in the offering at the public offering price of \$1.63 per Unit, and/or up to 718,653 additional Prefunded Warrants, representing 15% of the Prefunded Warrants sold in the offering, and/or up to 1,610,429 additional Class C Warrants, representing 15% of the Class C Warrants sold in the offering, and/or up to 805,214 additional Class D Warrants, representing 15% of the Class D Warrants sold in the offering, on the same terms and conditions set forth above solely to cover over-allotments. The underwriter may exercise the over-allotment option with respect to shares of common stock only, Prefunded Warrants only, Class C Warrants only, Class D Warrants only, or any combination thereof.
Common Stock Outstanding After This Offering (1)	5,932,058 shares (or 6,737,272 shares of common stock if the underwriters exercise their option in full) (assuming we sell only shares of common stock and no Prefunded Warrants and assuming no exercise of the Class C Warrants or Class D Warrants).
Use of Proceeds	<p>We estimate that the net proceeds from this offering will be approximately \$7.5 million, after deducting the underwriting discount and estimated offering expenses payable by us, and excluding the proceeds, if any, from the exercise of the Class C Warrants and Class D Warrants in this offering.</p> <p>We currently intend to use the net proceeds from the offering to (i) repay \$2.3 million in outstanding debt that will be due and payable upon consummation of the offering and (ii) 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 21.</p>
Risk Factors	See “Risk Factors” beginning on page 13 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 Class C Warrants, Class D Warrants and Prefunded Warrants, and we do not expect a trading market to develop. We do not intend to list the Class C Warrants, Class D Warrants or Prefunded Warrants on any securities exchange or other trading market.
(1) The number of shares of our common stock to be outstanding after this offering is based on 563,960 shares of our common stock outstanding as of June 21, 2024, and, unless otherwise indicated, excludes, as of that date:	<ul style="list-style-type: none"> • 3,705 shares of common stock issuable upon the exercise of stock options outstanding as of June 21, 2024, at a weighted average exercise price of \$292.08 per share; • 27,000 shares of common stock issuable upon the exercise of the August 2023 Warrants outstanding as of June 21, 2024, at an exercise price of \$57.92 per share; • 1,890 shares of common stock issuable upon the exercise of the August 2023 Placement Agent Warrants outstanding as June 21, 2024, at an exercise price of \$73.65 per share;

- 5,074 shares of common stock issuable upon the exercise of additional Common Stock warrants outstanding as of June 21, 2024, at a weighted average exercise price of \$517.84 per share;
- 15,525 shares of common stock issuable upon the exercise of Class A warrants outstanding as of June 21, 2024, at an exercise price of \$1,120.00 per share;
- 471 shares of common stock issuable upon the exercise of Class B warrants outstanding as of June 21, 2024, at an exercise price of \$1,600.00 per share;
- 1,639 shares of common stock available for future issuance under our 2018 Stock Incentive Plan as of June 21, 2024;
- 5,047 shares of common stock available for grant under the 2021 Stock Incentive Plan as of June 21, 2024;
- 125 unvested restricted stock units outstanding as of June 21, 2024;
- 336,538 shares of common stock issuable upon the exercise of the January 2024 Warrants outstanding as of June 21, 2024, at an exercise price of \$10.40 per share; and
- 23,557 shares of common stock issuable upon the exercise of the January 2024 Placement Agent Warrants outstanding as of June 21, 2024, at an exercise price of \$13.00 per share.

Except as otherwise indicated, the information in this prospectus assumes: (i) no exercise of the Prefunded Warrants in this offering; (ii) no exercise of any Class C Warrants or Class D Warrants to be issued in this offering; and (iii) 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, 2023 and our Quarterly Report on Form 10-Q for the quarter ended March 31, 2024, 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, Class C Warrants and Class D 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, do not currently generate any operating income, and will continue to incur losses as we work to obtain product approval, and thus we may never achieve or maintain profitability.

We incurred substantial losses of approximately \$10.0 million and \$9.3 million for fiscal years 2023 and 2022, respectively, and approximately \$2.3 million for the three months ended March 31, 2024, and from our inception through March 31, 2024, we had an accumulated deficit of approximately \$29.3 million. We do not currently generate any operating income. As of March 31, 2024, we possessed cash and cash equivalents of approximately \$2.7 million, while having current liabilities of approximately \$1.5 million. We expect that our net cash used in operating activities will continue to be negative over at least the next 12 months as we continue to conduct clinical trial work and, if such trials are successful, begin preparation of an FDA submission. These financial results and financial position, and our expected forward-looking outwork of significant negative cash flow in the future, raise substantial doubt with respect to our ability to continue as a going concern. As a result of our lack of cash, we have slowed the timeline of our clinical trial work to preserve cash resources in the near-term, and we expect that this will delay our Symphony platform regulatory submission timeline until 2025, if we are even able to generate sufficient clinical trial results to support such a submission. In addition, as described below, we have recently obtained \$2 million of bridge financing that will need be repaid in full (at a repayment level of \$2.3 million) from the proceeds of this offering. If we fail to obtain additional material financing in the near-term, our clinical trials and targeted FDA submission timeline could be delayed further, and we could be forced to abandon such activities entirely and cease operations, with the possible loss of such properties or assets. If we are unable to obtain a material quantum of financing in the imminent future or unable to continue to obtain additional financing over at least the next 12 months as we continue to generate negative cash flow, our board of directors could determine to cause the Company to undertake a process of liquidation under Chapter 7 of applicable U.S. bankruptcy laws, or otherwise seek other protection under such laws. In such event, we expect that holders of shares of our common stock would recoup little if any material value in such process (and that the Class C Warrants and Class D Warrants being sold in this offering would have little or no recoupable value).

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, 2023, 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 consolidated 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, we expect that the net proceeds of this offering will not be sufficient for us to fund the working capital needs of our business beyond sometime during the late fourth quarter of 2024. We intend to 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 further delay our FDA regulatory strategy, and to delay or reduce the scope of our clinical trials, research or development programs, commercialization efforts or 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

Sales of substantial amounts of our securities in the public market could depress the market price of our common stock.

Our common stock is listed for trading on the Nasdaq Capital Market. If our stockholders sell substantial amounts of our common stock in the public market, including the shares of common stock issuable upon the exercise of the Prefunded Warrants, Class C Warrants and/or Class D Warrants issued in this offering, and shares issued as consideration in any future acquisitions, or the market perceives that such sales may occur, the market price of our securities could fall and we may be unable to sell our securities in the future.

Our securities may experience extreme price and volume fluctuations, which could lead to costly litigation for us and make an investment in us less appealing.

The market price of our common stock may fluctuate substantially due to a variety of factors, including:

- the status and results of our clinical trials for our Symphony technology platform, including whether our planned SYMON-II validation study provides data that will support an FDA regulatory submission for a 510(k) product approval;
- our ability to fund and complete our SYMON-II validation study and, if such study provides data supporting an FDA submission, our ability to apply for and obtain 510(k) clearance from the FDA;
- our ability to remain a going concern;
- our business strategy and plans;
- the potential market for our Symphony technology platform, if approved for sale in the U.S.;
- new regulatory pronouncements and changes in regulatory guidelines and timing of regulatory approvals;
- general and industry-specific economic conditions;
- variations in our quarterly financial and operating results, including the rate at which we incur negative cash flow in future periods;
- additions to or departures of our key personnel, particularly given that our President and Chief Executive Officer currently serves as our principal executive, financial and accounting officer and we have no other employees devoted on a full-time basis to our finance, accounting, legal or compliance functions;
- changes in market valuations of other companies that operate in our business segments or in our industry;
- lack of trading liquidity;
- if our product is approved and becomes available for us to sell in the U.S., whether we ultimately achieve profitability or not;
- changes in accounting principles; and
- general market conditions, economic and other external factors.

The market prices of the securities of early-stage companies, particularly companies like ours that are seeking to obtain regulatory approval of their product candidate and do not yet generate operating revenue, have been highly volatile and are likely to remain highly volatile in the future. This volatility has often been unrelated to the operating performance of particular companies. In the past, companies that experience volatility in the market price of their securities have often faced securities class action litigation. Whether or not meritorious, litigation brought against us could result in substantial costs, divert our management's attention and resources and harm our financial condition and results of operations.

Our common stockholders could be adversely affected by the issuance by us of preferred stock.

Our certificate of incorporation does not restrict our ability to offer one or more series of preferred stock, any or all of which could rank equally with or have preferences over our common stock as to dividend payments, voting rights, rights upon liquidation or other types of rights. We would have no obligation to consider the specific interests of the holders of common stock in creating any such series of preferred stock or engaging in any such offering or transaction. Our creation of any series of preferred stock or our engaging in any such offering or transaction could have a material adverse effect on holders of our common stock.

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 (i) repay \$2.3 million in outstanding debt that will be due and payable upon consummation of the offering and (ii) 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.

The placement agent from our August 2023 Registered Direct Offering and January 2024 Public Offering could assert that they are entitled to a fee in connection with this offering.

In August 2023, we entered into an engagement letter with H.C. Wainwright & Co., LLC (the "Prior Placement Agent"), which was amended in October 2023, and pursuant to which the Prior Placement Agent served as the placement agent in our August 2023 Offering, August 2023 Private Placement and January 2024 Public Offering. Pursuant to this engagement letter, we provided the Prior Placement Agent a right of first refusal to serve as underwriter in any public offering or private placement we engage in prior to January 2, 2025, and the right to receive compensation comparable to what it received in the August 2023 Offering and January Public Offering (e.g., 7% of the gross proceeds of such an offering and additional warrants exercisable at 125% of the offering price) in connection with such offering or placement. Prior to filing the registration statement with respect to this offering, we provided the Prior Placement Agent the opportunity to serve as underwriter for this transaction, and it declined such opportunity. While we believe that the Prior Placement Agent is not entitled to any fees in connection with this offering given that it declined to serve as underwriter, the Prior Placement Agent could assert that it is nevertheless entitled to compensation. While we believe such a position would be unreasonable and invalid, and we would intend to challenge it, any such assertion that is ultimately successful could cause us to pay an addition substantial fee (such as up to 7% of the estimated \$8.75 million gross proceeds) in connection with this offering, which would further reduce our net proceeds from the 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. The issuance of securities in future offerings may cause 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 warrants outstanding. To the extent that outstanding warrants have been or may be exercised or other shares issued, you may experience 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.

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.

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.

The offering price of the Units may not be indicative of the value of our assets or the price at which shares can be resold. The offering price of the Units may not be an indication of our actual value.

The public offering price per share of the Units is being determined based upon negotiations between the Company and the underwriter. Factors taken into consideration include the trading volume of our common stock prior to this offering, the historical prices at which our shares of common stock have recently traded, the history and prospects of our business, the stage of development of our business, our business plans for the future and the extent to which they have been implemented, an assessment of our management, general conditions of the securities markets at the time of the offering, and such other factors as we and the underwriters deem relevant. No assurance can be given that our common stock can be resold at the public offering price for the Units.

For these reasons, comparing our operating results on a period-to-period basis may not be meaningful, and you should not rely on past results as an indication of future performance. In the past, following periods of volatility in the market price of a public company's securities, securities class action litigation has often been instituted against the public company. Regardless of its outcome, this type of litigation could result in substantial costs to us and a likely diversion of our management's attention. You may not receive a positive return on your investment when you sell your shares of common stock (including following the exercise of any Prefunded Warrants, Class C Warrants and/or Class D Warrants) and you may lose the entire amount of your investment in the Units.

If securities or industry analysts do not publish research or publish inaccurate or unfavorable research about our business, our stock price and trading volume could decline.

The trading market for our common stock may depend in part on research and reports that securities or industry analysts publish about us or our business. Securities and industry analysts do not currently, and may never, publish research on our us. If no securities or industry analysts commence coverage of us, the trading price for our stock would likely be negatively impacted. In the event securities or industry analysts initiate coverage, if one or more of the analysts who covers us downgrades our stock or publishes inaccurate or unfavorable research about our business, our stock price may decline. If one or more of these analysts ceases coverage of us or fails to publish reports on us regularly, demand for our stock could decrease, which might cause our stock price and trading volume to decline.

FINRA sales practice requirements may limit a stockholder's ability to buy and sell our securities.

Effective June 30, 2020, the SEC implemented Regulation Best Interest requiring that "A broker, dealer, or a natural person who is an associated person of a broker or dealer, when making a recommendation of any securities transaction or investment strategy involving securities (including account recommendations) to a retail customer, shall act in the best interest of the retail customer at the time the recommendation is made, without placing the financial or other interest of the broker, dealer, or natural person who is an associated person of a broker or dealer making the recommendation ahead of the interest of the retail customer." This is a significantly higher standard for broker-dealers to recommend securities to retail customers than before under FINRA "suitability rules. FINRA suitability rules do still apply to institutional investors and require that in recommending an investment to a customer, a broker-dealer must have reasonable grounds for believing that the investment is suitable for that customer. Prior to recommending securities to their customers, broker-dealers must make reasonable efforts to obtain information about the customer's financial status, tax status, investment objectives and other information, and for retail customers determine the investment is in the customer's "best interest" and meet other SEC requirements. Both SEC Regulation Best Interest and FINRA's suitability requirements may make it more difficult for broker-dealers to recommend that their customers buy speculative, low-priced securities. They may affect investing in our common stock or our preferred stock, which may have the effect of reducing the level of trading activity in our securities. As a result, fewer broker-dealers may be willing to make a market in our common stock or our preferred stock, reducing a stockholder's ability to resell shares of our common stock.

The Class C Warrants, Class D Warrants, and Prefunded Warrants will not be listed or quoted on any exchange.

There is no established public trading market for the Class C Warrants, Class D Warrants, or Prefunded Warrants being offered in this offering, and we do not expect a market to develop. In addition, we do not intend to apply to list the Class C Warrants, Class D 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 Class C Warrants, Class D Warrants, and Prefunded Warrants will be limited.

Except as otherwise provided in the Class C Warrants, Class D Warrants, and Prefunded Warrants, holders of Class C Warrants, Class D Warrants, and Prefunded Warrants purchased in this offering will have no rights as stockholders until such holders exercise their Class C Warrants, Class D Warrants, or Prefunded Warrants and acquire our common stock.

Except as otherwise provided in the Class C Warrants, Class D Warrants, and Prefunded Warrants, until holders of Class C Warrants, Class D Warrants or Prefunded Warrants acquire our common stock upon exercise of the Class C Warrants, Class D Warrants or Prefunded Warrants, holders of Class C Warrants, Class D Warrants, and Prefunded Warrants will have no rights with respect to our common stock underlying such Class C Warrants, Class D Warrants, and Prefunded Warrants. Upon exercise of the Class C Warrants, Class D Warrants, and Prefunded Warrants, the holders will be entitled to exercise the rights of a holder of our common stock 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 Unit, together with the number of shares of common stock and Class C Warrants, Class D Warrants and Prefunded Warrants 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 577,073 shares of common stock, and/or 4,791,025 shares of common stock, in the aggregate, issuable upon the exercise of the Prefunded Warrants, as well as the Class C Warrants and the Class D Warrants (and shares of common stock issuable thereunder) 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.

Provisions of the Class C Warrants and Class D Warrants offered pursuant to this prospectus, as well as the previously issued August 2023 Warrants and January 2024 Warrants, could discourage an acquisition of us by a third-party.

Certain provisions of the Class C Warrants and Class D Warrants offered pursuant to this prospectus, as well as the August 2023 Warrants and January 2024 Warrants, could make it more difficult or expensive for a third-party to acquire us. The Class C Warrants, Class D Warrants, August 2023 Warrants and January 2024 Warrants each prohibit us from engaging in certain transactions constituting “fundamental transactions” unless, among other things, the surviving entity assumes our obligations under the applicable warrants. These and other provisions of the Class C Warrants, Class D Warrants, August 2023 Warrants and January 2024 Warrants could prevent or deter a third-party from acquiring us even where the acquisition could be beneficial to you.

The Class C Warrants and Class D Warrants may have an adverse effect on the market price of our common stock and make it more difficult to effect a business combination.

To the extent we issue shares of common stock to effect a future business combination, the potential for the issuance of a substantial number of additional shares of common stock upon exercise of the Class C Warrants and Class D Warrants could make us a less attractive acquisition vehicle in the eyes of a target business. Such Class C Warrants and Class D Warrants, when exercised, will increase the number of issued and outstanding shares of common stock and reduce the value of the shares issued to complete the business combination. Accordingly, the Class C Warrants and Class D Warrants may make it more difficult to effectuate a business combination or increase the cost of acquiring a target business. Additionally, the sale, or even the possibility of a sale, of the shares of common stock underlying the Class C Warrants and Class D Warrants could have an adverse effect on the market price for our securities or on our ability to obtain future financing. If and to the extent the Class C Warrants and/or Class D Warrants are exercised, you may experience dilution to your holdings.

Certain beneficial provisions in the Class C Warrants and Class D Warrants will not be effective until we are able to receive stockholder approval of such provisions, and if we are unable to obtain such approval the Class C Warrants and Class D Warrants will have significantly less value.

Under Nasdaq listing rules, certain provisions in the Class C Warrants and Class D Warrants will not be effective until, and unless, we obtain the approval of our stockholders. While we intend to promptly seek stockholder approval, there is no guarantee that the Warrant Stockholder Approval will ever be obtained. If we are unable to obtain the Warrant Stockholder Approval, the foregoing provisions will not become effective and the Class C Warrants and Class D Warrants may have substantially less value. In addition, we expect to incur substantial cost, and management may devote substantial time and attention, in attempting to obtain the Warrant Stockholder Approval.

The Class C Warrants and Class D Warrants are speculative in nature.

The Class C Warrants and Class D Warrants offered hereby as part of the Units 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. Following this offering, the market value of the Class C Warrants and Class D Warrants will be uncertain and there can be no assurance that the market value of the Class C Warrants and Class D Warrants, if any, will equal or exceed their exercise prices, and consequently, whether it will ever be profitable for holders of Class C Warrants and Class D Warrants to exercise such Class C Warrants and Class D Warrants.

Although our Common Stock is listed on the Nasdaq Capital Market, the exchange could subsequently delist our common stock if we fail to comply with ongoing listing standards.

Our common stock currently is listed for quotation on the Nasdaq Capital Market. We are required to meet specified financial requirements in order to maintain such listing, including a requirement that the bid price for our common stock remain above \$1.00, and that the market value of our publicly held securities be at least \$1 million.

On February 28, 2024, we received a notification letter from the Nasdaq's Listing Qualifications Staff 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 are not in compliance with the minimum bid price requirement for continued inclusion on the Nasdaq Capital Market under Nasdaq Listing Rule 5550(a)(2). The notification has no immediate effect on the listing of our common stock on the Nasdaq Capital Market.

Under the Nasdaq Listing Rules, we have a period of 180 calendar days to regain compliance. To regain compliance, the closing bid price of our common stock must be at least \$1.00 or higher for a minimum of ten consecutive business days, and in such case, Nasdaq will provide us with written confirmation of compliance. If we do not regain compliance by August 26, 2024, we may be eligible for an additional 180 calendar days, provided that we meet the continued listing requirement for market value of publicly held shares and all other initial listing standards for Nasdaq, except the bid price requirement. If we are not eligible or it appears to Nasdaq that we will not be able to cure the deficiency during the second compliance period, Nasdaq will provide written notice to us that our common stock will be subject to delisting. In the event of such notification, we may appeal Nasdaq's determination to delist its securities, but there can be no assurance that Nasdaq would grant our request for continued listing.

We intend to take all reasonable measures available to us to achieve compliance to allow for continued listing on the Nasdaq Capital Market. However, there can be no assurance that we will be able to regain compliance with the minimum bid price requirement or will otherwise be in compliance with other Nasdaq listing criteria.

As of the close of business on June 21, 2024, the market value of our publicly held common stock (which is our only outstanding class of capital stock) was approximately \$1.5 million. If the value of our publicly held common stock declines below \$1 million, we would also be subject to Nasdaq delisting proceedings on that basis. Nasdaq's staff also maintains discretionary authority under its listing rules to delist companies whose capital structure or public offerings raise public interest and investor protection concerns, including as a result of highly dilutive issuances, and it is possible that Nasdaq could assert that our present offering, past offerings that we have consummated, or future offerings we may consummate, raise such concerns.

If our common stock is delisted, we may seek to have our common stock quoted on an over-the-counter marketplace, such as on the OTCQX. The OTCQX is not a stock exchange, and if our common stock trades on the OTCQX rather than a securities exchange, there may be significantly less trading volume and analyst coverage of, and significantly less investor interest in, our common stock, which may lead to lower trading prices for our common stock.

Any potential delisting of our common stock from the Nasdaq Capital Market may have materially adverse consequences to our stockholders, including:

- a reduced market price and liquidity with respect to our shares of common stock, which could make our ability to raise new investment capital more difficult;
- limited dissemination of the market price of our common stock;
- limited news coverage;
- limited interest by investors in our common stock;
- volatility of the prices of our common stock, due to low trading volume;
- our common stock being considered a "penny stock," which would result in broker-dealers participating in sales of our common stock being subject to the regulations set forth in Rules 15c-2 through 15c-9 promulgated under the Exchange Act;
- increased difficulty in selling our common stock in certain states due to "blue sky" restrictions; and
- limited ability to issue additional securities or to secure additional financing.

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 13 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, 2023 and our Quarterly Report on Form 10-Q for the quarter ended March 31, 2024, 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.

SELECTED FINANCIAL DATA

The following selected financial data has been derived from our audited financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2023, filed with the SEC on March 28, 2024, and our unaudited financial statements included in our Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2024, filed with the SEC on May 15, 2024, each of which give effect to the 2023 Reverse Stock Split that occurred on July 24, 2023 for all periods presented. In addition, the “as adjusted” presentation below gives effect to the 2024 Reverse Stock Split that occurred on June 20, 2024 for all periods presented.

Our historical results are not indicative of the results that may be expected in the future, and results of interim periods are not indicative of the results for the entire year.

As Reported (Giving Effect to the 2023 Reverse Stock Split but not the 2024 Reverse Stock Split)

	Years Ended December 31,	
	2023	2022
Net loss	\$ (9,953,888)	\$ (9,296,948)
Net loss per share – basic and diluted	\$ (9.08)	\$ (9.22)
Weighted average common shares outstanding, basic and diluted	1,096,500	1,008,196
Common shares outstanding at year end	1,239,140	1,010,560

	Three Months Ended	
	March 31,	
	2024	2023
	(Unaudited)	
Net loss	\$ (2,328,465)	\$ (2,539,843)
Net loss per share - basic and diluted	\$ (0.99)	\$ (2.49)
Weighted average common shares outstanding, basic and diluted	2,359,376	1,018,755
Common shares outstanding at period end	2,688,448	1,022,748

As Adjusted for the 2024 Reverse Stock Split

	Years Ended December 31,	
	2023	2022
Net loss	\$ (9,953,888)	\$ (9,296,948)
Net loss per share – basic and diluted	\$ (72.62)	\$ (73.77)
Weighted average common shares outstanding, basic and diluted	137,063	126,025
Common shares outstanding at year end	154,893	126,320

	Three Months Ended	
	March 31,	
	2024	2023
	(Unaudited)	
Net loss	\$ (2,328,465)	\$ (2,539,843)
Net loss per share - basic and diluted	\$ (7.90)	\$ (19.94)
Weighted average common shares outstanding, basic and diluted	294,922	127,344
Common shares outstanding at period end	336,056	127,844

USE OF PROCEEDS

We estimate that the net proceeds from this offering, after deducting underwriting discounts and commissions and estimated offering expenses payable by us, will be approximately \$7.5 million. We intend to use the net proceeds from the offering to (i) repay \$2.3 million in outstanding debt that will be due and payable upon consummation of the offering and (ii) 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.

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.

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 55,000,000 shares, of which (i) 50,000,000 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 June 21, 2024, there were 563,960 shares of our common stock outstanding, held by 19 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 June 21, 2024, we had outstanding:

- 27,000 shares of common stock issuable upon the exercise of the August 2023 Warrants at an exercise price of \$57.92 per share;
- 1,890 shares of common stock issuable upon the exercise of the August 2023 Placement Agent Warrants at an exercise price of \$73.65 per share;
- 5,074 shares of common stock issuable upon the exercise of additional Common Stock warrants at a weighted average exercise price of \$517.84 per share;
- 15,525 shares of common stock issuable upon the exercise of Class A warrants at an exercise price of \$1,120.00 per share;
- 471 shares of common stock issuable upon the exercise of Class B warrants at an exercise price of \$1,600.00 per share;
- 336,538 shares of common stock issuable upon the exercise of the January 2024 Warrants at an exercise of \$10.40 per share; and
- 23,557 shares of common stock issuable upon the exercise of the January 2024 Placement Agent Warrants at an exercise of \$13.00 per share.

Outstanding Stock Options to Purchase our Common Stock

As of June 21, 2024, options to purchase an aggregate of 3,705 shares of our common stock, at a weighted average exercise price of \$292.08 per share, were outstanding.

Unvested Restricted Stock Units

As of June 21, 2024, 125 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

We are offering 5,368,098 Units. Each Unit will consist of one share of common stock (or Prefunded Warrant to purchase one share of our common stock in lieu thereof), two Class C Warrants each to purchase one share of common stock and one Class D Warrant to purchase such number of shares of common stock as determined in the Class D Warrant. The Units have no stand-alone rights and will not be certificated or issued as stand-alone securities. The shares of common stock and Prefunded Warrants, if any, can each be purchased in this offering only with the accompanying Class C Warrants and Class D Warrants as part of Units (other than pursuant to the underwriter's option to purchase additional shares of common stock and/or Prefunded Warrants and/or Class C Warrants and/or Class D Warrants), but the components of the Units will be immediately separable and will be issued separately in this offering.

Common Stock

The material terms and provisions of our common stock are described under the caption "Description of Capital Stock" in this prospectus.

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 Warrants. 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.

The term "prefunded" refers to the fact that the purchase price of our common stock in this offering includes almost the entire exercise price that will be paid under the Prefunded Warrants, except for a nominal remaining exercise price of \$0.0001. The purpose of the Prefunded Warrants is to enable investors that may have restrictions on their ability to beneficially own more than 4.99% (or, upon election of the holder, 9.99%) of our outstanding shares of common stock following the consummation of this offering the opportunity to make an investment in the Company without triggering their ownership restrictions, by receiving Prefunded Warrants in lieu of our common stock which would result in such ownership of more than 4.99% (or 9.99%), and receive the ability to exercise their option to purchase the shares underlying the Prefunded Warrants at such nominal price at a later date.

Duration. The Prefunded Warrants offered hereby will entitle the holders thereof to purchase our shares of common stock at a nominal exercise price of \$0.0001 per share, commencing immediately on the date of issuance. There is no expiration date for the Prefunded Warrants.

Exercise Limitation. A holder will not have the right to exercise any portion of the Prefunded Warrants if the holder (together with its affiliates) would beneficially own in excess of 4.99% (or, upon election of the holder, 9.99%) of the number of our shares of common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the Prefunded Warrants. However, any holder may increase or decrease such percentage (up to 9.99%), provided that any increase will not be effective until the 61st day after such election. It is the responsibility of the holder to determine whether any exercise would exceed the exercise limitation.

Exercise Price. The Prefunded Warrants will have an exercise price of \$0.0001 per share. The exercise price is subject to appropriate adjustment in the event of certain stock dividends and distributions, stock splits, stock combinations, reclassifications or similar events affecting our common stock and also upon any distributions of assets, including cash, stock or other property to our shareholders.

Transferability. Subject to applicable laws, the Prefunded Warrants may be offered for sale, sold, transferred or assigned without our consent.

Absence of Trading Market. There is no established trading market for the Prefunded Warrants and we do not expect a market to develop. In addition, we do not intend to apply for the listing of the Prefunded Warrants on any national securities exchange or other trading market. Without an active trading market, the liquidity of the Prefunded Warrants will be limited.

Fundamental Transactions. In the event of a fundamental transaction, 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, merger, amalgamation or arrangement 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 holder will have the right to receive, for each share of common stock that would have been issuable upon such exercise immediately prior to the occurrence of such fundamental transaction, the number of shares of the successor or acquiring corporation or of us if we are the surviving corporation, and any additional consideration receivable as a result of such fundamental transaction by a holder of the number of shares for which the Prefunded Warrant was exercisable immediately prior to such fundamental transaction. The holders of the Prefunded Warrants may also require us to purchase the Prefunded Warrants from the holders by paying to each holder an amount equal to the Black Scholes value of the remaining unexercised portion of the Prefunded Warrants on the date of the fundamental transaction.

No Rights as a Shareholder. Except as otherwise provided in the Prefunded Warrants or by virtue of such holder's ownership of our shares of common stock, the holder of Prefunded Warrants does not have the rights or privileges of a holder of our common stock, including any voting rights, until the holder exercises the Prefunded Warrant.

Warrant Stockholder Approval

Under Nasdaq listing rules, certain anti-dilution provisions and the reverse stock split provision in the Class C Warrants (described below) will not be effective until, and unless, we obtain the approval of our stockholders. While we intend to promptly seek stockholder approval, there is no guarantee that the Warrant Stockholder Approval will ever be obtained. If we are unable to obtain the Warrant Stockholder Approval, the foregoing provisions will not become effective and the Class C Warrants and Class D Warrants will have substantially less value. In addition, we expect to incur substantial costs, and management may devote substantial time and attention, in attempting to obtain the Warrant Stockholder Approval.

Class C Warrants

The following summary of certain terms and provisions of the Class C Warrants included in the Units and offered hereby is not complete and is subject to, and qualified in its entirety by the provisions of the form of Class C Warrant, which is filed as an exhibit to the registration statement of which this prospectus forms a part. Prospective investors should carefully review the terms and provisions set forth in the form of Class C Warrant.

Exercisability. The Class C Warrants will be exercisable beginning on the first trading day following Warrant Stockholder Approval and will expire five (5) years from such first exercisable date. The Class C Warrants will be exercisable, at the option of each holder, in whole or in part by delivering to us a duly executed exercise notice and, at any time a registration statement registering the issuance of the shares of common stock underlying the Class C Warrants under the Securities Act is effective and available for the issuance of such shares, by payment in full in immediately available funds for the number of shares of common stock purchased upon such exercise. If a registration statement registering the issuance of the shares of common stock underlying the Class C Warrants under the Securities Act is not effective, the holder may elect to exercise the Class C Warrants through a cashless exercise, in which case the holder would receive upon such exercise the net number of shares of common stock determined according to the formula set forth in the warrant. No fractional shares of common stock will be issued in connection with the exercise of Class C Warrants. In lieu of fractional shares, we will pay the holder an amount in cash equal to the fractional amount multiplied by the exercise price or round up to the next whole share.

Exercise Limitation. A holder will not have the right to exercise any portion of the Class C Warrants if the holder (together with its affiliates) would beneficially own in excess of 4.99% 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 Class C Warrants. However, any holder may increase or decrease such percentage to any other percentage not in excess of 9.99%, provided that any increase in such percentage shall not be effective until 61 days following notice from the holder to us.

Exercise Price. The exercise price per whole share of common stock purchasable upon exercise of the Class C Warrants is \$1.96. The exercise price and floor price are subject to appropriate adjustment in the event of certain stock dividends and distributions, stock splits, stock combinations, reclassifications or similar events affecting our common stock.

Subsequent Financing. In addition, conditioned upon the receipt of the Warrant Stockholder Approval, and subject to certain exemptions, if we sell, enter into an agreement to sell, or grant any option to purchase, or sell, enter into an agreement to sell, or grant any right to reprice, or otherwise dispose of or issue (or announce any offer, sale, grant or any option to purchase or other disposition) any shares of common stock, for a consideration per share less than the exercise price of the Class C Warrants then in effect, the exercise price of the Class C Warrants will be reduced to the lower of such price or the lowest volume weighted average price (VWAP) during the five (5) consecutive trading days immediately following such dilutive issuance or announcement thereof (subject to a floor, prior to the Warrant Stockholder Approval, equal to \$0.815 per share (representing 50% of the lower of our common stock's closing price on the Nasdaq Capital Market on the date that we priced this offering or our common stock's average closing price on the Nasdaq Capital Market for the five trading days ending on such date (such lower price, without giving effect to such 50% reduction, the "Nasdaq Minimum Price")), and following the Warrant Stockholder Approval, equal to \$0.326 per share (representing 20% of the Nasdaq Minimum Price)), and the number of shares issuable upon exercise will be proportionately adjusted such that the aggregate exercise price will remain unchanged.

Reverse Stock Split. If at any time there occurs any share split, share dividend, share combination recapitalization or other similar transaction involving our common stock and the lowest daily volume weighted average price during the period commencing five (5) consecutive trading days immediately preceding through the five (5) consecutive trading days commencing on the date of such event is less than the exercise price of the Class C Warrants then in effect, then the exercise price of the Class C Warrants will be reduced (but in no event increased) to the lowest daily volume weighted average price during such period (subject to a floor, prior to the Warrant Stockholder Approval, equal to \$0.815 per share (representing 50% of the Nasdaq Minimum Price), and following the Warrant Stockholder Approval, equal to \$0.326 per share (representing 20% of the Nasdaq Minimum Price)) and the number of shares issuable upon exercise will be proportionately adjusted such that the aggregate price before and after such event will remain unchanged.

Transferability. Subject to applicable laws, the Class C Warrants may be offered for sale, sold, transferred or assigned, in whole or in part, without our consent.

Fundamental Transactions. In the event of a fundamental transaction, as described in the Class C 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 50% or more of the voting power of the common equity of the Company, the holders of the Class C Warrants will be entitled to receive upon exercise of the Class C Warrants, at the option of the holder, the kind and amount of securities, cash or other property that the holders would have received had they exercised the Class C Warrants immediately prior to such fundamental transaction. If the Fundamental Transaction is not within the Company's control, the holders of the Class C Warrants shall only be entitled to receive from the Company or any successor entity the same type or form of consideration (and in the same proportion), at the Black Scholes Value (as defined in the Class C Warrant) of the unexercised portion of the Class C Warrant, that is being offered and paid to the holders of common stock of the Company in connection with the fundamental transaction.

Absence of Trading Market. There is no established trading market for the Class C Warrants and we do not expect a market to develop. In addition, we do not intend to apply for the listing of the Class C Warrants on any national securities exchange or other trading market. Without an active trading market, the liquidity of the Class C Warrants will be limited.

Rights as a Stockholder. Except as otherwise provided in the Class C Warrants or by virtue of such holder's ownership of shares of our common stock, the holder of a Class C Warrant does not have the rights or privileges of a holder of our common stock, including any voting rights, until the holder exercises the Class C Warrant.

Governing Law. The Class C Warrants are governed by New York law.

Class D Warrants

The following summary of certain terms and provisions of the Class D Warrants included in the Units and offered hereby is not complete and is subject to, and qualified in its entirety by the provisions of the form of Class D Warrant, which is filed as an exhibit to the registration statement of which this prospectus forms a part. Prospective investors should carefully review the terms and provisions set forth in the form of Class D Warrant.

Exercisability. The Class D Warrants will be exercisable immediately.

Exercise Limitation. A holder will not have the right to exercise any portion of the Class D Warrants if the holder (together with its affiliates) would beneficially own in excess of 4.99% 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 Class D Warrants.

Exercise Price. The exercise price and number of shares of common stock issuable under the Class D Warrants are subject to adjustment based upon the weighted average price of our common stock over a rolling five (5)-trading day period between the issuance date of the Class D Warrants and the close of trading on the tenth (10th) trading day following the Warrant Stockholder Approval (subject to a floor, prior to the Warrant Stockholder Approval, equal to \$0.815 per share (representing 50% of the Nasdaq Minimum Price), and following the Warrant Stockholder Approval, equal to \$0.326 per share (representing 20% of the Nasdaq Minimum Price)). The exercise price and floor price are subject to appropriate adjustment in the event of certain stock dividends and distributions, stock splits, stock combinations, reclassifications or similar events affecting our common stock and also upon any distributions of assets, including cash, stock or other property to our stockholders.

Transferability. Subject to applicable laws, the Class D Warrants may be offered for sale, sold, transferred or assigned without our consent.

Fundamental Transactions. The Company shall not enter into a fundamental transaction, as described in the Class D 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 50% or more of the voting power of the common equity of the Company, unless the successor entity in such transaction assumes in writing all of the obligations of the Company under the Class D Warrants. Such security of the successor entity shall be evidenced by a written instrument substantially similar in form and substance to the Class D Warrants, including, without limitation, an adjusted exercise price equal to the value for the Common Shares reflected by the terms of such fundamental transaction, and exercisable for a corresponding number of shares of capital stock equivalent to the Common Shares acquirable and receivable upon exercise of the Class D Warrants (without regard to any limitations on the exercise of the Class D Warrants) prior to such fundamental transaction, and with an exercise price which applies the exercise price described in the Class D Warrants to such shares of capital stock (but taking into account the relative value of the Common Shares pursuant to such fundamental transaction and the value of such shares of capital stock, such adjustments to the number of shares of capital stock and such exercise price being for the purpose of protecting the economic value of the Class D Warrants immediately prior to the occurrence or consummation of such fundamental transaction).

Absence of Trading Market. There is no established trading market for the Class D Warrants and we do not expect a market to develop. In addition, we do not intend to apply for the listing of the Class D Warrants on any national securities exchange or other trading market. Without an active trading market, the liquidity of the Class D Warrants will be limited.

Rights as a Stockholder. Except as otherwise provided in the Class D Warrants or by virtue of such holder's ownership of shares of our common stock, the holder of a Class D Warrant does not have the rights or privileges of a holder of our common stock, including any voting rights, until the holder exercises the Class D Warrant.

Governing Law. The Class D Warrants are governed by New York law.

UNDERWRITING

Aegis Capital Corp., (“Aegis” or the “underwriter”), is the underwriter and the book-running manager of this offering. Under the terms of an underwriting agreement, which is filed as an exhibit to the registration statement, we have agreed to sell to the underwriter and the underwriter has agreed to purchase, at the public offering price less the underwriting discounts and commissions set forth on the cover page of this prospectus, the following number of Units:

Underwriter	Number of Units including Common Stock	Number of Units including Prefunded Warrants
Aegis Capital Corp.	577,073	4,791,025

The underwriting agreement provides that the underwriter’s obligation to purchase Units depends on the satisfaction of the conditions contained in the underwriting agreement including:

- the representations and warranties made by us to the underwriter are true;
- there is no material change in our business or the financial markets; and
- we deliver customary closing documents to the underwriter.

The underwriter has agreed to purchase all of the Units offered by this prospectus (other than those covered by the over-allotment option described below), if any are purchased under the underwriting agreement.

The underwriter is offering the Units subject to various conditions and may reject all or part of any order. The underwriter has advised us that it proposes to offer the units directly to the public at the public offering price per Unit that appears on the cover page of this prospectus. In addition, the underwriter may offer some of the Units to other securities dealers at such price less a concession of \$0.04 per Unit. After the Units are released for sale to the public, the underwriter may change the offering price and other selling terms at various times.

Over-Allotment Option

We have granted to the underwriter an option to purchase up to 805,214 additional shares of Common Stock (representing 15.0% of the Units sold in the offering), and/or up to an additional 1,610,429 Class C Warrants to purchase an aggregate of an additional 1,610,429 shares of common stock (subject to potential upward adjustment), representing 15.0% of the Units sold at the closing of the offering from the Company; and 805,214 Class D Warrants to purchase additional shares of common stock, representing 15.0% of the Units sold at the closing of the offering by the Company) at the public offering price less underwriting discounts and commissions. The underwriter may exercise this option in whole or in part at any time within forty-five (45) days after the date of the offering. The underwriter may exercise the over-allotment option with respect to shares of common stock only, warrants only, or any combination thereof. The purchase price to be paid per additional share of common stock will be equal to the public offering price of one Unit (less \$0.01 allocated to each full warrant), as applicable, less the underwriting discount, and the purchase price to be paid per over-allotment warrant will be \$0.01. We will be obligated, pursuant to the option, to sell these additional shares of common stock or warrants to the underwriter to the extent the option is exercised. If any additional shares of common stock or warrants are purchased, the underwriter will offer the additional shares of common stock or warrants on the same terms as those on which the other shares of common stock or warrants are being offered hereunder. No underwriting discounts or commissions will be paid on any warrants purchased pursuant to the underwriter’s over-allotment option. If this over-allotment option is exercised in full, the total offering price to the public will be approximately \$10.1 million, and the total net proceeds, before expenses and after deducting the underwriting discounts described above, to us will be approximately \$9.2 million.

Underwriting Discounts and Expenses

The following table shows the per Unit and total underwriting discounts we will pay to Aegis. These amounts are shown assuming both no exercise and full exercise of the underwriter's option to purchase additional securities.

	Per Unit	Total	
		No Exercise	Full Exercise ⁽²⁾
Public offering price	\$ 1.63	\$ 8,750,000	\$ 10,062,500
Underwriting discounts to be paid by us (8.5%)	\$ 0.14	\$ 743,750	\$ 855,312
Non-accountable expense allowance (\$75,000) ⁽¹⁾	\$ 0.02	\$ 75,000	\$ 75,000
Proceeds, before expenses, to us	\$ 1.48	\$ 7,928,681	\$ 9,132,187

(1) We have agreed to pay a non-accountable expense allowance to Aegis equal to \$75,000.

(2) Assumes exercise for Units only. The underwriter will not receive any discounts or commissions upon exercise of the underwriter's option to purchase warrants.

We have also agreed to reimburse the underwriter for certain of its expenses, including \$170,000 for reasonable and documented legal fees and disbursements for Aegis' counsel.

Stabilization

In accordance with Regulation M under the Exchange Act, the underwriter may engage in activities that stabilize, maintain or otherwise affect the price of our Common Stock, including short sales and purchases to cover positions created by short positions, stabilizing transactions, syndicate covering transactions, penalty bids and passive market making.

- Short positions involve sales by the underwriter of shares of common stock in excess of the number of shares the underwriter is obligated to purchase, which creates a syndicate short position. The short position may be either a covered short position or a naked short position. In a covered short position, the number of shares involved in the sales made by the underwriter in excess of the number of shares they are obligated to purchase is not greater than the number of shares that they may purchase by exercising their option to purchase additional shares. In a naked short position, the number of shares involved is greater than the number of shares in their option to purchase additional shares. The underwriter may close out any short position by either exercising their option to purchase additional shares or purchasing shares in the open market.
- Stabilizing transactions permit bids to purchase the underlying security as long as the stabilizing bids do not exceed a specific maximum price.
- Syndicate covering transactions involve purchases of our shares of common stock in the open market after the distribution has been completed to cover syndicate short positions. In determining the source of shares to close out the short position, the underwriter will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the underwriter's option to purchase additional shares. If the underwriter sells more shares than could be covered by the underwriter's option to purchase additional shares, thereby creating a naked short position, the position can only be closed out by buying shares in the open market. A naked short position is more likely to be created if the underwriter is concerned that there could be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase in the offering.
- Penalty bids permit the underwriter to reclaim a selling concession from a syndicate member when the shares of Common Stock originally sold by the syndicate member is purchased in a stabilizing or syndicate covering transaction to cover syndicate short positions.
- In passive market making, market makers in our common stock who are underwriters or prospective underwriters may, subject to limitations, make bids for or purchase our Common Stock until the time, if any, at which a stabilizing bid is made.

These activities may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result of these activities, the price of our common stock may be higher than the price that might otherwise exist in the open market. These transactions may be effected on or otherwise and, if commenced, may be discontinued at any time.

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

Discretionary Accounts

The underwriter has informed us that they do not expect to make sales to accounts over which they exercise discretionary authority in excess of five percent (5%) of the securities being offered in this offering.

Indemnification

We have agreed to indemnify Aegis, its affiliates, and each person controlling Aegis against any losses, claims, damages, judgments, assessments, costs, and other liabilities, as the same are incurred (including the reasonable fees and expenses of counsel), relating to or arising out of the offering, undertaken in good faith.

Lock-Up Agreements

Pursuant to certain "lock-up" agreements, our executive officers, directors and holders of at least 5% of our common stock and securities exercisable for or convertible into common stock outstanding immediately upon the closing of this offering, have agreed, subject to certain exceptions, not to offer, sell, assign, transfer, pledge, contract to sell, or otherwise dispose of or announce the intention to otherwise dispose of, or enter into any swap, hedge or similar agreement or arrangement that transfers, in whole or in part, the economic risk of ownership of, directly or indirectly, engage in any short selling of any shares of Common Stock or securities convertible into or exchangeable or exercisable for any shares of common stock, whether currently owned or subsequently acquired, without the prior written consent of the underwriter, for a period of ninety (90) days after the closing date of the offering.

The underwriter, in its sole discretion, may release the common stock and other securities subject to the lock-up agreements described above in whole or in part at any time. When determining whether or not to release common stock and other securities from lock-up agreements, the underwriter will consider, among other factors, the holder's reasons for requesting the release, the number of shares of common stock and other securities for which the release is being requested and market conditions at the time.

Company Standstill

We have agreed, for a period of three (3) months after the closing date of the offering (the "Standstill Period"), that without the prior written consent of Aegis, we will not (a) offer, sell, issue, or otherwise transfer or dispose of, directly or indirectly, any equity of our Company or any securities convertible into or exercisable or exchangeable for equity of our Company; (b) file or caused to be filed any registration statement with the Commission relating to the offering of any equity of our Company or any securities convertible into or exercisable or exchangeable for equity of our Company; or (c) enter into any agreement or announce the intention to effect any of the actions described in subsections (a) or (b) hereof (all of such matters, the "Standstill Restrictions"). So long as none of such equity securities shall be saleable in the public market until the expiration of the Standstill Period, the following matters shall not be prohibited by the Standstill Restrictions: (i) the adoption of an equity incentive plan and the grant of awards or equity pursuant to any equity incentive plan, and the filing of a registration statement on Form S-8; and (ii) securities issued pursuant to acquisitions or strategic transactions approved by a majority of the disinterested directors of our Company, provided that such securities are issued as "restricted securities" (as defined in Rule 144) and carry no registration rights that require or permit the filing of any registration statement in connection therewith during the Standstill Period, and provided that any such issuance shall only be to a person or entity (or to the equityholders of an entity) which is, itself or through its subsidiaries, an operating company or an owner of an asset in a business synergistic with the business of our Company and shall provide to our Company additional benefits in addition to the investment of funds, but shall not include a transaction in which our Company is issuing securities primarily for the purpose of raising capital or to an entity whose primary business is investing in securities. In no event should any equity transaction during the Standstill Period result in the sale of equity at an offering price to the public less than that of this offering.

Right of First Refusal

If, between June 3, 2024 and June 3, 2025, we or any of our subsidiaries (a) decides to finance or refinance any indebtedness, Aegis (or any affiliate designated by Aegis) shall have the right to act as sole book-runner, sole manager, sole placement agent or sole agent with respect to such financing or refinancing; or (b) decides to raise funds by means of a public offering (including at-the-market facility) or a private placement or any other capital raising financing of equity, equity-linked or debt securities, Aegis (or any affiliate designated by Aegis) shall have the right to act as sole book-running manager, sole underwriter or sole placement agent for such financing. If Aegis 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 and terms for transactions of similar size and nature, including indemnification, which are appropriate to such a transaction. The foregoing rights of Aegis and its affiliates are subject to any pre-existing obligations that we have and that have been previously identified to Aegis.

Notwithstanding the foregoing, the decision to accept our engagement shall be made by Aegis or one of its affiliates, by a written notice to us, within ten (10) days of the receipt of our notification of financing needs, including a detailed term sheet. Aegis's determination of whether in any case to exercise its right of first refusal will be strictly limited to the terms on such term sheet, and any waiver of such right of first refusal shall apply only to such specific terms. If Aegis waives its right of first refusal, any deviation from such terms shall void the waiver and require us to seek a new waiver from the right of first refusal.

Other Relationships

The underwriter is a full service financial institution engaged in various activities, which may include sales and trading, commercial and investment banking, advisory, investment management, investment research, principal investment, hedging, market making, brokerage and other financial and non-financial activities and services. The underwriter may in the future provide various investment banking, commercial banking and other financial services for us and our affiliates for which they may in the future receive customary fees.

In the ordinary course of its business activities, the underwriter and its affiliates, officers, directors and employees may purchase, sell or hold a broad array of investments and actively traded securities, derivatives, loans, commodities, currencies, credit default swaps and other financial instruments for their own account and for the accounts of their customers, and such investment and trading activities may involve or relate to assets, securities and/or instruments of the issuer (directly, as collateral securing other obligation or otherwise) publish or express independent research views in respect of such assets, securities or instruments and may at any time hold, or recommend to clients that they should acquire, long and/or short positions in such assets, securities and instruments.

Electronic Offer, Sale and Distribution of Securities

A prospectus in electronic format may be made available on the websites maintained by the underwriter, if any, participating in this offering and the underwriter participating in this offering may distribute prospectuses electronically. The underwriter may agree to allocate a number of Units for sale to its online brokerage account holders. Internet distributions will be allocated by the underwriter that will make internet distributions on the same basis as other allocations. Other than the prospectus in electronic format, the information on these websites is not part of, nor incorporated by reference into, this prospectus or the registration statement of which this prospectus forms a part, has not been approved or endorsed by us or the underwriter in its capacity as underwriter, and should not be relied upon by investors.

Offer Restrictions Outside the United States

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

Transfer Agent and Registrar

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

Trading Market

Our common stock is listed on the Nasdaq Capital Market under the symbol "BJDX." We do not intend to apply for listing of the Prefunded Warrants, Class C Warrants or Class D Warrants on any securities exchange or other nationally recognized trading system.

LEGAL MATTERS

The validity of the common stock offered hereby is being passed upon for us by Hogan Lovells US LLP, Washington, D.C. Certain legal matters in connection with this offering have been passed upon for the underwriter by Kaufman & Canoles, P.C., Richmond, Virginia.

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, for the year ended December 31, 2023, 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 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 June 20, 2024, do not give effect to the 2024 Reverse Stock Split and all documents incorporated by reference into this prospectus that were filed prior to July 24, 2023 also do not give effect to the 2023 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, 2023, filed on March 28, 2024;
- our Quarterly Report on [Form 10-Q](#) for the fiscal quarter ended March 31, 2024 filed on May 15, 2024;
- those portions of our Definitive Proxy Statement on [Schedule 14A](#) filed on April 15, 2024 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 2, 2024](#), [March 4, 2024](#), [April 2, 2024](#), [May 16, 2024](#), [May 31, 2024](#) and [June 20, 2024](#); 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 4.10](#) to our Annual Report on [Form 10-K](#) for the year ended December 31, 2023, 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 of which this prospectus forms a part 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.

5,368,098 Units

Each Consisting of One Share of Common Stock or One Prefunded Warrant to Purchase One Share of Common Stock, Two Class C Warrants each to Purchase One Share of Common Stock and One Class D Warrant to Purchase such number of Shares of Common Stock as determined in the Class D Warrant

Up to 4,791,025 Shares of Common Stock underlying the Prefunded Warrants

Up to 53,680,980 Shares of Common Stock underlying the Class C Warrants

Up to 21,472,392 Shares of Common Stock underlying the Class D Warrants

Prospectus

June 27, 2024

Aegis Capital Corp.
