

Prospectus Supplement
(To Prospectus dated March 16, 2023)



BLUE WATER VACCINES INC.
Up to \$3,900,000
Common Stock

We have entered into an At The Market Offering Agreement with H.C. Wainwright & Co., LLC (“Wainwright”) relating to the sale of our common stock, \$0.00001 par value per share (our “common stock”), offered by this prospectus supplement and the accompanying prospectus. In accordance with the terms of the At The Market Offering Agreement, we may offer and sell up to \$3,900,000 of shares of our common stock from time to time through Wainwright acting as agent.

Our common stock is listed on The Nasdaq Capital Market (“Nasdaq”) under the symbol “BWV.” The last reported sale price of our common stock on Nasdaq on March 27, 2023 was \$1.03 per share.

Sales of our common stock, if any, under this prospectus supplement and accompanying prospectus may be made in sales deemed to be “at the market equity offerings” as defined in Rule 415 promulgated under the Securities Act of 1933, as amended (the “Securities Act”), including sales made directly on or through Nasdaq or any other existing trading market in the United States for our common stock, sales made to or through a market maker other than on an exchange or otherwise, directly to Wainwright as principal, in negotiated transactions at market prices prevailing at the time of sale or at prices related to such prevailing market prices and/or in any other method permitted by law. If we and Wainwright agree on any method of distribution other than sales of shares of our common stock on or through Nasdaq or another existing trading market in the United States at market prices, we will file a further prospectus supplement providing all information about such offering as required by Rule 424(b) under the Securities Act. Wainwright is not required to sell any specific dollar amount of shares but will use its commercially reasonable efforts to sell on our behalf all of the shares of common stock requested to be sold by us, consistent with its normal trading and sales practices and applicable laws and regulations, subject to the terms of the At The Market Offering Agreement on mutually agreed terms between Wainwright and us. There is no arrangement for funds to be received in any escrow, trust or similar arrangement.

Wainwright will be entitled to compensation at a fixed commission rate of 3.0% of the gross sales price per share sold under the At The Market Offering Agreement. In connection with the sale of our common stock on our behalf, Wainwright will be deemed to be an “underwriter” within the meaning of the Securities Act and the compensation of Wainwright will be deemed to be underwriting commissions or discounts. We have also agreed to provide indemnification and contribution to Wainwright with respect to certain liabilities, including liabilities under the Securities Act.

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

The aggregate market value of our outstanding common stock held by non-affiliates is \$11,709,327.68, based on 10,094,248 shares of outstanding common stock held by non-affiliates as of March 6, 2023 and a price per share of \$1.16, the closing price of our common stock on March 6, 2023. Pursuant to General Instruction I.B.6 of Form S-3, in no event will we offer to sell, pursuant to the registration statement of which this prospectus supplement forms a part, securities in a public primary offering with a value exceeding one-third of our public float in any 12-month period so long as the aggregate market value of our outstanding common stock held by non-affiliates remains below \$75 million. During the prior 12-calendar-month period that ends on, and includes, the date of this prospectus supplement, we have not offered or sold any shares of common stock pursuant to General Instruction I.B.6 of Form S-3.

Investing in our securities involves a high degree of risk. Before buying any of our securities, you should carefully read the discussion of material risks of investing in our securities under the heading “Risk Factors” beginning on page S-7 of this prospectus supplement and the documents incorporated by reference herein and page 5 of the accompanying prospectus.

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

H.C. WAINWRIGHT & CO.

The date of this prospectus supplement is March 29, 2023

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You should rely only on the information we have provided or incorporated by reference in this prospectus supplement and the accompanying prospectus. We have not authorized anyone to provide you with information different from that contained or incorporated by reference in this prospectus supplement or the accompanying prospectus.

This prospectus supplement, the accompanying prospectus and any later prospectus supplement is an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so.

You should assume that the information contained in this prospectus supplement, the accompanying prospectus and in any other prospectus supplement is accurate only as of their respective dates and that any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus supplement and the accompanying prospectus or any other prospective supplement for any sale of securities.

ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying prospectus are part of a registration statement on Form S-3 (File No. 333-270383) that we filed with the Securities and Exchange Commission (the “SEC”) utilizing a shelf registration process (the “Registration Statement”). Under the shelf registration process, we may offer and sell shares of our common stock and any other securities registered thereunder having an aggregate offering price of up to \$100,000,000 from time to time, and, specifically, under this prospectus supplement we may offer and sell shares of our common stock having an aggregate offering price of up to \$3,900,000 from time to time at prices and on terms to be determined by market conditions at the time of offering.

This prospectus supplement describes the specific terms of the common stock we are offering and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference into this prospectus supplement. To the extent there is a conflict between the information contained in this prospectus supplement, on the one hand, and the information contained in the accompanying prospectus or any document incorporated by reference into this prospectus supplement that was filed with the SEC before the date of this prospectus supplement, on the other hand, you should rely on the information in this prospectus supplement. If any statement in one of these documents is inconsistent with a statement in another document having a later date — for example, a document incorporated by reference into this prospectus supplement — the statement in the document having the later date modifies or supersedes the earlier statement.

You should rely only on the information contained in, or incorporated by reference into, this prospectus supplement and in any free writing prospectus that we may authorize for use in connection with this offering. We have not, and Wainwright has not, authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not, and Wainwright is not, making an offer to sell or soliciting an offer to buy our securities in any jurisdiction in which an offer or solicitation is not authorized or in which the person making that offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make an offer or solicitation. You should assume that the information appearing in this prospectus supplement, the accompanying prospectus, the documents incorporated by reference into this prospectus supplement and the accompanying prospectus and in any free writing prospectus that we may authorize for use in connection with this offering is accurate only as of the date of those respective documents. Our business, financial condition, results of operations and prospects may have changed since those dates. You should read this prospectus supplement, the accompanying prospectus, the documents incorporated by reference into this prospectus supplement and the accompanying prospectus and any free writing prospectus that we may authorize for use in connection with this offering in their entirety before making an investment decision. You should also read and consider the information in the documents to which we have referred you in the sections of this prospectus supplement entitled “Where You Can Find More Information” and “Incorporation of Documents by Reference.”

We are offering to sell, and seeking offers to buy, shares of common stock only in jurisdictions where offers and sales are permitted. The distribution of this prospectus supplement and the accompanying prospectus and the offering of the common stock in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus supplement and the accompanying prospectus must inform themselves about, and observe any restrictions relating to, the offering of the common stock and the distribution of this prospectus supplement and the accompanying prospectus outside the United States. This prospectus supplement and the accompanying prospectus does not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities offered by this prospectus supplement and the accompanying prospectus by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference into this prospectus supplement and the accompanying prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreement, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

Unless otherwise stated, all references to “we,” “us,” “our,” the “Company,” “Blue Water Vaccines,” “BWV” and similar designations refer to Blue Water Vaccines Inc. Our logo, trademarks and service marks are the property of Blue Water Vaccines Inc. Other trademarks or service marks appearing in this prospectus supplement are the property of their respective holders.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein may contain forward-looking statements that involve substantial risks and uncertainties. In some cases, you can identify forward-looking statements by the words “may,” “might,” “will,” “could,” “would,” “should,” “expect,” “intend,” “plan,” “objective,” “anticipate,” “believe,” “estimate,” “predict,” “project,” “potential,” “continue” and “ongoing,” or the negative of these terms, or other comparable terminology intended to identify statements about the future, although not all forward-looking statements contain these words. These statements relate to future events or our future financial performance or condition and involve known and unknown risks, uncertainties and other factors that could cause our actual results, levels of activity, performance or achievement to differ materially from those expressed or implied by these forward-looking statements. These forward-looking statements include, but are not limited to, statements about:

- our projected financial position and estimated cash burn rate;
- our estimates regarding expenses, future revenues and capital requirements;
- our ability to continue as a going concern;
- our need to raise substantial additional capital to fund our operations;
- the success, cost and timing of our clinical trials;
- our dependence on third parties in the conduct of our clinical trials;
- our ability to obtain the necessary regulatory approvals to market and commercialize our product candidates;
- the ultimate impact of the ongoing COVID-19 pandemic, or any other health epidemic, on our business, our clinical trials, our research programs, healthcare systems or the global economy as a whole;
- the potential that results of pre-clinical and clinical trials indicate our current product candidates or any future product candidates we may seek to develop are unsafe or ineffective;
- the results of market research conducted by us or others;
- our ability to obtain and maintain intellectual property protection for our current product candidates;
- our ability to protect our intellectual property rights and the potential for us to incur substantial costs from lawsuits to enforce or protect our intellectual property rights;
- the possibility that a third party may claim we or our third-party licensors have infringed, misappropriated or otherwise violated their intellectual property rights and that we may incur substantial costs and be required to devote substantial time defending against claims against us;

- our reliance on third parties;
- the success of competing therapies and products that are or become available;
- our ability to expand our organization to accommodate potential growth and our ability to retain and attract key personnel;
- the potential for us to incur substantial costs resulting from product liability lawsuits against us and the potential for these product liability lawsuits to cause us to limit our commercialization of our product candidates;
- market acceptance of our product candidates, the size and growth of the potential markets for our current product candidates and any future product candidates we may seek to develop, and our ability to serve those markets; and
- the successful development of our commercialization capabilities, including sales and marketing capabilities.

These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including those described in “Risk Factors” on page S-7 of this prospectus supplement and certain other matters discussed in this prospectus supplement, the accompanying prospectus and the information incorporated by reference herein. Moreover, we operate in a very competitive and rapidly changing environment. New risks emerge from time to time. It is not possible for our management to predict all risks, 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 we may make. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein or therein may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements.

You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance or events and circumstances reflected in the forward-looking statements will be achieved or occur. Moreover, except as required by law, neither we nor any other person assumes responsibility for the accuracy and completeness of the forward-looking statements. We undertake no obligation to update publicly any forward-looking statements for any reason after the date of this prospectus supplement to conform these statements to actual results or to changes in our expectations.

You should read this prospectus supplement, the accompanying prospectus, the documents incorporated by reference herein and therein and the documents that we have filed with the SEC as exhibits to our filings with the understanding that our actual future results, levels of activity, performance and events and circumstances may be materially different from what we expect.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights selected information contained elsewhere in this prospectus supplement or the accompanying prospectus, or incorporated by reference in this prospectus supplement or the accompanying prospectus. This summary does not contain all the information that you should consider before investing in our Company. You should carefully read this entire prospectus supplement and the accompanying prospectus, including all documents incorporated by reference. In particular, attention should be directed to our “Risk Factors,” “Business,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and the financial statements and related notes thereto contained herein or otherwise incorporated by reference hereto before making an investment decision.

Our Company

We are a biotechnology company focused on the research and development of transformational vaccines to prevent infectious diseases worldwide. We hold exclusive, global rights to novel technology licensed from renowned research institutions around the world, including St. Jude Children’s Research Hospital, the University of Oxford, Cincinnati Children’s Hospital Medical Center, and the University of Texas Health at San Antonio. We believe that our pipeline and vaccine platform are synergistic for developing next generation preventive vaccines to improve both health outcomes and quality of life globally.

We seek to develop vaccines that provide long-lasting immunity to harmful viral and bacterial pathogens that cause infections in patient populations with high unmet needs. Our most advanced vaccine candidate is a live-attenuated, intranasally delivered, serotype independent *Streptococcus pneumoniae* vaccine to prevent middle ear infections, also known as acute otitis media (“AOM”), and pneumococcal pneumonia. AOM is a significant burden globally, particularly in young children, and pneumococcal pneumonia primarily impacts the elderly population. Additionally, we believe that this attenuated bacterium can serve as a platform to protect against other infectious agents that cause acute otitis media, such as non-typeable *Haemophilus influenzae* and *Moraxella catarrhalis*, by anchoring antigens from these pathogens on the surface of BWV-201, our attenuated *Streptococcus pneumoniae* bacterial vaccine. We hold a global, exclusive license to this technology, which was generated from the laboratory of Jason Rosch, Ph.D., of St. Jude Children’s Research Hospital. Our influenza programs are based on technology developed by Sunetra Gupta, Ph.D. at the University of Oxford, for which we hold a global, exclusive license for use of epitopes of limited variability, ELVs, to develop novel influenza vaccine candidates. Identified through a proprietary computational research and discovery process, we believe a vaccine formulated with these epitopes from different influenza strains will produce a viable universal influenza vaccine candidate. We are exploring the development of these influenza ELVs utilizing our norovirus shell and protrusion (“S&P”) nanoparticle vaccine platform, licensed from Cincinnati Children’s Hospital Medical Center, or CHMC. We are also utilizing this platform to develop a vaccine for the prevention of gastroenteritis caused by norovirus or rotavirus, as well as novel vaccines for malaria and monkeypox. The final candidate in our vaccine pipeline is a live-attenuated, orally delivered vaccine to prevent Chlamydia, for which we have a global, exclusive license to this technology originated from the University of Texas Health at San Antonio. We leverage the expertise of each of our collaborators to pursue the discovery and development of vaccines for these diseases, each of which represent high unmet needs globally.

In addition, we have expertise in identifying business development opportunities for our platform vaccines technologies and portfolio. This allows for both internal pipeline expansion and the ability to generate non-dilutive revenue from potential licensing partners to utilize our discovery engine vaccine platform. There is potential for adjunctive or next generation therapeutic exploration to enhance current standard of care options.

Vaccination has been used as an effective method of protecting individuals against harmful diseases by utilizing the body’s natural defense system to develop resistance or immunity to infections (World Health Organization, <https://www.who.int/news-room/q-a-detail/herd-immunity-lockdowns-and-covid-19>). The body’s immune system naturally creates antibodies and cell-mediated immunity to defend against foreign pathogens. Vaccines introduce or present these foreign pathogens, prompting the body’s immune system produce a response protective against the pathogen without exposing the body to the relevant lethal or harmful infection (World Health Organization, <https://www.who.int/news-room/q-a-detail/herd-immunity-lockdowns-and-covid-19>). While vaccines are generally able to provide resistance against disease, many infectious diseases can evolve or mutate leading to shortcomings of traditional vaccines, such as yearly reformulations. We believe our vaccine candidates can provide an alternative to the current standards of care by harnessing durable and long-lived immune response to specific or multiple antigens.

The global vaccine market has recently experienced significant growth caused by rising awareness of the importance of immunization and vaccination benefits in emerging markets as well as by projects to fuel further global market expansion. For instance, The World Health Organization (“WHO”) has undertaken initiatives to increase immunization awareness through its Global Vaccine Action Plan and Global Immunization Vision and Strategy.

As such, market research professionals project the global vaccine market size to reach \$73.78 billion by 2028, representing a CAGR of 7.3% over the forecast period, driven by rising prevalence of infectious diseases, increasing government funding for vaccine production and growing emphasis on becoming immunized.

This market acceleration has been coupled with various strategic transactions in the sector, including consolidations and mergers and acquisitions in recent years. Major market participants have strategically acquired start-ups and mid-sized companies to broaden their products portfolios and service offerings. For instance, in February 2019, Bharat Biotech acquired Chiron Behring Vaccines, one of the leading manufacturers of rabies vaccines across the globe. Additionally, in October 2018, Emergent BioSolutions, a multinational specialty biopharmaceutical company, acquired PaxVax for \$270 million, and in July 2017 Sanofi acquired Protein Sciences for \$650 million. In the pneumococcal disease market specifically, for which we are targeting for our *Streptococcus pneumoniae* vaccine candidate, GlaxoSmithKline acquired Affinivax for up to \$3.3 billion in May 2022. The appetite of these companies to buttress their vaccine programs and pipelines reflects the increasing importance of vaccines in the healthcare sector, both nationally and worldwide.

The U.S. Centers for Disease Control and Prevention (“CDC”), its Advisory Committee on Immunization Practices (“ACIP”), and similar international advisory bodies develop vaccine recommendations for both children and adults. New pediatric vaccines that receive ACIP preferred recommendations are almost universally adopted, and adult vaccines that receive a preferred recommendation are widely adopted. We believe that our vaccine candidates will be well-positioned to obtain these preferred recommendations, by virtue of their longer and more durable immunity, which could drive rapid and significant market adoption.

Pipeline

Our vaccine candidates are being developed in a manner that is scalable, designed to be cost-effective and provide long-term benefit to patients from infectious agents.



The FDA regulatory approval process is lengthy and time-consuming, and we may experience significant delays in the clinical development and regulatory approval of our vaccine candidates. Our vaccine candidates are in early stages of development and may fail in development or suffer delays that materially and adversely affect their commercial viability. We may be unable to complete development of or commercialize our vaccine candidates or experience significant delays in doing so due to regulatory or other uncertainties.

Our Vaccine Candidates

BWV-201: Streptococcus pneumoniae (S. pneumoniae) vaccine program

We are developing BWV-201, licensed from St. Jude Children's Research Hospital, to prevent Acute Otitis Media, or AOM, in children and adults, a leading cause of hospital visits, prescription antibiotics and potentially permanent hearing loss. Based on information from the American Academy of Pediatrics, over 5 million cases of AOM are reported annually in the U.S., resulting in approximately 30 million medical care visits and over 10 million antibiotic prescriptions, representing approximately \$4.3 billion spent on treatment in the U.S. alone. AOM due to *S. pneumoniae* infections range from 30 to 50% of all AOM infections each year (Monsata 2012 2012; 7(4): e36226). In addition to AOM, we are exploring the potential for BWV-201 to protect against non-invasive pneumococcal pneumonia, or colonization of the bacteria within the lungs that has not spread to the blood or other major organs. According to the CDC, pneumococcal pneumonia leads to an estimated 150,000 hospitalizations each year in the US alone (CDC Fast Facts: Pneumococcal Disease) and while there are commercially available pneumococcal vaccines, efficacy rates against pneumococcal pneumonia are low (Berild 2020; 9(4): 259) and vaccines are serotype independent (CDC: Pneumococcal Disease). BWV-201 is a live attenuated serotype-independent intranasal vaccine candidate for *S. pneumoniae* induced AOM and pneumococcal pneumonia.

BWV-101 and BWV-102: Influenza vaccine program

The company's influenza vaccine programs are focused on developing transformational and novel influenza vaccines: BWV-101 for an influenza vaccine to provide protection against H1, H3 and Flu B infections; and BWV-102 for a H1 only vaccine. This program is licensed from the University of Oxford in which all relevant studies were performed to support our hypothesis. Our goal is to develop a vaccine that protects against all influenza strains that commonly infect humans by targeting specific parts of the influenza viruses, which are of limited variability across flu strains and induce a strong protective immune response. This POC will be leveraged to develop BWV-101 by studying the cross-reactivity of different flu strains, H1, H3 and influenza B. The BWV-101 vaccine candidate may potentially provide a therapeutic benefit that negates the need for annual vaccination, vaccine reformulation, and provide long-lasting broad protection against the flu to millions globally (Thompson et al. Nature Communications. 2018. 9:385).

BWV Norovirus (NoV) S&P Nanoparticle Versatile vaccine platform

Our Approach to Stimulating the Immune System for Infectious Disease Protection

Our S&P platform was co-invented by two researchers, Xi Jason Jiang, Ph.D., and Ming Tan, Ph.D., of the Division of Infectious Disease at the Cincinnati Children's Hospital Medical Center. The pre-clinical research conducted at CHMC provided encouraging data that supports further investigation and development of the platform for our vaccine candidates. The S&P platform combines two or more immunogenic components, a norovirus antigen plus at least one additional antigen, together creating novel constructs. The norovirus nanoparticle enhances immunogenicity of the inserted antigen. The S&P particles themselves also act as antigens, and are large enough to trigger an immune response to a foreign substance. By combining the norovirus nanoparticle with one or more antigens from other infectious disease(s), the immune system is stimulated to create antibodies to both the norovirus and the additional antigen(s). Currently, we are evaluating this platform to generate vaccine candidates for norovirus, rotavirus, malaria, monkeypox, and Marburg virus disease.

Key Elements of our Platform

We are leveraging our disruptive norovirus nanoparticle platform to develop novel, broad-spectrum vaccines for adult and child infectious disease prevention by taking advantage of:

- Flexible and Scalable discovery platform engine. We believe we are able to design and create novel vaccines that are stable and scalable for broad spectrum prophylactics. Through this platform's adaptability, we may opportunistically expand our pipeline and potentially collaborate with third parties for additional vaccines, as well as therapeutics.
- Cost-effective and Rapid Production of Novel Vaccines. We are potentially able to reduce the cost and time to manufacture a vaccine candidate by utilizing an E.coli expression platform, compared to traditional vaccine production which uses other, longer production-time platforms, such as Chinese Hamster Ovary (CHO) cells. We have bioengineered these nanoparticles to be stable and effective, as determined through animal immunogenicity studies, using E.coli expression which may provide cost savings and efficiency compared to other VLPs needing a eukaryotic expression system. (Pharmaceutics 2019, 11, 472; doi:10.3390/pharmaceutics11090472).
- Multi-antigen and Pathogen Capabilities. One of the key features of our platform is its ability to carry multiple antigens at a time, thereby creating a multi-targeted vaccine. It also provides the opportunity to develop vaccines for protection against not only viral pathogens, but also bacterial and potentially parasitic and fungal pathogens.
- Therapeutic potential. We believe our platform may offer opportunities to develop non-infectious disease therapeutic products, for example being used as a carrier or vehicle to transport drugs to specific target locations.

BWV-401: Chlamydia vaccine program

We are developing a live attenuated, orally delivered chlamydia vaccine derived from a murine strain of chlamydia, *Chlamydia muridarum*, to protect individuals against chlamydia infection. By delivering this vaccine orally, BWV-401 may elicit transmucosal immunity and provide protection against chlamydia in the genital tract post-vaccination without altering the gut microbiota or the development of gut mucosal resident T cell responses to non-chlamydial infection. According to the CDC, there were about 1.6 million new cases of chlamydia reported in 2020 in the United States and globally, the WHO estimates about 129 million new cases each year. Additionally, given high estimations of asymptomatic cases and low availability of diagnostic testing in low- and middle-income countries, these annual estimates may be an underrepresentation. Currently, there is no vaccine available to prevent chlamydia infection, and the main treatment is through antibiotic regimens with the possibility of reinfection after antibiotics have treated the disease. If left undetected or untreated, Chlamydia represents a major cause of pelvic inflammatory disease and infertility in women. It is estimated that about 10 – 15% of women that experience untreated chlamydia develop pelvic inflammatory disease and face chronic pain or fertility problems later in life. Additionally, should women contract chlamydia during pregnancy or give birth with an active infection, newborns may develop eye infections or pneumonia resulting from the disease. We believe this vaccine candidate has the potential to protect individuals against this harmful disease and may eliminate the need for antibiotic prescriptions associated with treating chlamydia.

BWV-301: Norovirus-rotavirus vaccine program

We are developing a norovirus-rotavirus vaccine, BWV-301, to prevent gastroenteritis utilizing our S&P platform. Preclinical data from gnotobiotic pig studies have shown our vaccine can prevent severe gastroenteritis and reduces viral shedding. While rotavirus vaccines exist in the market, no norovirus vaccine is available to date. Our vaccine would protect people from two of the most globally prevalent viruses causing vomiting and diarrhea.

BWV-302: Norovirus-malaria vaccine program

Additionally, we are currently investigating a malaria vaccine, BWV-302, utilizing our norovirus S&P platform. The vaccine is designed to offer protection from both norovirus and malaria, infectious diseases that occur frequently together in geographic regions. The vaccine utilizes a protein identified on the surface of the plasmodium parasite being presented on the surface of the norovirus nanoparticle.

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, which closed during February 2022), 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

Our principal executive offices are located at 201 E. Fifth Street, Suite 1900, Cincinnati, OH 45202. Our telephone number is (513) 620-4101. Information about us is also available at our website at <http://www.bluewatervaccines.com>. The information on our website is not a part of, or incorporated in, this prospectus supplement.

THE OFFERING

Common stock offered by us:	Shares of our common stock having an aggregate offering price of up to \$3,900,000.
Shares of common stock to be outstanding after this offering⁽¹⁾	Up to 19,651,968 shares of common stock, assuming sales of 3,750,000 shares of common stock in this offering at an offering price of \$1.04 per share, which was the last reported sale price of our shares of common stock on Nasdaq on March 22, 2023. The actual number of shares of common stock issued will vary depending on the sales price under this offering at which shares may be sold from time to time during this offering.
Manner of offering	“At the market offering” as defined in Rule 415(a)(4) under the Securities Act that may be made from time to time through our sales agent, Wainwright. See “Plan of Distribution” on page S-13 of this prospectus supplement.
Use of Proceeds	We intend to use the net proceeds from this offering primarily for general corporate purposes and working capital, which includes, without limitation, ongoing pre-clinical and clinical work, the development of new vaccine candidates, investing in or acquiring companies that are synergistic with or complementary to our technologies, licensing activities related to our current and future vaccine candidates, the development of emerging technologies, investing in or acquiring companies that are developing emerging technologies, or the acquisition of other businesses. Pending these uses, we intend to invest the net proceeds from this offering in short-term, investment-grade interest-bearing securities such as money market funds, certificates of deposit, commercial paper and guaranteed obligations of the U.S. government. See “Use of Proceeds” on page S-10 of this prospectus supplement.
Risk Factors	Your investment in our securities involves substantial risks. You should consider the “Risk Factors” and the “Cautionary Note Regarding Forward-Looking Statements” included and incorporated by reference in this prospectus supplement and the accompanying prospectus, including the risk factors incorporated by reference herein from our filings with the SEC.
Nasdaq Capital Market symbol	“BWV”

(1) The number of shares of our common stock to be outstanding after this offering is based on 15,901,968 shares of common stock outstanding as of March 22, 2023 and excludes the following, all as of March 22, 2023:

- 1,469,102 shares of our common stock issuable upon the exercise of outstanding options with a weighted average exercise price of \$3.17 per share;
- 5,264,274 shares of our common stock issuable upon the exercise of outstanding warrants and preferred investment options (which are in the form of warrants) with a weighted average exercise price of \$2.66 per share; and
- 965,446 shares of our common stock reserved for future issuance under our equity incentive plan.

Unless otherwise indicated, all information contained in this prospectus supplement:

- assumes no exercise of the outstanding stock options described above; and
- assumes no exercise of the outstanding warrants described above.

RISK FACTORS

Investing in our securities is highly speculative and involves a high degree of risk. Before deciding whether to invest in our securities, you should carefully consider the risk factors we describe below, in the accompanying prospectus, in any related free writing prospectus that we may authorize to be provided to you or in any report incorporated by reference into this prospectus supplement, including our Annual Report on Form 10-K for the year ended December 31, 2022, or any Annual Report on Form 10-K, Quarterly Report on Form 10-Q or Current Reports on Form 8-K and in any other documents that are incorporated by reference into this prospectus supplement after the date of this prospectus supplement.

Risks Related to This Offering

Since we have broad discretion in how we use the proceeds from this offering, we may use the proceeds in ways with which you disagree.

We have not allocated specific amounts of the net proceeds from this offering for any specific purpose. Accordingly, our management will have broad discretion in applying the net proceeds of this offering. You will be relying on the judgment of our management with regard to the use of these net proceeds and you will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being used appropriately. It is possible that the net proceeds will be invested in a way that does not yield a favorable, or any, return for us. The failure of our management to use such funds effectively could have a material adverse effect on our business, financial condition, operating results and cash flow.

The common stock offered hereby will be sold in “at the market” offerings, and investors who buy shares at different times will likely pay different prices.

Investors who purchase shares in this offering at different times will likely pay different prices, and so may experience different outcomes in their investment results. We will have discretion, subject to market demand, to vary the timing, prices, and numbers of shares sold, and there is no maximum sales price. Pursuant to the At The Market Offering Agreement, our board of directors, or a duly authorized executive committee thereof, may authorize, from time to time, a minimum sales price per share of our common stock sold in this offering, which will limit the Company’s ability to make sales if the price goes below that minimum. Investors may experience a decline in the value of their shares as a result of share sales made at prices lower than the prices they paid.

You may experience immediate and substantial dilution as a result of this offering.

The offering price per share in this offering may exceed the net tangible book value per share of our common stock outstanding prior to this offering. Assuming that an aggregate of \$3,900,000 of shares of our common stock are sold at a price of \$1.04 per share, the last reported sale price of our common stock on Nasdaq on March 22, 2023, for aggregate net proceeds of approximately \$3.5 million after deducting sales agent commissions and estimated aggregate offering expenses payable by us, you will experience immediate increase of \$0.32 per share, representing the difference between our as adjusted net tangible book value per share as of December 31, 2022 after giving effect to this offering and the assumed offering price. However, the shares sold in this offering, if any, will be sold from time to time at various prices. Your interest may be diluted to the extent of the difference between the price per share you pay and the adjusted net tangible book value per share of our common stock after this offering. The exercise of outstanding stock options and warrants may also result in dilution of your investment. As of December 31, 2022, there were 1,392,654 shares of common stock issuable upon exercise of outstanding options with a weighted average exercise price of \$3.30 per share, 5,264,274 shares of common stock issuable upon exercise of outstanding warrants and preferred investment options (which are in the form of warrants) with a weighted average exercise price of \$2.66 per share, 646,640 shares of common stock issuable upon exercise of outstanding pre-funded warrants with an exercise price of \$0.001 per share, and 1,041,894 shares of our common stock reserved for future issuance under our equity incentive plan.

The actual number of shares we will issue and the total aggregate proceeds resulting from sales made under the At The Market Offering Agreement with Wainwright, at any one time or in total, is uncertain.

Subject to certain limitations in the At The Market Offering Agreement with Wainwright and compliance with applicable law, we have the discretion to deliver sales notices to Wainwright at any time throughout the term of the At The Market Offering Agreement. The number of shares that are sold by Wainwright after delivering a sales notice will fluctuate based on the market price of the common stock during the sales period and limits we set with Wainwright, and as such, it is not currently possible to predict the aggregate proceeds to be raised in connection with this offering or the number of shares that will ultimately be issued.

Raising additional capital may cause dilution to our existing stockholders and investors, restrict our operations or require us to relinquish rights to our product candidates on unfavorable terms to us.

We may seek additional capital through a variety of means, including through private and public equity offerings and debt financings, collaborations, strategic alliances and marketing, distribution or licensing arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, or through the issuance of shares under other types of contracts, or upon the exercise or conversion of outstanding options, warrants, convertible debt or other similar securities, the ownership interests of our stockholders will be diluted, and the terms of such financings may include liquidation or other preferences, anti-dilution rights, conversion and exercise price adjustments and other provisions that adversely affect the rights of our stockholders, including rights, preferences and privileges that are senior to those of our holders of common stock in terms of the payment of dividends or in the event of a liquidation. In addition, debt financing, if available, could include covenants limiting or restricting our ability to take certain actions, such as incurring additional debt, making capital expenditures, entering into licensing arrangements, or declaring dividends and may require us to grant security interests in our assets. If we raise additional funds through collaborations, strategic alliances, or marketing, distribution or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, product or product candidates or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings when needed, we may need to curtail or cease our operations.

An active trading market for our common stock may not develop or be sustained.

Prior to the commencement of trading of our common stock on February 18, 2022, no public market for our common stock existed. Although our common stock is listed on Nasdaq, an active trading market for our common stock may not develop, or if developed, be sustained. The lack of an active market may impair your ability to sell your shares at the time you wish to sell them or at a price that you consider reasonable. The lack of an active market may also reduce the fair value of your shares.

Further, an inactive market may also impair our ability to raise capital by selling shares of our common stock or to enter into strategic partnerships or acquire companies or products by using our shares of common stock as consideration.

We do not anticipate paying any cash dividends on our common stock in the foreseeable future and, as such, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future.

We have never declared or paid cash dividends on our common stock. We do not anticipate paying any cash dividends on our common stock in the foreseeable future. We currently intend to retain all available funds and any future earnings to fund the development and growth of our business. In addition, any future loan arrangements we enter into may contain terms prohibiting or limiting the amount of dividends that may be declared or paid on our common stock. As a result, capital appreciation, if any, of our common stock, which may never occur, will be your sole source of gain for the foreseeable future.

Sales of a significant number of shares of our common stock in the public markets, or the perception that such sales could occur, could depress the market price of our common stock.

Sales of a significant number of shares of our common stock in the public markets, or the perception that such sales could occur as a result of our utilization of a universal shelf registration statement, our At The Market Offering Agreement with Wainwright or otherwise, could depress the market price of our common stock and impair our ability to raise capital through the sale of additional equity securities. We cannot predict the effect that future sales of our common stock or the market perception that we are permitted to sell a significant number of our securities would have on the market price of our common stock.

Resales of our common stock in the public market during this offering by our stockholders may cause the market price of our common stock to fall.

We may issue shares of common stock from time to time in connection with this offering. The issuance from time to time of these new shares of common stock, or our ability to issue new shares of common stock in this offering, could result in resales of shares our common stock by our current stockholders concerned about the potential dilution of their holdings. In turn, these resales could have the effect of depressing the market price for our common stock.

There can be no assurance that we will be able to comply with the continued listing standards of Nasdaq.

Our continued eligibility for listing on Nasdaq depends on our ability to comply with Nasdaq's continued listing requirements, including but not limited to our common stock maintaining a minimum bid price of \$1.00 per share. However, the price of our stock has been volatile, and we cannot assure you that we will be able to maintain the minimum price requirements for continued listing on Nasdaq. If Nasdaq delists the common stock from trading on its exchange for failure to meet the listing standards, we and our stockholders could face significant material adverse consequences including:

- a limited availability of market quotations for our securities;
- a determination that our common stock is a "penny stock," which will require brokers trading in our common stock to adhere to more stringent rules, possibly resulting in a reduced level of trading activity in the secondary trading market for our common stock;
- a limited amount of analyst coverage; and
- a decreased ability to issue additional securities or obtain additional financing in the future.

The National Securities Markets Improvement Act of 1996, which is a federal statute, prevents or preempts the states from regulating the sale of certain securities, which are referred to as "covered securities." Because our common stock is currently listed on Nasdaq, such shares are covered securities. If we were no longer listed on Nasdaq, our securities would not be covered securities, and we would be subject to regulation in each state in which we offers our securities.

The market price of our common stock has been extremely volatile and may continue to be highly volatile due to numerous circumstances beyond our control, and stockholders could lose all or part of their investment.

The market price of our common stock may be highly volatile. Our stock price could be subject to wide fluctuations in response to a variety of factors, which include:

- whether we achieve our anticipated corporate objectives;
- actual or anticipated fluctuations in our financial condition and operating results;
- changes in financial or operational estimates or projections;
- the development status of our product candidates and when our products receive regulatory approval;
- our execution of our sales and marketing, manufacturing and other aspects of our business plan;
- performance of third parties on whom we rely to manufacture our products, product components and product candidates, including their ability to comply with regulatory requirements;
- the results of our clinical studies and clinical trials;
- results of operations that vary from those of our competitors and the expectations of securities analysts and investors;
- changes in expectations as to our future financial performance, including financial estimates by securities analysts and investors;
- our announcement of significant contracts, acquisitions or capital commitments;
- announcements by our competitors of competing products or other initiatives;
- announcements by third parties of significant claims or proceedings against us;
- regulatory and reimbursement developments in the United States and abroad;
- future sales of our common stock;
- product liability claims;
- healthcare reform measures in the United States;
- additions or departures of key personnel; and
- general economic or political conditions in the United States or elsewhere.

In addition, the stock market in general, and the stock of medical biotechnology companies like ours, in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of the issuer. For example, on March 15, 2022 and November 9, 2022, the closing price of our common stock on Nasdaq was \$67.90 and \$0.92, respectively, and daily trading volume on these days was approximately 12,500 and 236,500 shares, respectively. Additionally, our intraday trading prices have experienced extreme fluctuation. On April 7, 2022, the difference between our high and low trading price was \$52.10. These broad market fluctuations may adversely affect the trading price of our common stock. In particular, a proportion of our common stock may be traded by short sellers which may put pressure on the supply and demand for our common stock, further influencing volatility in its market price. Additionally, these and other external factors have caused and may continue to cause the market price and demand for our common stock to fluctuate, which may limit or prevent investors from readily selling their shares of common stock and may otherwise negatively affect the liquidity of our common stock. While the market price of our common stock may respond to developments regarding operating performance and prospects, expansion plans, developments regarding our participation in direct contracting, the impacts of COVID-19, and developments regarding our industry, we believe that the extreme volatility we experienced in recent periods reflects market and trading dynamics unrelated to our underlying business, our actual or expected operating performance, our financial condition, or macro or industry fundamentals, and we do not know if these dynamics will continue or how long they will last. Under these circumstances, we caution you against investing in our common stock, unless you are prepared to incur the risk of losing all or a substantial portion of your investment.

USE OF PROCEEDS

We may issue and sell shares of common stock having aggregate sales proceeds of up to \$3,900,000 from time to time, before deducting sales agent commissions and expenses. The amount of proceeds from this offering will depend upon the number of shares of our common stock sold and the market price at which they are sold. There can be no assurance that we will be able to sell any shares under or fully utilize the At The Market Offering Agreement with Wainwright.

We currently intend to use the net proceeds to us from this offering primarily for general corporate purposes and working capital, which includes, without limitation, ongoing pre-clinical and clinical work, the development of new vaccine candidates, investing in or acquiring companies that are synergistic with or complementary to our technologies, licensing activities related to our current and future vaccine candidates, the development of emerging technologies, investing in or acquiring companies that are developing emerging technologies, or the acquisition of other businesses. The amounts and timing of these expenditures will depend on numerous factors, including the development of our current business initiatives. Accordingly, we will have broad discretion over the uses of the net proceeds from this offering and investors will be relying on the judgment of our management regarding the application of the net proceeds from this offering. Pending these uses, we intend to invest the net proceeds from this offering in short-term, investment-grade interest-bearing securities such as money market funds, certificates of deposit, commercial paper and guaranteed obligations of the U.S. government.

DESCRIPTION OF SECURITIES WE ARE OFFERING

General

The following description is not complete and may not contain all the information you should consider before investing in our common stock. For a more detailed description of these securities, you should read the applicable provisions of Delaware law and our amended and restated certificate of incorporation (“Amended and Restated Certificate of Incorporation”) and our amended and restated bylaws (“Amended and Restated Bylaws”).

The total number of shares of capital stock we are authorized to issue is 260,000,000 shares, of which (a) 250,000,000 are common stock and (b) 10,000,000 are preferred stock.

Common Stock

As of March 22, 2023, there were 16,371,597 shares of common stock issued (including treasury shares acquired by the Company through repurchases) and 15,901,968 shares of common stock outstanding, held of record by approximately 13 stockholders. Subject to preferential rights with respect to any outstanding preferred stock, all outstanding shares of common stock are of the same class and have equal rights and attributes.

Under the terms of our Amended and Restated Certificate of Incorporation, holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders, including the election of directors, and do not have cumulative voting rights. The holders of outstanding shares of common stock are entitled to receive dividends out of assets or funds legally available for the payment of dividends of such times and in such amounts as our board of directors from time to time may determine. Our common stock is not entitled to pre-emptive rights and is not subject to conversion or redemption. Upon liquidation, dissolution or winding up of the Company, the assets legally available for distribution to stockholders are distributable ratably among the holders of our common stock after payment of liquidation preferences, if any, on any outstanding payment of other claims of creditors. The rights, preferences and privileges of holders of common stock are subject to and may be adversely affected by the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future.

Anti-Takeover Effects of Delaware Law and Our Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws

Some provisions of Delaware law, our Amended and Restated Certificate of Incorporation and our Amended and Restated Bylaws could prohibit or delay mergers or other takeover or change in control attempts and, accordingly, may discourage attempts to acquire us even though such a transaction may offer our stockholders the opportunity to sell their stock at a price above the prevailing market price.

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 (the “DGCL”), 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.

Choice of Forum

Our Amended and Restated Certificate of Incorporation provides that, unless we consent in writing to an alternative forum, to the fullest extent permitted by law, that derivative actions brought in our name, actions against directors, officers and employees for breach of fiduciary duty and certain other actions may be brought only in the Court of Chancery in the State of Delaware, except any action (A) as to which the Court of Chancery in the State of Delaware determines that there is an indispensable party not subject to the jurisdiction of the Court of Chancery (and the indispensable party does not consent to the personal jurisdiction of the Court of Chancery within ten days following such determination), (B) which is vested in the exclusive jurisdiction of a court or forum other than the Court of Chancery or (C) for which the Court of Chancery does not have subject matter jurisdiction. If an action is brought outside of Delaware, the stockholder bringing the suit will be deemed to have consented to service of process on such stockholder’s counsel. Although we believe this provision benefits us by providing increased consistency in the application of 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.

Our Amended and Restated Certificate of Incorporation provides that the exclusive forum provision will be applicable to the fullest extent permitted by applicable law, subject to certain exceptions. Section 27 of the Exchange Act of 1934, as amended (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. As a result, the exclusive forum provision will not apply to suits brought to enforce any duty or liability created by the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction. In addition, our Amended and Restated Certificate of Incorporation provides that, unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States of America shall, to the fullest extent permitted by law, be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act or the rules and regulations promulgated thereunder. We note, however, that there is uncertainty as to whether a court would enforce this provision and that investors cannot waive compliance with the federal securities laws and the rules and regulations thereunder. Section 22 of the Securities Act creates concurrent jurisdiction for state and federal courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder.

As permitted by Section 102 of the DGCL, we have adopted provisions in our Amended and Restated Certificate of Incorporation and our Amended and Restated Bylaws that limit or eliminate the personal liability of our directors for a breach of their fiduciary duty of care as a director. The duty of care generally requires that, when acting on behalf of the corporation, directors exercise an informed business judgment based on all material information reasonably available to them. Consequently, a director will not be personally liable to us or our stockholders for monetary damages for breach of fiduciary duty as a director, except for liability for:

- any breach of the director’s duty of loyalty to us or our stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- any act related to unlawful stock repurchases, redemptions or other distributions or payment of dividends; or
- any transaction from which the director derived an improper personal benefit.

These limitations of liability do not affect the availability of equitable remedies such as injunctive relief or rescission. Our Amended and Restated Certificate of Incorporation also authorizes us to indemnify our officers, directors and other agents to the fullest extent permitted under Delaware law.

As permitted by Section 145 of the DGCL, our Amended and Restated Bylaws provide that:

- we may indemnify our directors, officers and employees to the fullest extent permitted by the DGCL, subject to limited exceptions;
- we may advance expenses to our directors, officers and employees in connection with a legal proceeding to the fullest extent permitted by the DGCL, subject to limited exceptions; and
- the rights provided in our bylaws are not exclusive.

Our Amended and Restated Certificate of Incorporation and our Amended and Restated Bylaws provide for the indemnification provisions described above and elsewhere herein. We have entered or will enter into, and intend to continue to enter into, separate indemnification agreements with our directors and officers that may be broader than the specific indemnification provisions contained in the DGCL. These indemnification agreements generally require us, among other things, to indemnify our officers and directors against certain liabilities that may arise by reason of their status or service as directors or officers, other than liabilities arising from willful misconduct. These indemnification agreements also generally require us to advance any expenses incurred by the directors or officers as a result of any proceeding against them as to which they could be indemnified. These indemnification provisions and the indemnification agreements may be sufficiently broad to permit indemnification of our officers and directors for liabilities, including reimbursement of expenses incurred, arising under the Securities Act.

We have purchased and currently intend to maintain insurance on behalf of each and every person who is or was a director or officer of the Company against any loss arising from any claim asserted against him or her and incurred by him or her in any such capacity, subject to certain exclusions.

Transfer Agent and Registrar

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

Listing

Our common stock is traded on Nasdaq under the trading symbol “BWV.”

PLAN OF DISTRIBUTION

We have entered into an At The Market Offering Agreement with Wainwright, pursuant to which we may issue and sell from time to time shares of our common stock having an aggregate offering price of up to \$3,900,000 through Wainwright as our sales agent. Sales of the shares of common stock, if any, will be made by any method permitted by law deemed to be an “at the market offering” as defined in Rule 415 promulgated under the Securities Act. If we and Wainwright agree on any method of distribution other than sales of shares on or through Nasdaq or another existing trading market in the United States at market prices, we will file a further prospectus supplement providing all information about such offering as required by Rule 424(b) under the Securities Act.

Wainwright will offer shares of our common stock at prevailing market prices subject to the terms and conditions of the At The Market Offering Agreement as agreed upon by us and Wainwright. We will designate the number of shares which we desire to sell, the time period during which sales are requested to be made, any limitation on the number of shares that may be sold in one day and any minimum price below which sales may not be made. Subject to the terms and conditions of the At The Market Offering Agreement, Wainwright will use its commercially reasonable efforts consistent with its normal trading and sales practices to sell on our behalf all of the shares requested to be sold by us. We or Wainwright may suspend the offering of the shares of common stock being made through Wainwright under the At The Market Offering Agreement upon proper notice to the other party.

Settlement for sales of common stock will occur on the second trading day or such shorter settlement cycle as may be in effect under Exchange Act Rule 15c6-1 from time to time, following the date on which any sales are made, or on some other date that is agreed upon by us and Wainwright in connection with a particular transaction, in return for payment of the net proceeds to us. Sales of our shares of our common stock as contemplated in this prospectus supplement and the accompanying prospectus will be settled through the facilities of The Depository Trust Company or by such other means as we and Wainwright may agree upon. There is no arrangement for funds to be received in an escrow, trust or similar arrangement.

We will pay Wainwright in cash, upon each sale of shares of our common stock pursuant to the At The Market Offering Agreement, a commission of 3.0% of the gross proceeds from each sale of shares. Because there is no minimum offering amount required as a condition to this offering, the actual total public offering amount, commissions and proceeds to us, if any, are not determinable at this time. Pursuant to the terms of the At The Market Offering Agreement, we agreed to reimburse Wainwright for the documented fees and costs of its legal counsel reasonably incurred in connection with entering into the transactions contemplated by the At The Market Offering Agreement in an amount not to exceed \$50,000 in the aggregate, in addition to up to a maximum of \$2,500 per due diligence update session conducted in connection with each such date the Company files its Quarterly Reports on Form 10-Q and \$5,000 per due diligence session conducted in connection with each such date the Company files its Annual Report on Form 10-K, for Wainwright’s counsel’s fees and any incidental expenses to be reimbursed by us. We will report at least quarterly the number of shares of our common stock sold through Wainwright under the At The Market Offering Agreement, the net proceeds to us and the compensation paid by us to Wainwright in connection with the sales of shares of our common stock.

In connection with the sales of shares of our common stock on our behalf, Wainwright will be deemed to be an “underwriter” within the meaning of the Securities Act, and the compensation paid to Wainwright will be deemed to be underwriting commissions or discounts. We have agreed in the At The Market Offering Agreement to provide indemnification and contribution to Wainwright against certain liabilities, including liabilities under the Securities Act.

The offering of our shares of our common stock pursuant to the At The Market Offering Agreement will terminate upon the earlier of the sale of all of the shares of our common stock provided for in this prospectus supplement or termination of the At The Market Offering Agreement as permitted therein.

To the extent required by Regulation M, Wainwright will not engage in any market making activities involving our common stock while the offering is ongoing under this prospectus supplement.

Wainwright and certain of its affiliates have engaged in, and may in the future engage in, investment banking and other commercial dealings in the ordinary course of business with us or our affiliates. Wainwright and such affiliates have received, or may in the future receive, customary fees and expenses for these transactions. In addition, in the ordinary course of its various business activities, Wainwright and its affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (which may include bank loans) for their own account and for the accounts of their customers. Such investments and securities activities may involve securities and/or instruments of ours or our affiliates. Wainwright or its affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

Wainwright acted as placement agent in our private placements of securities in April 2022 and August 2022 and received cash and warrant compensation.

This prospectus supplement and the accompanying prospectus may be made available in electronic format on a website maintained by Wainwright, and Wainwright may distribute this prospectus supplement and the accompanying prospectus electronically.

The foregoing does not purport to be a complete statement of the terms and conditions of the At The Market Offering Agreement. A copy of the At The Market Offering Agreement is included as an exhibit to our Current Report on Form 8-K that will be filed with the SEC and incorporated by reference into the registration statement of which this prospectus supplement and the accompanying prospectus form a part. See “Where You Can Find More Information” and “Incorporation of Documents By Reference”.

Trading Market

Our Common Stock is listed on Nasdaq under the symbol “BWV.”

EXPENSES

The following table sets forth the aggregate expenses to be paid by us in connection with this offering. All amounts shown, except the FINRA filing fee, are estimated.

FINRA filing fee	\$ 15,500
Legal fees and expenses	\$ 200,000
Accounting fees and expenses	\$ 30,000
Miscellaneous	\$ 11,020
Total	<u>\$ 256,520</u>

LEGAL MATTERS

The validity of the issuance of the common stock offered by this prospectus supplement will be passed upon for us by Ellenoff Grossman & Schole LLP, New York, New York. Wainwright is being represented in connection with this offering by Haynes and Boone, LLP, New York, New York.

EXPERTS

The financial statements as of and for the years ended December 31, 2022 and 2021, included in our Annual Report on Form 10-K for the year ended December 31, 2022, have been audited by Mayer Hoffman McCann P.C., independent registered public accounting firm, as set forth in their report, and have been incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus supplement is part of the Registration Statement on Form S-3 we filed with the SEC under the Securities Act and does not contain all the information set forth in the Registration Statement. Whenever a reference is made in this prospectus supplement to any of our contracts, agreements or other documents, the reference may not be complete, and you should refer to the exhibits that are a part of the Registration Statement or the exhibits to the reports or other documents incorporated by reference into this prospectus supplement and the accompanying prospectus for a copy of such contract, agreement or other document.

Because we are subject to the information and reporting requirements of the Exchange Act, we file annual, quarter and periodic reports, proxy statements and other information with the SEC using the SEC's EDGAR system. The SEC maintains a web site that contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC. The address of such site is <http://www.sec.gov>.

INCORPORATION OF DOCUMENTS BY REFERENCE

We are “incorporating by reference” in this prospectus supplement certain documents we file with the SEC, which means that we can disclose important information to you by referring you to those documents. The information in the documents incorporated by reference is considered to be part of this prospectus supplement and the accompanying prospectus. Statements contained in documents that we file with the SEC and that are incorporated by reference in this prospectus supplement and the accompanying prospectus will automatically update and supersede information contained in this prospectus supplement and the accompanying prospectus, including information in previously filed documents or reports that have been incorporated by reference in this prospectus supplement and the accompanying prospectus, to the extent the new information differs from or is inconsistent with the old information. We have filed or may file the following documents with the SEC, and they are incorporated herein by reference as of their respective dates of filing.

1. Our Annual Report on [Form 10-K](#) for the year ended December 31, 2022, filed with the SEC on March 9, 2023;
2. Our Current Reports on Form 8-K filed with the SEC on [January 17, 2023](#) and [February 16, 2023](#); and
3. The description of our common stock contained in our registration statement on [Form 8-A](#), filed on February 17, 2022 pursuant to Section 12(b) of the Exchange Act, which incorporates by reference the description of the shares of our common stock contained in the section entitled “Description of Securities” in our registration statement on [Form S-1](#) (File No. 333-249690), as updated by the description of common stock included in [Exhibit 4.2](#) to our Annual Report on Form 10-K for the year ended December 31, 2021, filed with the SEC on March 31, 2022, together with any subsequent amendment or report for the purpose of updating such description.

All documents that we filed with the SEC pursuant to Sections 13(a), 13(c), 14, and 15(d) of the Exchange Act subsequent to the date of this prospectus supplement and prior to the filing of a post-effective amendment to the Registration Statement that indicates that all securities offered under this prospectus supplement and the accompanying prospectus have been sold, or that deregisters all securities then remaining unsold, will be deemed to be incorporated in this prospectus supplement and the accompanying prospectus by reference and to be a part hereof from the date of filing of such documents.

Any statement contained in a document incorporated or deemed to be incorporated by reference in this prospectus supplement and the accompanying prospectus shall be deemed modified, superseded or replaced for purposes of this prospectus supplement to the extent that a statement contained in this prospectus supplement and the accompanying prospectus, or in any subsequently filed document that also is deemed to be incorporated by reference in this prospectus supplement and the accompanying prospectus, modifies, supersedes or replaces such statement. Any statement so modified, superseded or replaced shall not be deemed, except as so modified, superseded or replaced, to constitute a part of this prospectus supplement. None of the information that we disclose under Items 2.02 or 7.01 of any Current Report on Form 8-K or any corresponding information, either furnished under Item 9.01 or included as an exhibit therein, that we may from time to time furnish to the SEC will be incorporated by reference into, or otherwise included in, this prospectus supplement or the accompanying prospectus, except as otherwise expressly set forth in the relevant document. Subject to the foregoing, all information appearing in this prospectus supplement and the accompanying prospectus is qualified in its entirety by the information appearing in the documents incorporated by reference.

You may request, orally or in writing, a copy of these documents, which will be provided to you at no cost (other than exhibits, unless such exhibits are specifically incorporated by reference), by contacting the Company at Blue Water Vaccines Inc., 201 E. Fifth Street, Suite 1900, Cincinnati, OH 45202, Attention: Corporate Secretary. Our telephone number is (513) 620-4101. Information about us is also available at our website at <http://www.bluewatervaccines.com>. However, the information in our website is not a part of this prospectus supplement or the accompanying prospectus and is not incorporated by reference.



\$100,000,000

COMMON STOCK
PREFERRED STOCK
PURCHASE CONTRACTS
WARRANTS
SUBSCRIPTION RIGHTS
DEPOSITARY SHARES
DEBT SECURITIES
UNITS

- common stock;
- preferred stock;
- purchase contracts;
- warrants to purchase our securities;
- subscription rights to purchase any of the foregoing securities;
- depositary shares;
- secured or unsecured debt securities consisting of notes, debentures or other evidences of indebtedness which may be senior debt securities, senior subordinated debt securities or subordinated debt securities, each of which may be convertible into equity securities; or
- units comprised of, or other combinations of, the foregoing securities.

We may offer and sell these securities separately or together, in one or more series or classes and in amounts, at prices and on terms described in one or more offerings. We may offer securities through underwriting syndicates managed or co-managed by one or more underwriters or dealers, through agents or directly to purchasers. The prospectus supplement for each offering of securities will describe in detail the plan of distribution for that offering. For general information about the distribution of securities offered, please see “Plan of Distribution” in this prospectus.

Each time our securities are offered, we will provide a prospectus supplement containing more specific information about the particular offering and attach it to this prospectus. The prospectus supplements may also add, update or change information contained in this prospectus. **This prospectus may not be used to offer or sell securities without a prospectus supplement which includes a description of the method and terms of this offering.**

Our common stock is listed on the Nasdaq Capital Market under the symbol “BWV.” The last reported sale price of our common stock on the Nasdaq Capital Market on March 6, 2023 was \$1.16 per share. The aggregate market value of our outstanding common stock held by non-affiliates is \$11.7 million based on 15,911,868 shares of outstanding common stock on March 6, 2023. During the 12 calendar month period that ends on, and includes, the date of this prospectus, we have not offered and sold any of our securities pursuant to General Instruction I.B.6 of Form S-3.

If we decide to seek a listing of any preferred stock, purchase contracts, warrants, subscriptions rights, depositary shares, debt securities or units offered by this prospectus, the related prospectus supplement will disclose the exchange or market on which the securities will be listed, if any, or where we have made an application for listing, if any.

Investing in our securities is highly speculative and involves a significant degree of risks. See “Risk Factors” beginning on page 5 and the risk factors in our most recent Annual Report on Form 10-K, which is incorporated by reference herein, as well as in any other recently filed quarterly or current reports and, if any, in the relevant prospectus supplement. We urge you to carefully read this prospectus and the accompanying prospectus supplement, together with the documents we incorporate by reference, describing the terms of these securities before investing.

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

The date of this Prospectus is March 16, 2023

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or SEC, utilizing a “shelf” registration process. Under this shelf registration process, we may offer and sell, either individually or in combination, in one or more offerings, any of the securities described in this prospectus, for total gross proceeds of up to \$100,000,000. This prospectus provides you with a general description of the securities we may offer. Each time we offer securities under this prospectus, we will provide a prospectus supplement to this prospectus that will contain more specific information about the terms of that offering. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. The prospectus supplement and any related free writing prospectus that we may authorize to be provided to you may also add, update or change any of the information contained in this prospectus or in the documents that we have incorporated by reference into this prospectus.

We urge you to read carefully this prospectus, any applicable prospectus supplement and any free writing prospectuses we have authorized for use in connection with a specific offering, together with the information incorporated herein by reference as described under the heading “Incorporation of Documents by Reference,” before investing in any of the securities being offered. You should rely only on the information contained in, or incorporated by reference into, this prospectus and any applicable prospectus supplement, along with the information contained in any free writing prospectuses we have authorized for use in connection with a specific offering. We have not authorized anyone to provide you with different or additional information. This prospectus is an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so.

The information appearing in this prospectus, any applicable prospectus supplement or any related free writing prospectus is accurate only as of the date on the front of the document and any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus, any applicable prospectus supplement or any related free writing prospectus, or any sale of a security.

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. All of the summaries 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 section entitled “Where You Can Find Additional Information.”

This prospectus contains, or incorporates by reference, trademarks, tradenames, service marks and service names of Blue Water Vaccines Inc.

CAUTIONARY NOTE REGARDING FORWARD LOOKING STATEMENTS

This prospectus and any accompanying prospectus supplement and the documents incorporated by reference herein may contain forward looking statements that involve risks and uncertainties. All statements other than statements of historical fact contained in this prospectus and any accompanying prospectus supplement and the documents incorporated by reference herein, including statements regarding future events, our future financial performance, business strategy, and plans and objectives of management for future operations, are forward-looking statements. In some cases, you can identify forward-looking statements by the words “may,” “might,” “will,” “could,” “would,” “should,” “expect,” “intend,” “plan,” “objective,” “anticipate,” “believe,” “estimate,” “predict,” “project,” “potential,” “continue” and “ongoing,” or the negative of these terms, or other comparable terminology intended to identify statements about the future, although not all forward-looking statements contain these words. These statements relate to future events or our future financial performance or condition and involve known and unknown risks, uncertainties and other factors that could cause our actual results, levels of activity, performance or achievement to differ materially from those expressed or implied by these forward-looking statements. These forward-looking statements include, but are not limited to, statements about:

- our projected financial position and estimated cash burn rate;
- our estimates regarding expenses, future revenues and capital requirements;
- our ability to continue as a going concern;
- our need to raise substantial additional capital to fund our operation;
- the success, cost and timing of our clinical trials;
- our dependence on third parties in the conduct of our clinical trials;
- our ability to obtain the necessary regulatory approvals to market and commercialize our product candidates;
- the ultimate impact of the ongoing COVID-19 pandemic, or any other health epidemic, on our business, our clinical trials, our research programs, healthcare systems or the global economy as a whole;
- the potential that results of pre-clinical and clinical trials indicate our current product candidates or any future product candidates we may seek to develop are unsafe or ineffective;
- the results of market research conducted by us or others;
- our ability to obtain and maintain intellectual property protection for our current product candidates;
- our ability to protect our intellectual property rights and the potential for us to incur substantial costs from lawsuits to enforce or protect our intellectual property rights;
- the possibility that a third party may claim we or our third-party licensors have infringed, misappropriated or otherwise violated their intellectual property rights and that we may incur substantial costs and be required to devote substantial time defending against claims against us;

- our reliance on third parties;
- the success of competing therapies and products that are or become available;
- our ability to expand our organization to accommodate potential growth and our ability to retain and attract key personnel;
- the potential for us to incur substantial costs resulting from product liability lawsuits against us and the potential for these product liability lawsuits to cause us to limit our commercialization of our product candidates;
- market acceptance of our product candidates, the size and growth of the potential markets for our current product candidates and any future product candidates we may seek to develop, and our ability to serve those markets; and
- the successful development of our commercialization capabilities, including sales and marketing capabilities.

These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including those described in “Risk Factors.” Moreover, we operate in a highly regulated, very competitive and rapidly changing environment. New risks emerge from time to time. It is not possible for our management to predict all risks, 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 we may make. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this prospectus may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements.

We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our financial condition, results of operations, business strategy, short term and long term business operations, and financial needs. These forward-looking statements are subject to certain risks and uncertainties that could cause our actual results to differ materially from those reflected in the forward looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those discussed in this prospectus and any accompanying prospectus or prospectus supplement, and in particular, the risks discussed below and under the heading “Risk Factors” and those discussed in other documents we file with the SEC, which are incorporated by reference herein. The following discussion should be read in conjunction with the financial statements for the fiscal years ended December 31, 2022 and 2021 and notes incorporated by reference herein. We undertake no obligation to revise or publicly release the results of any revision to these forward-looking statements, except as required by law. In light of these significant risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this prospectus and any accompanying prospectus or prospectus supplement may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statement.

You should not place undue reliance on any forward-looking statement, each of which applies only as of the date of this prospectus, or any accompanying prospectus or prospectus supplement. Except as required by law, we undertake no obligation to update or revise publicly any of the forward-looking statements after the date of this prospectus to conform our statements to actual results or changed expectations. Any forward-looking statement you read in this prospectus, any accompanying prospectus, or any prospectus supplement or any document incorporated by reference reflects our current views with respect to future events and is subject to these and other risks, uncertainties and assumptions relating to our operations, operating results, growth strategy and liquidity. You should not place undue reliance on these forward-looking statements because such statements speak only as to the date when made. We assume no obligation to publicly update or revise these forward-looking statements for any reason, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future, except as otherwise required by applicable law. You are advised, however, to consult any further disclosures we make on related subjects in our reports on Forms 10-Q, 8-K and 10-K filed with the SEC. You should understand that it is not possible to predict or identify all risk factors. Consequently, you should not consider any such list to be a complete set of all potential risks or uncertainties.

PROSPECTUS SUMMARY

This summary highlights selected information contained elsewhere in this prospectus. This summary does not contain all the information that you should consider before investing in our Company. You should carefully read the entire prospectus, including all documents incorporated by reference herein. In particular, attention should be directed to our “Risk Factors,” “Information With Respect to the Company,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and the financial statements and related notes thereto contained herein or otherwise incorporated by reference hereto, before making an investment decision.

As used herein, and any amendment or supplement hereto, unless otherwise indicated, “we,” “us,” “our,” the “Company,” “Blue Water Vaccines,” “BWV” or similar terminology means Blue Water Vaccines Inc.

Our Company

We are a biotechnology company focused on the research and development of transformational vaccines to prevent infectious diseases worldwide. We hold exclusive, global rights to novel technology licensed from renowned research institutions around the world, including St. Jude Children’s Research Hospital, the University of Oxford, Cincinnati Children’s Hospital Medical Center, and the University of Texas Health at San Antonio. We believe that our pipeline and vaccine platform are synergistic for developing next generation preventive vaccines to improve both health outcomes and quality of life globally.

We seek to develop vaccines that provide long-lasting immunity to harmful viral and bacterial pathogens that cause infections in patient populations with high unmet needs. Our most advanced vaccine candidate is a live-attenuated, intranasally delivered, serotype independent *Streptococcus pneumoniae* vaccine to prevent middle ear infections, also known as acute otitis media (AOM), and pneumococcal pneumonia. AOM is a significant burden globally, particularly in young children, and pneumococcal pneumonia primarily impacts the elderly population. Additionally, we believe that this attenuated bacterium can serve as a platform to protect against other infectious agents that cause acute otitis media, such as non-typeable *Haemophilus influenzae* and *Moraxella catarrhalis*, by anchoring antigens from these pathogens on the surface of BWV-201, our attenuated *Streptococcus pneumoniae* bacterial vaccine. We hold a global, exclusive license to this technology, which was generated from the laboratory of Jason Rosch, Ph.D., of St. Jude Children’s Research Hospital. Our influenza programs are based on technology developed by Sunetra Gupta, Ph.D. at the University of Oxford, for which we hold a global, exclusive license for use of epitopes of limited variability, ELVs, to develop novel influenza vaccine candidates. Identified through a proprietary computational research and discovery process, we believe a vaccine formulated with these epitopes from different influenza strains will produce a viable universal influenza vaccine candidate. We are exploring the development of these influenza ELVs utilizing our norovirus shell and protrusion (S&P) nanoparticle vaccine platform, licensed from Cincinnati Children’s Hospital Medical Center, or CHMC. We are also utilizing this platform to develop a vaccine for the prevention of gastroenteritis caused by norovirus or rotavirus, as well as novel vaccines for malaria and monkeypox. The final candidate in our vaccine pipeline is a live-attenuated, orally delivered vaccine to prevent Chlamydia, for which we have a global, exclusive license to this technology originated from the University of Texas Health at San Antonio. We leverage the expertise of each of our collaborators to pursue the discovery and development of vaccines for these diseases, each of which represent high unmet needs globally.

In addition, we have expertise in identifying business development opportunities for our platform vaccines technologies and portfolio. This allows for both internal pipeline expansion and the ability to generate non-dilutive revenue from potential licensing partners to utilize our discovery engine vaccine platform. There is potential for adjunctive or next generation therapeutic exploration to enhance current standard of care options.

Vaccination has been used as an effective method of protecting individuals against harmful diseases by utilizing the body’s natural defense system to develop resistance or immunity to infections (World Health Organization, <https://www.who.int/news-room/q-a-detail/herd-immunity-lockdowns-and-covid-19>). The body’s immune system naturally creates antibodies and cell-mediated immunity to defend against foreign pathogens. Vaccines introduce or present these foreign pathogens, prompting the body’s immune system produce a response protective against the pathogen without exposing the body to the relevant lethal or harmful infection (World Health Organization, <https://www.who.int/news-room/q-a-detail/herd-immunity-lockdowns-and-covid-19>). While vaccines are generally able to provide resistance against disease, many infectious diseases can evolve or mutate leading to shortcomings of traditional vaccines, such as yearly reformulations. We believe our vaccine candidates can provide an alternative to the current standards of care by harnessing durable and long-lived immune response to specific or multiple antigens.

The global vaccine market has recently experienced significant growth caused by rising awareness of the importance of immunization and vaccination benefits in emerging markets as well as by projects to fuel further global market expansion. For instance, The World Health Organization (WHO) has undertaken initiatives to increase immunization awareness through its Global Vaccine Action Plan and Global Immunization Vision and Strategy.

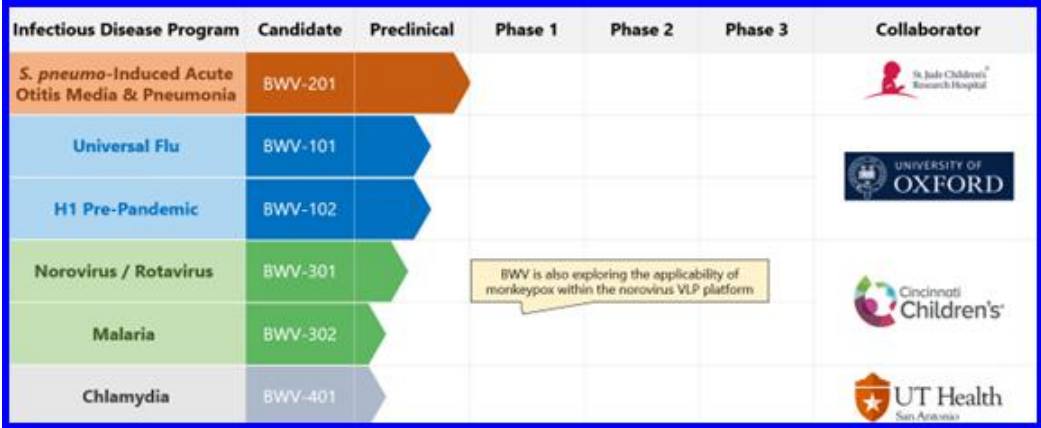
As such, market research professionals project the global vaccine market size to reach \$73.78 billion by 2028, representing a CAGR of 7.3% over the forecast period, driven by rising prevalence of infectious diseases, increasing government funding for vaccine production and growing emphasis on becoming immunized.

This market acceleration has been coupled with various strategic transactions in the sector, including consolidations and mergers and acquisitions in recent years. Major market participants have strategically acquired start-ups and mid-sized companies to broaden their products portfolios and service offerings. For instance, in February 2019, Bharat Biotech acquired Chiron Behring Vaccines, one of the leading manufacturers of rabies vaccines across the globe. Additionally, in October 2018, Emergent BioSolutions, a multinational specialty biopharmaceutical company, acquired PaxVax for \$270 million, and in July 2017 Sanofi acquired Protein Sciences for \$650 million. In the pneumococcal disease market specifically, for which we are targeting for our *Streptococcus pneumoniae* vaccine candidate, GlaxoSmithKline acquired Affinivax for up to \$3.3 billion in May 2022. The appetite of these companies to buttress their vaccine programs and pipelines reflects the increasing importance of vaccines in the healthcare sector, both nationally and worldwide.

The U.S. Centers for Disease Control, or CDC, its Advisory Committee on Immunization Practices, or ACIP, and similar international advisory bodies develop vaccine recommendations for both children and adults. New pediatric vaccines that receive ACIP preferred recommendations are almost universally adopted, and adult vaccines that receive a preferred recommendation are widely adopted. We believe that our vaccine candidates will be well-positioned to obtain these preferred recommendations, by virtue of their longer and more durable immunity, which could drive rapid and significant market adoption.

Pipeline

Our vaccine candidates are being developed in a manner that is scalable, designed to be cost-effective and provide long-term benefit to patients from infectious agents.



The FDA regulatory approval process is lengthy and time-consuming, and we may experience significant delays in the clinical development and regulatory approval of our vaccine candidates. Our vaccine candidates are in early stages of development and may fail in development or suffer delays that materially and adversely affect their commercial viability. We may be unable to complete development of or commercialize our vaccine candidates or experience significant delays in doing so due to regulatory or other uncertainties.

Our Vaccine Candidates

BWV-201: Streptococcus pneumoniae (S. pneumoniae) vaccine program

We are developing BWV-201, licensed from St. Jude Children's Research Hospital, to prevent Acute Otitis Media, or AOM, in children and adults, a leading cause of hospital visits, prescription antibiotics and potentially permanent hearing loss. Based on information from the American Academy of Pediatrics, over 5 million cases of AOM are reported annually in the U.S., resulting in approximately 30 million medical care visits and over 10 million antibiotic prescriptions, representing approximately \$4.3 billion spent on treatment in the U.S. alone. AOM due to *S. pneumoniae* infections range from 30 to 50% of all AOM infections each year (Monsata 2012 2012; 7(4): e36226). In addition to AOM, we are exploring the potential for BWV-201 to protect against non-invasive pneumococcal pneumonia, or colonization of the bacteria within the lungs that has not spread to the blood or other major organs. According to the CDC, pneumococcal pneumonia leads to an estimated 150,000 hospitalizations each year in the US alone (CDC Fast Facts: Pneumococcal Disease) and while there are commercially available pneumococcal vaccines, efficacy rates against pneumococcal pneumonia are low (Berild 2020; 9(4): 259) and vaccines are serotype independent (CDC: Pneumococcal Disease). BWV-201 is a live attenuated serotype-independent intranasal vaccine candidate for *S. pneumoniae* induced AOM and pneumococcal pneumonia.

BWV-101 and BWV-102: Influenza vaccine program

The company's influenza vaccine programs are focused on developing transformational and novel influenza vaccines: BWV-101 for an influenza vaccine to provide protection against H1, H3 and Flu B infections; and BWV-102 for a H1 only vaccine. This program is licensed from the University of Oxford in which all relevant studies were performed to support our hypothesis. Our goal is to develop a vaccine that protects against all influenza strains that commonly infect humans by targeting specific parts of the influenza viruses, which are of limited variability across flu strains and induce a strong protective immune response. This POC will be leveraged to develop BWV-101 by studying the cross-reactivity of different flu strains, H1, H3 and influenza B. The BWV-101 vaccine candidate may potentially provide a therapeutic benefit that negates the need for annual vaccination, vaccine reformulation, and provide long-lasting broad protection against the flu to millions globally (Thompson et al. Nature Communications. 2018. 9:385).

BWV Norovirus (NoV) S&P Nanoparticle Versatile Vaccine Platform

Our Approach to Stimulating the Immune System for Infectious Disease Protection

Our S&P platform was co-invented by two researchers, Xi Jason Jiang, Ph.D., and Ming Tan, Ph.D., of the Division of Infectious Disease at the Cincinnati Children's Hospital Medical Center. The pre-clinical research conducted at CHMC provided encouraging data that supports further investigation and development of the platform for our vaccine candidates. The S&P platform combines two or more immunogenic components, a norovirus antigen plus at least one additional antigen, together creating novel constructs. The norovirus nanoparticle enhances immunogenicity of the inserted antigen. The S & P particles themselves also act as antigens, and are large enough to trigger an immune response to a foreign substance. By combining the norovirus nanoparticle with one or more antigens from other infectious disease(s), the immune system is stimulated to create antibodies to both the norovirus and the additional antigen(s). Currently, we are evaluating this platform to generate vaccine candidates for norovirus, rotavirus, malaria, monkeypox, and Marburg virus disease.

Key Elements of our Platform

We are leveraging our disruptive norovirus nanoparticle platform to develop novel, broad-spectrum vaccines for adult and child infectious disease prevention by taking advantage of:

- *Flexible and Scalable discovery platform engine.* We believe we are able to design and create novel vaccines that are stable and scalable for broad spectrum prophylactics. Through this platform's adaptability, we may opportunistically expand our pipeline and potentially collaborate with third parties for additional vaccines, as well as therapeutics.
- *Cost-effective and Rapid Production of Novel Vaccines.* We are potentially able to reduce the cost and time to manufacture a vaccine candidate by utilizing an *E.coli* expression platform, compared to traditional vaccine production which uses other, longer production-time platforms, such as Chinese Hamster Ovary (CHO) cells. We have bioengineered these nanoparticles to be stable and effective, as determined through animal immunogenicity studies, using *E.coli* expression which may provide cost savings and efficiency compared to other VLPs needing a eukaryotic expression system. (Pharmaceutics 2019, 11, 472; doi:10.3390/pharmaceutics11090472).
- *Multi-antigen and Pathogen Capabilities.* One of the key features of our platform is its ability to carry multiple antigens at a time, thereby creating a multi-targeted vaccine. It also provides the opportunity to develop vaccines for protection against not only viral pathogens, but also bacterial and potentially parasitic and fungal pathogens.
- *Therapeutic potential.* We believe our platform may offer opportunities to develop non-infectious disease therapeutic products, for example being used as a carrier or vehicle to transport drugs to specific target locations.

BWV-401: Chlamydia Vaccine

We are developing a live attenuated, orally delivered chlamydia vaccine derived from a murine strain of chlamydia, *Chlamydia muridarum*, to protect individuals against chlamydia infection. By delivering this vaccine orally, BWV-401 may elicit transmucosal immunity and provide protection against chlamydia in the genital tract post-vaccination without altering the gut microbiota or the development of gut mucosal resident T cell responses to non-chlamydial infection. According to the Centers for Disease Control and Prevention, there were about 1.6 million new cases of chlamydia reported in 2020 in the United States and globally, the World Health Organization estimates about 129 million new cases each year. Additionally, given high estimations of asymptomatic cases and low availability of diagnostic testing in low- and middle-income countries, these annual estimates may be an underrepresentation. Currently, there is no vaccine available to prevent chlamydia infection, and the main treatment is through antibiotic regimens with the possibility of reinfection after antibiotics have treated the disease. If left undetected or untreated, Chlamydia represents a major cause of pelvic inflammatory disease and infertility in women. It is estimated that about 10 – 15% of women that experience untreated chlamydia develop pelvic inflammatory disease and face chronic pain or fertility problems later in life. Additionally, should women contract chlamydia during pregnancy or give birth with an active infection, newborns may develop eye infections or pneumonia resulting from the disease. We believe this vaccine candidate has the potential to protect individuals against this harmful disease and may eliminate the need for antibiotic prescriptions associated with treating chlamydia.

BWV-301: Norovirus-rotavirus vaccine program

We are developing a norovirus-rotavirus vaccine, BWV-301, to prevent gastroenteritis utilizing our S&P platform. Preclinical data from gnotobiotic pig studies have shown our vaccine can prevent severe gastroenteritis and reduces viral shedding. While rotavirus vaccines exist in the market, no norovirus vaccine is available to date. Our vaccine would protect people from two of the most globally prevalent viruses causing vomiting and diarrhea.

BWV-302: Norovirus-malaria vaccine program

Additionally, we are currently investigating a malaria vaccine, BWV-302, utilizing our norovirus S&P platform. The vaccine is designed to offer protection from both norovirus and malaria, infectious diseases that occur frequently together in geographic regions. The vaccine utilizes a protein identified on the surface of the plasmodium parasite being presented on the surface of the norovirus nanoparticle

Corporate Information

Our principal executive offices are located at Blue Water Vaccines Inc., at 201 E. Fifth Street, Suite 1900, Cincinnati, OH 45202, attention: Corporate Secretary. Our telephone number is (513) 620-4101. Information about us is also available at our website at <http://www.bluewatervaccines.com>. The information on our website is not a part of, or incorporated in, this prospectus.

RISK FACTORS

Investing in our securities is highly speculative and involves a high degree of risk. Before deciding whether to invest in our securities, you should carefully consider the risk factors we describe below, in any accompanying prospectus or any future prospectus supplement and in any related free writing prospectus for a specific offering of securities, as well as those incorporated by reference into this prospectus or such prospectus supplement. You should also carefully consider other information contained and incorporated by reference in this prospectus and any applicable prospectus supplement, including our financial statements and the related notes thereto incorporated by reference in this prospectus. The risks and uncertainties described herein and in the applicable prospectus supplement and our other filings with the SEC incorporated by reference herein are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently consider immaterial may also adversely affect us. If any of the described risks occur, our business, financial condition or results of operations could be materially harmed. In such case, the value of our securities could decline and you may lose all or part of your investment.

We may engage in future acquisitions or strategic transactions which may require us to seek additional financing or financial commitments, increase our expenses and/or present significant distractions to our management.

In the event we engage in an acquisition or strategic transaction, we may need to acquire additional financing (particularly, if the acquired entity is not cash flow positive or does not have significant cash on hand). Obtaining financing through the issuance or sale of additional equity and/or debt securities, if possible, may not be at favorable terms and may result in additional dilution to our current stockholders. Additionally, any such transaction may require us to incur non-recurring or other charges, may increase our near and long-term expenditures and may pose significant integration challenges or disrupt our management or business, which could adversely affect our operations and financial results. For example, an acquisition or strategic transaction may entail numerous operational and financial risks, including the risks outlined above and additionally:

- exposure to unknown liabilities;
- disruption of our business and diversion of our management's time and attention in order to develop acquired products or technologies;
- higher than expected acquisition and integration costs;
- write-downs of assets or goodwill or impairment charges;
- increased amortization expenses;
- difficulty and cost in combining the operations and personnel of any acquired businesses with our operations and personnel;
- impairment of relationships with key suppliers or customers of any acquired businesses due to changes in management and ownership; and
- inability to retain key employees of any acquired businesses.

Accordingly, although there can be no assurance that we will undertake or successfully complete any transactions of the nature described above, and any transactions that we do complete could have a material adverse effect on our business, results of operations, financial condition and prospects.

USE OF PROCEEDS

Unless otherwise indicated in a prospectus supplement, we intend to use the net proceeds from these sales for general corporate purposes and working capital, which includes, without limitation, ongoing pre-clinical and clinical work, the development of new vaccine candidates, investing in or acquiring companies that are synergistic with or complementary to our technologies, licensing activities related to our current and future vaccine candidates, the development of emerging technologies, investing in or acquiring companies that are developing emerging technologies, or the acquisition of other businesses. The amounts and timing of these expenditures will depend on numerous factors, including the development of our current business initiatives.

DIVIDEND POLICY

We have never paid or declared any cash dividends on our common stock, and we do not anticipate paying any cash dividends on our common stock in the foreseeable future. We intend to retain all available funds and any future earnings to fund the development and expansion of our business. Any future determination to pay dividends will be at the discretion of our board of directors and will depend upon a number of factors, including our results of operations, financial condition, future prospects, contractual restrictions, restrictions imposed by applicable law and other factors our board of directors deems relevant. Our future ability to pay cash dividends on our stock may also be limited by the terms of any future debt or preferred securities or future credit facility.

PLAN OF DISTRIBUTION

We may sell the securities from time to time to or through underwriters or dealers, through agents, or directly to one or more purchasers. A distribution of the securities offered by this prospectus may also be effected through the issuance of derivative securities, including without limitation, warrants, rights to purchase and subscriptions. In addition, the manner in which we may sell some or all of the securities covered by this prospectus includes, without limitation, through:

- a block trade in which a broker-dealer will attempt to sell as agent, but may position or resell a portion of the block, as principal, in order to facilitate the transaction;
- purchases by a broker-dealer, as principal, and resale by the broker-dealer for its account; or
- ordinary brokerage transactions and transactions in which a broker solicits purchasers.

A prospectus supplement or supplements with respect to each series of securities will describe the terms of the offering, including, to the extent applicable:

- the terms of the offering;
- the name or names of the underwriters or agents and the amounts of securities underwritten or purchased by each of them, if any;
- the public offering price or purchase price of the securities or other consideration therefor, and the proceeds to be received by us from the sale;
- any delayed delivery requirements;
- any over-allotment options under which underwriters may purchase additional securities from us;
- any underwriting discounts or agency fees and other items constituting underwriters' or agents' compensation;
- any discounts or concessions allowed or re-allowed or paid to dealers; and
- any securities exchange or market on which the securities may be listed.

The offer and sale of the securities described in this prospectus by us, the underwriters or the third parties described above may be effected from time to time in one or more transactions, including privately negotiated transactions, either:

- at a fixed price or prices, which may be changed;
- in an "at the market" offering within the meaning of Rule 415(a)(4) of the Securities Act of 1933, as amended, or the Securities Act;
- at prices related to such prevailing market prices; or
- at negotiated prices.

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

Underwriters and Agents; Direct Sales

If underwriters are used in a sale, they will acquire the offered securities for their own account and may resell the offered securities from time to time in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. We may offer the securities to the public through underwriting syndicates represented by managing underwriters or by underwriters without a syndicate.

Unless the prospectus supplement states otherwise, the obligations of the underwriters to purchase the securities will be subject to the conditions set forth in the applicable underwriting agreement. Subject to certain conditions, the underwriters will be obligated to purchase all of the securities offered by the prospectus supplement, other than securities covered by any over-allotment option. Any public offering price and any discounts or concessions allowed or re-allowed or paid to dealers may change from time to time. We may use underwriters with whom we have a material relationship. We will describe in the prospectus supplement, naming the underwriter, the nature of any such relationship.

We may sell securities directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of securities, and we will describe any commissions we will pay the agent in the prospectus supplement. Unless the prospectus supplement states otherwise, our agent will act on a best-efforts basis for the period of its appointment.

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

Dealers

We may sell the offered securities to dealers as principals. The dealer may then resell such securities to the public either at varying prices to be determined by the dealer or at a fixed offering price agreed to with us at the time of resale.

Institutional Purchasers

We may authorize agents, dealers or underwriters to solicit certain institutional investors to purchase offered securities on a delayed delivery basis pursuant to delayed delivery contracts providing for payment and delivery on a specified future date. The applicable prospectus supplement or other offering materials, as the case may be, will provide the details of any such arrangement, including the offering price and commissions payable on the solicitations.

We will enter into such delayed contracts only with institutional purchasers that we approve. These institutions may include commercial and savings banks, insurance companies, pension funds, investment companies and educational and charitable institutions.

Indemnification; Other Relationships

We may provide agents, underwriters, dealers and remarketing firms with indemnification against certain civil liabilities, including liabilities under the Securities Act, or contribution with respect to payments that the agents or underwriters may make with respect to these liabilities. Agents, underwriters, dealers and remarketing firms, and their affiliates, may engage in transactions with, or perform services for, us in the ordinary course of business. This includes commercial banking and investment banking transactions.

Market-Making; Stabilization and Other Transactions

There is currently no market for any of the offered securities, other than our common stock, which is quoted on the Nasdaq Capital Market. If the offered securities are traded after their initial issuance, they may trade at a discount from their initial offering price, depending upon prevailing interest rates, the market for similar securities and other factors. While it is possible that an underwriter could inform us that it intends to make a market in the offered securities, such underwriter would not be obligated to do so, and any such market-making could be discontinued at any time without notice. Therefore, no assurance can be given as to whether an active trading market will develop for the offered securities. We have no current plans for listing of the debt securities, preferred stock, warrants or subscription rights on any securities exchange or quotation system; any such listing with respect to any particular debt securities, preferred stock, warrants or subscription rights will be described in the applicable prospectus supplement or other offering materials, as the case may be.

Any underwriter may engage in over-allotment, stabilizing transactions, short-covering transactions and penalty bids in accordance with Regulation M under the Securities Exchange Act of 1934, as amended, or the Exchange Act. Over-allotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum price. Syndicate-covering or other short-covering transactions involve purchases of the securities, either through exercise of the over-allotment option or in the open market after the distribution is completed, to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a stabilizing or covering transaction to cover short positions. Those activities may cause the price of the securities to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of the activities at any time.

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

Fees and Commissions

If 5% or more of the net proceeds of any offering of securities made under this prospectus will be received by a FINRA member participating in the offering or affiliates or associated persons of such FINRA member, the offering will be conducted in accordance with FINRA Rule 5121.

DESCRIPTION OF SECURITIES WE MAY OFFER

General

This prospectus describes the general terms of our capital stock. The following description is not complete and may not contain all the information you should consider before investing in our capital stock. For a more detailed description of these securities, you should read the applicable provisions of Delaware law and our amended and restated certificate of incorporation ("Amended and Restated Certificate of Incorporation") and our amended and restated bylaws ("Amended and Restated Certificate of Bylaws"). When we offer to sell a particular series of these securities, we will describe the specific terms of the series in a supplement to this prospectus. Accordingly, for a description of the terms of any series of securities, you must refer to both the prospectus supplement relating to that series and the description of the securities described in this prospectus. To the extent the information contained in the prospectus supplement differs from this summary description, you should rely on the information in the prospectus supplement.

The total number of shares of capital stock we are authorized to issue is 260,000,000 shares, of which (a) 250,000,000 are common stock and (b) 10,000,000 are preferred stock.

We, directly or through agents, dealers or underwriters designated from time to time, may offer, issue and sell, together or separately, up to \$100,000,000 in the aggregate of:

- common stock;
- preferred stock;
- purchase contracts;
- warrants to purchase our securities;
- subscription rights to purchase our securities;
- depositary shares;
- secured or unsecured debt securities consisting of notes, debentures or other evidences of indebtedness which may be senior debt securities, senior subordinated debt securities or subordinated debt securities, each of which may be convertible into equity securities; or
- units comprised of, or other combinations of, the foregoing securities.

We may issue the debt securities as exchangeable for or convertible into shares of common stock, preferred stock or other securities that may be sold by us pursuant to this prospectus or any combination of the foregoing. The preferred stock may also be exchangeable for and/or convertible into shares of common stock, another series of preferred stock or other securities that may be sold by us pursuant to this prospectus or any combination of the foregoing. When a particular series of securities is offered, a supplement to this prospectus will be delivered with this prospectus, which will set forth the terms of the offering and sale of the offered securities.

Common Stock

As of March 6, 2023, there were 15,911,868 and 16,371,597 shares of common stock issued and outstanding, respectively, held of record by approximately 29 stockholders. Subject to preferential rights with respect to any outstanding preferred stock, all outstanding shares of common stock are of the same class and have equal rights and attributes. Under the terms of our Amended and Restated Certificate of Incorporation, holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders, including the election of directors, and do not have cumulative voting rights. The holders of outstanding shares of common stock are entitled to receive dividends out of assets or funds legally available for the payment of dividends of such times and in such amounts as our board of directors from time to time may determine. Our common stock is not entitled to pre-emptive rights and is not subject to conversion or redemption. Upon liquidation, dissolution or winding up of our company, the assets legally available for distribution to stockholders are distributable ratably among the holders of our common stock after payment of liquidation preferences, if any, on any outstanding payment of other claims of creditors. The rights, preferences and privileges of holders of common stock are subject to and may be adversely affected by the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future.

Preferred Stock

Our Amended and Restated Certificate of Incorporation empowers our board of directors, without further action by our stockholders, to establish and issue up to 10,000,000 shares of preferred stock in one or more class or series, which preferred stock may be offered by this prospectus and supplements thereto. As of March 6, 2023, no shares of preferred stock were designated or outstanding.

We will fix the rights, preferences, privileges and restrictions of the preferred stock of each series in the certificate of designation relating to that series. We will file as an exhibit to the registration statement of which this prospectus is a part, or will incorporate by reference from a current report on Form 8-K that we file with the SEC, the form of any certificate of designation that describes the terms of the series of preferred stock we are offering before the issuance of the related series of preferred stock. This description will include any or all of the following, as required:

- the title and stated value;
- the number of shares we are offering;
- the liquidation preference per share;
- the purchase price;
- the dividend rate, period and payment date and method of calculation for dividends;
- whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate;
- any contractual limitations on our ability to declare, set aside or pay any dividends;
- the procedures for any auction and remarketing, if any;
- the provisions for a sinking fund, if any;
- the provisions for redemption or repurchase, if applicable, and any restrictions on our ability to exercise those redemption and repurchase rights;
- any listing of the preferred stock on any securities exchange or market;
- whether the preferred stock will be convertible into our common stock, and, if applicable, the conversion price, or how it will be calculated, and the conversion period;
- whether the preferred stock will be exchangeable into debt securities, and, if applicable, the exchange price, or how it will be calculated, and the exchange period;
- voting rights, if any, of the preferred stock;

- preemptive rights, if any;
- restrictions on transfer, sale or other assignment, if any;
- whether interests in the preferred stock will be represented by depositary shares;
- a discussion of any material or special United States federal income tax considerations applicable to the preferred stock;
- the relative ranking and preferences of the preferred stock as to dividend rights and rights if we liquidate, dissolve or wind up our affairs;
- any limitations on issuance of any class or series of preferred stock ranking senior to or on a parity with the series of preferred stock as to dividend rights and rights if we liquidate, dissolve or wind up our affairs; and
- any other specific terms, preferences, rights or limitations of, or restrictions on, the preferred stock.

If we issue shares of preferred stock under this prospectus, after receipt of payment therefor, the shares will be fully paid and non-assessable.

The Delaware General Corporation Law provides that the holders of preferred stock will have the right to vote separately as a class if the amendment would increase or decrease the aggregate number of authorized shares of such class, increase or decrease the par value of the shares of such class, or alter or change the powers, preferences, or special rights of the shares of such class so as to affect them adversely. This right is in addition to any voting rights provided for in the applicable certificate of designation.

Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of our common stock. Preferred stock could be issued quickly with terms designed to delay or prevent a change in control of our Company or make removal of management more difficult. Additionally, the issuance of preferred stock could have the effect of decreasing the market price of our common stock.

Purchase Contracts

We may issue purchase contracts, representing contracts obligating holders to purchase from us, and us to sell to the holders, a specific or varying number of common stock, preferred stock, warrants, depositary shares, debt securities, warrants or any combination of the above, at a future date or dates. Alternatively, the purchase contracts may obligate us to purchase from holders, and obligate holders to sell to us, a specific or varying number of common stock, preferred stock, warrants, depositary shares, debt securities, or any combination of the above. The price of the securities and other property subject to the purchase contracts may be fixed at the time the purchase contracts are issued or may be determined by reference to a specific formula set forth in the purchase contracts.

The purchase contracts may be issued separately or as a part of a unit that consists of (a) a purchase contract and (b) one or more of the other securities that may be sold by us pursuant to this prospectus or any combination of the foregoing, which may secure the holders' obligations to purchase the securities under the purchase contract. The purchase contracts may require us to make periodic payments to the holders or require the holders to make periodic payments to us. These payments may be unsecured or prefunded and may be paid on a current or on a deferred basis. The purchase contracts may require holders to secure their obligations under the contracts in a manner specified in the applicable prospectus supplement.

We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from a current report on Form 8-K that we file with the SEC, forms of the purchase contracts and purchase contract agreement, if any. The applicable prospectus supplement will describe the terms of any purchase contracts in respect of which this prospectus is being delivered, including, to the extent applicable, the following:

- whether the purchase contracts obligate the holder or us to purchase or sell, or both purchase and sell, the securities subject to purchase under the purchase contract, and the nature and amount of each of those securities, or the method of determining those amounts;
- whether the purchase contracts are to be prepaid or not;
- whether the purchase contracts are to be settled by delivery, or by reference or linkage to the value, performance or level of the securities subject to purchase under the purchase contract;
- any acceleration, cancellation, termination or other provisions relating to the settlement of the purchase contracts; and
- whether the purchase contracts will be issued in fully registered or global form.

Warrants

We may issue warrants to purchase our securities or other rights, including rights to receive payment in cash or securities based on the value, rate or price of one or more specified commodities, currencies, securities or indices, or any combination of the foregoing. Warrants may be issued independently or together with any other securities that may be sold by us pursuant to this prospectus or any combination of the foregoing and may be attached to, or separate from, such securities. To the extent warrants that we issue are to be publicly-traded, each series of such warrants will be issued under a separate warrant agreement to be entered into between us and a warrant agent.

We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from a current report on Form 8-K that we file with the SEC, forms of the warrant and warrant agreement, if any. The prospectus supplement relating to any warrants that we may offer will contain the specific terms of the warrants and a description of the material provisions of the applicable warrant agreement, if any. These terms may include the following:

- the title of the warrants;
- the price or prices at which the warrants will be issued;
- the designation, amount and terms of the securities or other rights for which the warrants are exercisable;
- the designation and terms of the other securities, if any, with which the warrants are to be issued and the number of warrants issued with each other security;
- the aggregate number of warrants;
- any provisions for adjustment of the number or amount of securities receivable upon exercise of the warrants or the exercise price of the warrants;
- the price or prices at which the securities or other rights purchasable upon exercise of the warrants may be purchased;
- if applicable, the date on and after which the warrants and the securities or other rights purchasable upon exercise of the warrants will be separately transferable;
- a discussion of any material U.S. federal income tax considerations applicable to the exercise of the warrants;
- the date on which the right to exercise the warrants will commence, and the date on which the right will expire;
- the maximum or minimum number of warrants that may be exercised at any time;
- information with respect to book-entry procedures, if any; and
- any other terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants.

Exercise of Warrants. Each warrant will entitle the holder of warrants to purchase the amount of securities or other rights, at the exercise price stated or determinable in the prospectus supplement for the warrants. Warrants may be exercised at any time up to the close of business on the expiration date shown in the applicable prospectus supplement, unless otherwise specified in such prospectus supplement. After the close of business on the expiration date, if applicable, unexercised warrants will become void. Warrants may be exercised in the manner described in the applicable prospectus supplement. When the warrant holder makes the payment and properly completes and signs the warrant certificate at the corporate trust office of the warrant agent, if any, or any other office indicated in the prospectus supplement, we will, as soon as possible, forward the securities or other rights that the warrant holder has purchased. If the warrant holder exercises less than all of the warrants represented by the warrant certificate, we will issue a new warrant certificate for the remaining warrants.

Subscription Rights

We may issue rights to purchase our securities. The rights may or may not be transferable by the persons purchasing or receiving the rights. In connection with any rights offering, we may enter into a standby underwriting or other arrangement with one or more underwriters or other persons pursuant to which such underwriters or other persons would purchase any offered securities remaining unsubscribed for after such rights offering. In connection with a rights offering to holders of our capital stock a prospectus supplement will be distributed to such holders on the record date for receiving rights in the rights offering set by us.

We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from a current report on Form 8-K that we file with the SEC, forms of the subscription rights, standby underwriting agreement or other agreements, if any. The prospectus supplement relating to any rights that we offer will include specific terms relating to the offering, including, among other matters:

- the date of determining the security holders entitled to the rights distribution;
- the aggregate number of rights issued and the aggregate amount of securities purchasable upon exercise of the rights;
- the exercise price;
- the conditions to completion of the rights offering;
- the date on which the right to exercise the rights will commence and the date on which the rights will expire; and
- any applicable federal income tax considerations.

Each right would entitle the holder of the rights to purchase the principal amount of securities at the exercise price set forth in the applicable prospectus supplement. Rights may be exercised at any time up to the close of business on the expiration date for the rights provided in the applicable prospectus supplement. After the close of business on the expiration date, all unexercised rights will become void.

Holders may exercise rights as described in the applicable prospectus supplement. Upon receipt of payment and the rights certificate properly completed and duly executed at the corporate trust office of the rights agent, if any, or any other office indicated in the prospectus supplement, we will, as soon as practicable, forward the securities purchasable upon exercise of the rights. If less than all of the rights issued in any rights offering are exercised, we may offer any unsubscribed securities directly to persons other than stockholders, to or through agents, underwriters or dealers or through a combination of such methods, including pursuant to standby underwriting arrangements, as described in the applicable prospectus supplement.

Depository Shares

General. We may offer fractional shares of preferred stock, rather than full shares of preferred stock. If we decide to offer fractional shares of our preferred stock, we will issue receipts for depository shares. Each depository share will represent a fraction of a share of a particular series of our preferred stock, and the applicable prospectus supplement will indicate that fraction. The shares of preferred stock represented by depository shares will be deposited under a deposit agreement between us and a depository that is a bank or trust company that meets certain requirements and is selected by us. The depository will be specified in the applicable prospectus supplement. Each owner of a depository share will be entitled to all of the rights and preferences of the preferred stock represented by the depository share.

The depository shares will be evidenced by depository receipts issued pursuant to the deposit agreement. Depository receipts will be distributed to those persons purchasing the fractional shares of our preferred stock in accordance with the terms of the offering. We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from a current report on Form 8-K that we file with the SEC, forms of the deposit agreement, form of certificate of designation of underlying preferred stock, form of depository receipts and any other related agreements.

Dividends and Other Distributions. The depository will distribute all cash dividends or other cash distributions received by it in respect of the preferred stock to the record holders of depository shares relating to such preferred shares in proportion to the numbers of depository shares held on the relevant record date.

In the event of a distribution other than in cash, the depository will distribute securities or property received by it to the record holders of depository shares in proportion to the numbers of depository shares held on the relevant record date, unless the depository determines that it is not feasible to make such distribution. In that case, the depository may make the distribution by such method as it deems equitable and practicable. One such possible method is for the depository to sell the securities or property and then distribute the net proceeds from the sale as provided in the case of a cash distribution.

Redemption of Depository Shares. Whenever we redeem the preferred stock, the depository will redeem a number of depository shares representing the same number of shares of preferred stock so redeemed. If fewer than all of the depository shares are to be redeemed, the depository shares to be redeemed will be selected by lot, pro rata or by any other equitable method as the depository may determine.

Voting of Underlying Shares. Upon receipt of notice of any meeting at which the holders of our preferred stock of any series are entitled to vote, the depository will mail the information contained in the notice of the meeting to the record holders of the depository shares relating to that series of preferred stock. Each record holder of the depository shares on the record date will be entitled to instruct the depository as to the exercise of the voting rights represented by the number of shares of preferred stock underlying the holder's depository shares. The depository will endeavor, to the extent it is practical to do so, to vote the number of whole shares of preferred stock underlying such depository shares in accordance with such instructions. We will agree to take all action that the depository may deem reasonably necessary in order to enable the depository to do so. To the extent the depository does not receive specific instructions from the holders of depository shares relating to such preferred shares, it will abstain from voting such shares of preferred stock.

Withdrawal of Shares. Upon surrender of depository receipts representing any number of whole shares at the depository's office, unless the related depository shares previously have been called for redemption, the holder of the depository shares evidenced by the depository receipts will be entitled to delivery of the number of whole shares of the related series of preferred stock and all money and other property, if any, underlying such depository shares. However, once such an exchange is made, the preferred stock cannot thereafter be re-deposited in exchange for depository shares. Holders of depository shares will be entitled to receive whole shares of the related series of preferred stock on the basis set forth in the applicable prospectus supplement. If the depository receipts delivered by the holder evidence a number of depository shares representing more than the number of whole shares of preferred stock of the related series to be withdrawn, the depository will deliver to the holder at the same time a new depository receipt evidencing the excess number of depository shares.

Amendment and Termination of Depositary Agreement. The form of depositary receipt evidencing the depositary shares and any provision of the applicable depositary agreement may at any time be amended by agreement between us and the depositary. We may, with the consent of the depositary, amend the depositary agreement from time to time in any manner that we desire. However, if the amendment would materially and adversely alter the rights of the existing holders of depositary shares, the amendment would need to be approved by the holders of at least a majority of the depositary shares then outstanding.

The depositary agreement may be terminated by us or the depositary if:

- all outstanding depositary shares have been redeemed; or
- there has been a final distribution in respect of the shares of preferred stock of the applicable series in connection with our liquidation, dissolution or winding up and such distribution has been made to the holders of depositary receipts.

Resignation and Removal of Depositary. The depositary may resign at any time by delivering to us notice of its election to do so. We may remove a depositary at any time. Any resignation or removal will take effect upon the appointment of a successor depositary and its acceptance of appointment.

Charges of Depositary. We will pay all transfer and other taxes and governmental charges arising solely from the existence of any depositary arrangements. We will pay all charges of each depositary in connection with the initial deposit of the preferred shares of any series, the initial issuance of the depositary shares, any redemption of such preferred shares and any withdrawals of such preferred shares by holders of depositary shares. Holders of depositary shares will be required to pay any other transfer taxes.

Notices. Each depositary will forward to the holders of the applicable depositary shares all notices, reports and communications from us which are delivered to such depositary and which we are required to furnish the holders of the preferred stock represented by such depositary shares.

Miscellaneous. The depositary agreement may contain provisions that limit our liability and the liability of the depositary to the holders of depositary shares. Both the depositary and we are also entitled to an indemnity from the holders of the depositary shares prior to bringing, or defending against, any legal proceeding. We or any depositary may rely upon written advice of counsel or accountants, or information provided by persons presenting preferred shares for deposit, holders of depositary shares or other persons believed by us to be competent and on documents believed by us or them to be genuine.

Debt Securities

We may issue debt securities and incur additional indebtedness other than through the offering of debt securities pursuant to this prospectus. As used in this prospectus, the term “debt securities” means the debentures, notes, bonds and other evidences of indebtedness that we may issue from time to time. The debt securities will either be senior debt securities, senior subordinated debt or subordinated debt securities. We may also issue convertible debt securities. Debt securities may be issued under an indenture (which we refer to herein as an Indenture), which are contracts entered into between us and a trustee to be named therein. The form of Indenture has been filed as an exhibit to the registration statement of which this prospectus forms a part. It is likely that convertible debt securities will not be issued under an Indenture.

The debt securities may be fully and unconditionally guaranteed on a secured or unsecured senior or subordinated basis by one or more guarantors, if any. The obligations of any guarantor under its guarantee will be limited as necessary to prevent that guarantee from constituting a fraudulent conveyance under applicable law. In the event that any series of debt securities will be subordinated to other indebtedness that we have outstanding or may incur, the terms of the subordination will be set forth in the prospectus supplement relating to the subordinated debt securities.

We may issue debt securities from time to time in one or more series, in each case with the same or various maturities, at par or at a discount. Unless indicated in a prospectus supplement, we may issue additional debt securities of a particular series without the consent of the holders of the debt securities of such series outstanding at the time of the issuance. Any such additional debt securities, together with all other outstanding debt securities of that series, will constitute a single series of debt securities under the applicable Indenture and will be equal in ranking.

Should an Indenture relate to unsecured indebtedness, in the event of a bankruptcy or other liquidation event involving a distribution of assets to satisfy our outstanding indebtedness or an event of default under a loan agreement relating to secured indebtedness of our company or its subsidiaries, the holders of such secured indebtedness, if any, would be entitled to receive payment of principal and interest prior to payments on the unsecured indebtedness issued under an Indenture.

Each prospectus supplement will describe the terms relating to the specific series of debt securities. These terms will include some or all of the following:

- the title of debt securities and whether the debt securities are senior or subordinated;
- any limit on the aggregate principal amount of debt securities of such series;
- the percentage of the principal amount at which the debt securities of any series will be issued;
- the ability to issue additional debt securities of the same series;
- the purchase price for the debt securities and the denominations of the debt securities;
- the specific designation of the series of debt securities being offered;
- the maturity date or dates of the debt securities and the date or dates upon which the debt securities are payable and the rate or rates at which the debt securities of the series shall bear interest, if any, which may be fixed or variable, or the method by which such rate shall be determined;
- the basis for calculating interest;
- the date or dates from which any interest will accrue or the method by which such date or dates will be determined;
- the duration of any deferral period, including the period during which interest payment periods may be extended;
- whether the amount of payments of principal of (and premium, if any) or interest on the debt securities may be determined with reference to any index, formula or other method, such as one or more currencies, commodities, equity indices or other indices, and the manner of determining the amount of such payments;
- the dates on which we will pay interest on the debt securities and the regular record date for determining who is entitled to the interest payable on any interest payment date;
- the place or places where the principal of (and premium, if any) and interest on the debt securities will be payable, where any securities may be surrendered for registration of transfer, exchange or conversion, as applicable, and notices and demands may be delivered to or upon us pursuant to the applicable Indenture;
- the rate or rates of amortization of the debt securities;
- any terms for the attachment to the debt securities of warrants, options or other rights to purchase or sell our securities;
- if the debt securities will be secured by any collateral and, if so, a general description of the collateral and the terms and provisions of such collateral security, pledge or other agreements;
- if we possess the option to do so, the periods within which and the prices at which we may redeem the debt securities, in whole or in part, pursuant to optional redemption provisions, and the other terms and conditions of any such provisions;
- our obligation or discretion, if any, to redeem, repay or purchase debt securities by making periodic payments to a sinking fund or through an analogous provision or at the option of holders of the debt securities, and the period or periods within which and the price or prices at which we will redeem, repay or purchase the debt securities, in whole or in part, pursuant to such obligation, and the other terms and conditions of such obligation;
- the terms and conditions, if any, regarding the option or mandatory conversion or exchange of debt securities;
- the period or periods within which, the price or prices at which and the terms and conditions upon which any debt securities of the series may be redeemed, in whole or in part at our option and, if other than by a board resolution, the manner in which any election by us to redeem the debt securities shall be evidenced;
- any restriction or condition on the transferability of the debt securities of a particular series;
- the portion, or methods of determining the portion, of the principal amount of the debt securities which we must pay upon the acceleration of the maturity of the debt securities in connection with any event of default;
- the currency or currencies in which the debt securities will be denominated and in which principal, any premium and any interest will or may be payable or a description of any units based on or relating to a currency or currencies in which the debt securities will be denominated;

- provisions, if any, granting special rights to holders of the debt securities upon the occurrence of specified events;
- any deletions from, modifications of or additions to the events of default or our covenants with respect to the applicable series of debt securities, and whether or not such events of default or covenants are consistent with those contained in the applicable Indenture;
- any limitation on our ability to incur debt, redeem stock, sell our assets or other restrictions;
- the application, if any, of the terms of the applicable Indenture relating to defeasance and covenant defeasance (which terms are described below) to the debt securities;
- what subordination provisions will apply to the debt securities
- the terms, if any, upon which the holders may convert or exchange the debt securities into or for our securities or property;
- whether we are issuing the debt securities in whole or in part in global form;
- any change in the right of the trustee or the requisite holders of debt securities to declare the principal amount thereof due and payable because of an event of default;
- the depository for global or certificated debt securities, if any;
- any material federal income tax consequences applicable to the debt securities, including any debt securities denominated and made payable, as described in the prospectus supplements, in foreign currencies, or units based on or related to foreign currencies;
- any right we may have to satisfy, discharge and defease our obligations under the debt securities, or terminate or eliminate restrictive covenants or events of default in the Indentures, by depositing money or U.S. government obligations with the trustee of the Indentures;
- the names of any trustees, depositories, authenticating or paying agents, transfer agents or registrars or other agents with respect to the debt securities;
- to whom any interest on any debt security shall be payable, if other than the person in whose name the security is registered, on the record date for such interest, the extent to which, or the manner in which, any interest payable on a temporary global debt security will be paid;
- if the principal of or any premium or interest on any debt securities is to be payable in one or more currencies or currency units other than as stated, the currency, currencies or currency units in which it shall be paid and the periods within and terms and conditions upon which such election is to be made and the amounts payable (or the manner in which such amount shall be determined);
- the portion of the principal amount of any debt securities which shall be payable upon declaration of acceleration of the maturity of the debt securities pursuant to the applicable Indenture;
- if the principal amount payable at the stated maturity of any debt security of the series will not be determinable as of any one or more dates prior to the stated maturity, the amount which shall be deemed to be the principal amount of such debt securities as of any such date for any purpose, including the principal amount thereof which shall be due and payable upon any maturity other than the stated maturity or which shall be deemed to be outstanding as of any date prior to the stated maturity (or, in any such case, the manner in which such amount deemed to be the principal amount shall be determined); and
- any other specific terms of the debt securities, including any modifications to the events of default under the debt securities and any other terms which may be required by or advisable under applicable laws or regulations.

Unless otherwise specified in the applicable prospectus supplement, we do not anticipate the debt securities will be listed on any securities exchange. Holders of the debt securities may present registered debt securities for exchange or transfer in the manner described in the applicable prospectus supplement. Except as limited by the applicable Indenture, we will provide these services without charge, other than any tax or other governmental charge payable in connection with the exchange or transfer.

Debt securities may bear interest at a fixed rate or a variable rate as specified in the prospectus supplement. In addition, if specified in the prospectus supplement, we may sell debt securities bearing no interest or interest at a rate that at the time of issuance is below the prevailing market rate, or at a discount below their stated principal amount. We will describe in the applicable prospectus supplement any special federal income tax considerations applicable to these discounted debt securities.

We may issue debt securities with the principal amount payable on any principal payment date, or the amount of interest payable on any interest payment date, to be determined by referring to one or more currency exchange rates, commodity prices, equity indices or other factors. Holders of such debt securities may receive a principal amount on any principal payment date, or interest payments on any interest payment date, that are greater or less than the amount of principal or interest otherwise payable on such dates, depending upon the value on such dates of applicable currency, commodity, equity index or other factors. The applicable prospectus supplement will contain information as to how we will determine the amount of principal or interest payable on any date, as well as the currencies, commodities, equity indices or other factors to which the amount payable on that date relates and certain additional tax considerations.

Units

We may issue units consisting of any combination of the other types of securities offered under this prospectus in one or more series. We may evidence each series of units by unit certificates that we may issue under a separate agreement. We may enter into unit agreements with a unit agent. Each unit agent, if any, may be a bank or trust company that we select. We will indicate the name and address of the unit agent, if any, in the applicable prospectus supplement relating to a particular series of units. Specific unit agreements, if any, will contain additional important terms and provisions. We will file as an exhibit to the registration statement of which this prospectus is a part, or will incorporate by reference from a current report that we file with the SEC, the form of unit and the form of each unit agreement, if any, relating to units offered under this prospectus.

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

- the title of the series of units;
- identification and description of the separate constituent securities comprising the units;
- the price or prices at which the units will be issued;
- the date, if any, on and after which the constituent securities comprising the units will be separately transferable;
- a discussion of certain United States federal income tax considerations applicable to the units; and
- any other material terms of the units and their constituent securities.

Anti-Takeover Effects of Delaware Law and Our Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws

Some provisions of Delaware law, our Amended and Restated Certificate of Incorporation and our Amended and Restated Bylaws could prohibit or delay mergers or other takeover or change in control attempts and, accordingly, may discourage attempts to acquire us even though such a transaction may offer our stockholders the opportunity to sell their stock at a price above the prevailing market price.

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 General Corporation Law of the State of Delaware, 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.

Choice of Forum

Our Amended and Restated Certificate of Incorporation provides that, unless we consent in writing to an alternative forum, to the fullest extent permitted by law, that derivative actions brought in our name, actions against directors, officers and employees for breach of fiduciary duty and certain other actions may be brought only in the Court of Chancery in the State of Delaware, except any action (A) as to which the Court of Chancery in the State of Delaware determines that there is an indispensable party not subject to the jurisdiction of the Court of Chancery (and the indispensable party does not consent to the personal jurisdiction of the Court of Chancery within ten days following such determination), (B) which is vested in the exclusive jurisdiction of a court or forum other than the Court of Chancery or (C) for which the Court of Chancery does not have subject matter jurisdiction. If an action is brought outside of Delaware, the stockholder bringing the suit will be deemed to have consented to service of process on such stockholder’s counsel. Although we believe this provision benefits us by providing increased consistency in the application of 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.

Our Amended and Restated Certificate of Incorporation provides that the exclusive forum provision will be applicable to the fullest extent permitted by applicable law, subject to certain exceptions. 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. As a result, the exclusive forum provision will not apply to suits brought to enforce any duty or liability created by the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction. In addition, our Amended and Restated Certificate of Incorporation provides that, unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States of America shall, to the fullest extent permitted by law, be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act or the rules and regulations promulgated thereunder. We note, however, that there is uncertainty as to whether a court would enforce this provision and that investors cannot waive compliance with the federal securities laws and the rules and regulations thereunder. Section 22 of the Securities Act creates concurrent jurisdiction for state and federal courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder.

As permitted by Section 102 of the Delaware General Corporation Law, we have adopted provisions in our Amended and Restated Certificate of Incorporation and our Amended and Restated Bylaws that limit or eliminate the personal liability of our directors for a breach of their fiduciary duty of care as a director. The duty of care generally requires that, when acting on behalf of the corporation, directors exercise an informed business judgment based on all material information reasonably available to them. Consequently, a director will not be personally liable to us or our stockholders for monetary damages for breach of fiduciary duty as a director, except for liability for:

- any breach of the director's duty of loyalty to us or our stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- any act related to unlawful stock repurchases, redemptions or other distributions or payment of dividends; or
- any transaction from which the director derived an improper personal benefit.

These limitations of liability do not affect the availability of equitable remedies such as injunctive relief or rescission. Our Amended and Restated Certificate of Incorporation also authorizes us to indemnify our officers, directors and other agents to the fullest extent permitted under Delaware law.

As permitted by Section 145 of the Delaware General Corporation Law, our Amended and Restated Bylaws provide that:

- we may indemnify our directors, officers and employees to the fullest extent permitted by the Delaware General Corporation Law, subject to limited exceptions;
- we may advance expenses to our directors, officers and employees in connection with a legal proceeding to the fullest extent permitted by the Delaware General Corporation Law, subject to limited exceptions; and
- the rights provided in our bylaws are not exclusive.

Our Amended and Restated Certificate of Incorporation and our Amended and Restated Bylaws provide for the indemnification provisions described above and elsewhere herein. We have entered or will enter into, and intend to continue to enter into, separate indemnification agreements with our directors and officers that may be broader than the specific indemnification provisions contained in the Delaware General Corporation Law. These indemnification agreements generally require us, among other things, to indemnify our officers and directors against certain liabilities that may arise by reason of their status or service as directors or officers, other than liabilities arising from willful misconduct. These indemnification agreements also generally require us to advance any expenses incurred by the directors or officers as a result of any proceeding against them as to which they could be indemnified. These indemnification provisions and the indemnification agreements may be sufficiently broad to permit indemnification of our officers and directors for liabilities, including reimbursement of expenses incurred, arising under the Securities Act.

We have purchased and currently intend to maintain insurance on behalf of each and every person who is or was a director or officer of the Registrant against any loss arising from any claim asserted against him or her and incurred by him or her in any such capacity, subject to certain exclusions.

FORMS OF SECURITIES

Each security may be represented either by a certificate issued in definitive form to a particular investor or by one or more global securities representing the entire issuance of securities. Certificated securities in definitive form and global securities will be issued in registered form. Definitive securities name you or your nominee as the owner of the security, and in order to transfer or exchange these securities or to receive payments other than interest or other interim payments, you or your nominee must physically deliver the securities to the trustee, registrar, paying agent or other agent, as applicable. Global securities name a depositary or its nominee as the owner of the debt securities, warrants or units represented by these global securities. The depositary maintains a computerized system that will reflect each investor's beneficial ownership of the securities through an account maintained by the investor with its broker/dealer, bank, trust company or other representative, as we explain more fully below.

Registered Global Securities

We may issue the securities in the form of one or more fully registered global securities that will be deposited with a depositary or its nominee identified in the applicable prospectus supplement and registered in the name of that depositary or nominee. In those cases, one or more registered global securities will be issued in a denomination or aggregate denominations equal to the portion of the aggregate principal or face amount of the securities to be represented by registered global securities. Unless and until it is exchanged in whole for securities in definitive registered form, a registered global security may not be transferred except as a whole by and among the depositary for the registered global security, the nominees of the depositary or any successors of the depositary or those nominees.

The specific terms of the depositary arrangement with respect to any securities to be represented by a registered global security will be described in the prospectus supplement relating to those securities. We anticipate that the following provisions will apply to all depositary arrangements.

Ownership of beneficial interests in a registered global security will be limited to persons, called participants, that have accounts with the depositary or persons that may hold interests through participants. Upon the issuance of a registered global security, the depositary will credit, on its book-entry registration and transfer system, the participants' accounts with the respective principal or face amounts of the securities beneficially owned by the participants. Any dealers, underwriters or agents participating in the distribution of the securities will designate the accounts to be credited. Ownership of beneficial interests in a registered global security will be shown on, and the transfer of ownership interests will be effected only through, records maintained by the depositary, with respect to interests of participants, and on the records of participants, with respect to interests of persons holding through participants. The laws of some states may require that some purchasers of securities take physical delivery of these securities in definitive form. These laws may impair your ability to own, transfer or pledge beneficial interests in registered global securities.

So long as the depositary, or its nominee, is the registered owner of a registered global security, that depositary or its nominee, as the case may be, will be considered the sole owner or holder of the securities represented by the registered global security for all purposes under the applicable indenture, warrant agreement or unit agreement.

Except as described below, owners of beneficial interests in a registered global security will not be entitled to have the securities represented by the registered global security registered in their names, will not receive or be entitled to receive physical delivery of the securities in definitive form and will not be considered the owners or holders of the securities under the applicable indenture, warrant agreement or unit agreement. Accordingly, each person owning a beneficial interest in a registered global security must rely on the procedures of the depositary for that registered global security and, if that person is not a participant, on the procedures of the participant through which the person owns its interest, to exercise any rights of a holder under the applicable indenture, warrant agreement or unit agreement. We understand that under existing industry practices, if we request any action of holders or if an owner of a beneficial interest in a registered global security desires to give or take any action that a holder is entitled to give or take under the applicable indenture, warrant agreement or unit agreement, the depositary for the registered global security would authorize the participants holding the relevant beneficial interests to give or take that action, and the participants would authorize beneficial owners owning through them to give or take that action or would otherwise act upon the instructions of beneficial owners holding through them.

Payments to holders with respect to securities represented by a registered global security registered in the name of a depositary or its nominee will be made to the depositary or its nominee, as the case may be, as the registered owner of the registered global security. None of the Company, the trustees, the warrant agents, the unit agents or any other agent of the Company, agent of the trustees, the warrant agents or unit agents will have any responsibility or liability for any aspect of the records relating to payments made on account of beneficial ownership interests in the registered global security or for maintaining, supervising or reviewing any records relating to those beneficial ownership interests.

We expect that the depositary for any of the securities represented by a registered global security, upon receipt of any payment of principal, premium, interest or other payment or distribution to holders of that registered global security, will immediately credit participants' accounts in amounts proportionate to their respective beneficial interests in that registered global security as shown on the records of the depositary. We also expect that payments by participants to owners of beneficial interests in a registered global security held through participants will be governed by standing customer instructions and customary practices, as is now the case with the securities held for the accounts of customers or registered in "street name," and will be the responsibility of those participants.

If the depositary for any of these securities represented by a registered global security is at any time unwilling or unable to continue as depositary or ceases to be a clearing agency registered under the Exchange Act and a successor depositary registered as a clearing agency under the Exchange Act is not appointed by us within 90 days, we will issue securities in definitive form in exchange for the registered global security that had been held by the depositary. Any securities issued in definitive form in exchange for a registered global security will be registered in the name or names that the depositary gives to the relevant trustee, warrant agent, unit agent or other relevant agent of ours or theirs. It is expected that the depositary's instructions will be based upon directions received by the depositary from participants with respect to ownership of beneficial interests in the registered global security that had been held by the depositary.

LEGAL MATTERS

Unless otherwise indicated in the applicable prospectus supplement, the validity of the securities offered by this prospectus will be passed upon for us by Ellenoff Grossman & Schole LLP, New York, New York. If legal matters in connection with offerings made by this prospectus are passed on by counsel for the underwriters, dealers or agents, if any, that counsel will be named in the applicable prospectus supplement.

EXPERTS

The financial statements as of and for the years ended December 31, 2022 and 2021, included in our Annual Report on Form 10-K for the year ended December 31, 2022, have been audited by Mayer Hoffman McCann P.C., independent registered public accounting firm, as set forth in their report, and have been incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in auditing and accounting.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We file annual, quarter and periodic reports, proxy statements and other information with the Securities and Exchange Commission using the Commission's EDGAR system. The Commission maintains a web site that contains reports, proxy and information statements and other information regarding registrants that file electronically with the Commission. The address of such site is <http://www.sec.gov>.

INCORPORATION OF DOCUMENTS BY REFERENCE

We are “incorporating by reference” in this prospectus certain documents we file with the SEC, which means that we can disclose important information to you by referring you to those documents. The information in the documents incorporated by reference is considered to be part of this prospectus. Statements contained in documents that we file with the SEC and that are incorporated by reference in this prospectus will automatically update and supersede information contained in this prospectus, including information in previously filed documents or reports that have been incorporated by reference in this prospectus, to the extent the new information differs from or is inconsistent with the old information. We have filed or may file the following documents with the SEC and they are incorporated herein by reference as of their respective dates of filing.

1. Our Annual Report on [Form 10-K](#) for the year ended December 31, 2022, filed with the SEC on March 9, 2023;
2. Our Current Reports on Form 8-K filed with the SEC on [January 6, 2023](#), [January 9, 2023](#), [January 17, 2023](#) and [February 16, 2023](#); and
3. The description of our common stock contained in our Registration Statement on [Form 8-A](#), filed on February 17, 2022 pursuant to Section 12(b) of the Exchange Act, which incorporates by reference the description of the shares of our common stock contained in the section entitled “Description of Securities” in our Registration Statement on [Form S-1](#) (File No. 333-249690), as updated by the description of common stock included in [Exhibit 4.2](#) to our Annual Report on Form 10-K for the year ended December 31, 2021, filed with the SEC on March 31, 2022, together with any subsequent amendment or report for the purpose of updating such description.

All documents that we filed with the SEC pursuant to Sections 13(a), 13(c), 14, and 15(d) of the Exchange Act subsequent to the date of this registration statement and prior to the filing of a post-effective amendment to this registration statement that indicates that all securities offered under this prospectus have been sold, or that deregisters all securities then remaining unsold, will be deemed to be incorporated in this registration statement by reference and to be a part hereof from the date of filing of such documents.

Any statement contained in a document incorporated or deemed to be incorporated by reference in this prospectus shall be deemed modified, superseded or replaced for purposes of this prospectus to the extent that a statement contained in this prospectus, or in any subsequently filed document that also is deemed to be incorporated by reference in this prospectus, modifies, supersedes or replaces such statement. Any statement so modified, superseded or replaced shall not be deemed, except as so modified, superseded or replaced, to constitute a part of this prospectus. None of the information that we disclose under Items 2.02 or 7.01 of any Current Report on Form 8-K or any corresponding information, either furnished under Item 9.01 or included as an exhibit therein, that we may from time to time furnish to the SEC will be incorporated by reference into, or otherwise included in, this prospectus, except as otherwise expressly set forth in the relevant document. Subject to the foregoing, all information appearing in this prospectus is qualified in its entirety by the information appearing in the documents incorporated by reference.

You may request, orally or in writing, a copy of these documents, which will be provided to you at no cost (other than exhibits, unless such exhibits are specifically incorporate by reference), by contacting the Company at Blue Water Vaccines Inc., at 201 E. Fifth Street, Suite 1900, Cincinnati, OH 45202, attention: Corporate Secretary. Our telephone number is (513) 620-4101. Information about us is also available at our website at <http://www.bluewatervaccines.com>. However, the information in our website is not a part of this prospectus and is not incorporated by reference.



BLUE WATER VACCINES INC.
Up to \$3,900,000 of Shares
Common Stock

PROSPECTUS SUPPLEMENT

H.C. WAINWRIGHT & CO.

March 29, 2023
