

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

September 17, 2021

Joseph Hernandez Chief Executive Officer Blue Water Vaccines Inc. 201 E. Fifth Street, Suite 1900 Cincinnati, OH 45202

Re: Blue Water Vaccines Inc.
Draft Registration Statement on Form S-1
Submitted on August 23, 2021
CIK No. 000178210

Dear Mr. Hernandez:

We have reviewed your draft registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing the information you provide in response to these comments and your amended draft registration statement or filed registration statement, we may have additional comments.

Draft Registration Statement on Form S-1 Submitted on August 23, 2021

Prospectus Summary, page 1

- 1. Please tell us your consideration of including summary risk and Risk Factor disclosure concerning the clinical trial risks associated with pediatric trials. We note that based on your disclosures at least two of your vaccine programs, specifically your your universal influenza vaccine candidates being developed in collaboration with Cincinnati Children's Hospital and your *S. pneumoniae* vaccine candidate being developed in collaboration with St. Jude Children's Hospital, are intended for use in pediatric populations.
- 2. We note the following unqualified statements regarding vaccines on page 1 and page 74 of the prospectus:
 - "Vaccination is an effective method of protecting individuals against harmful

diseases by utilizing the body's natural defense system to develop resistance or immunity to infections;" and

• "Vaccines introduce or present these foreign pathogens in a safe manner, prompting the body's immune system produce a response protective against the pathogen without exposing the body to the relevant lethal or harmful infection."

We also note the following conclusory statements with respect to your particular vaccine candidates and platforms:

- "We have bioengineered these nanoparticles to be stable and effective . . ." (pages 2 and 77)
- "Unlike traditional live-attenuated and inactivated virus vaccines that need cultivation of infectious virions and are associated with certain safety concerns, the nonreplicating VLP vaccines derived from bioengineered viral capsid proteins do not involve an infectious agent and, therefore, are safer and have lower manufacturing costs than traditional vaccines." (page 77)
- "Such VLPs and capsid-like nanoparticles are excellent vaccine candidates against corresponding viral pathogens..." (page 78)
- "[T]he natures of self-formation, high stability, polyvalence, and high immunogenicity of the nanoparticles and polymers make them potent platforms..." (page 78)

As safety and efficacy determinations are solely within the authority of the FDA and comparable regulatory bodies, it is inappropriate to make a conclusory statement about vaccines, generally, or your products, specifically, that could imply that your vaccines will be determined to be safe or effective. Please revise these statements and any similar statements throughout your prospectus that may suggest the safety and efficacy of your candidates, platforms, or technologies.

Key Elements of our Platform, page 2

- 3. Given the early pre-clinical stage of development of each of your vaccine candidates, please provide the basis for the following claims on pages 2 and 77 in the summary prospectus and business section, respectively, or revise:
 - "We are able to design and create novel vaccines that are stable and scalable for broad spectrum prophylactics."
 - "We are able to significantly reduce the cost and time to market of traditional vaccines."
 - "We have bioengineered these nanoparticles to be stable and effective using E.coli expression, which provides cost savings and efficiency."

Pipeline, page 2

- 4. With respect to your pipeline table on page 2 and 75:
 - Please revise your chart to indicate the material stages you will need to complete

- before marketing your products (i.e., show all phases of the FDA approval process). For instance, please add Phase I, II and III to your chart.
- Please combine the "Discovery" and "Optimization" columns, as both relate to preclinical development and are not sufficiently distinct, and may give the impression that your product candidates are further along in the clinical process than they actually are. Note that we will not object to pre-clinical stage columns labeled as "Discovery" and/or "IND Enabling."
- Please revise to delete the rows for any preclinical product candidate that is not currently material to your business. In this regard, we note your disclosure on page 3 that your strategic plan is "to advance [your] main vaccine programs: influenza, norovirus-rotavirus, and S. pneumoniae induced AOM" and it appears that there is only minimal discussion of this program in one paragraph in the prospectus summary but no discussion of your BWV-302 vaccine program in the Business section of your prospectus. As such, it appears that BWV-302 is not currently sufficiently material to your operations to warrant inclusion in the pipeline table and should be removed. We further note that the "status" column for the Norovirus/Malaria row of the pipeline table indicates that you plan to start IND-enabling studies for this candidate in the second half of 2022. It appears that this statement is speculative and premature, particularly in light of your disclosure on page 68 that your current cash position is sufficient to fund your operations only until Q2 2022, and that your ability to continue as a going concern beyond that point is contingent upon obtaining funding from sales of your securities in this offering.

Our Vaccine Candidates, page 3

5. We note that you have included limited discussion of BWV-302, your Norovirus-Malaria vaccine program, in one paragraph in the prospectus summary on page 3. This appears to be the only discussion of BWV-302 in the prospectus, as there is no discussion of this program in the Business section or elsewhere. If BWV-302 is sufficiently material to your business to warrant discussion, please either revise your Business section to include a complete description of this program, or remove references to BWV-302 in the prospectus summary.

Management and History, page 4

6. Based on your risk factor disclosure on page 34 and your management disclosures beginning on page 111, we note that your CEO, Joseph Hernandez, also holds certain management positions and directorships of other companies and may allocate his time to other businesses. Please balance your prospectus summary disclosures regarding Mr. Hernandez' experience and qualifications in the Management and History section of the prospectus summary with disclosure in that section and the Summary of Risks Related to Our Business section regarding Mr. Hernandez' outside employment or business relationships, including specifying the amount of time he devotes to your business activities and the nature of any material conflicts of interest that may exist as a result of

him working for your company on a part-time basis. Please also make conforming revisions to your Risk Factor disclosure as appropriate.

Strategy, page 4

- 7. We note statements such as the following throughout your prospectus:
 - Disclosure on pages 2 and 77 that states: "We are able to significantly reduce the cost and time to market of traditional vaccines."
 - Disclosure on page 4 regarding your strategy to "leverage the pre-clinical and clinical experience from the development of BWV-102, H1 vaccine candidate, to accelerate the development of the of BWV-101 program;"
 - Disclosure on page 75 regarding your strategy to "leverage the learnings from the development of BMW-102[sic], H1 vaccine candidate, to accelerate the development of the of BWV-101 universal influenza vaccine program;" and
 - Disclosure on page 83 regarding your proprietary epitopes, which you state "are able to be formulated into a vaccine using our VLP platform technologies and may be evaluated using other vaccine technologies through partnerships in order to accelerate development of vaccines or to explore adjunct therapies." Please revise these and any similar disclosures throughout the prospectus to remove any implication that you or your collaborators will be successful in developing vaccines that obtain necessary regulatory approvals or commercializing your product candidates in a rapid or accelerated manner, as such statements are speculative.

Summary of Risks Related to Our Business, page 5

- 8. We note that in the summary risk factors and Risk Factors section, you disclose that there is substantial doubt about your ability to continue as a going concern. You also note in the Risk Factors that your auditors have issued a going concern opinion regarding your operations. Please revise your disclosure throughout your prospectus as follows:
 - Expand and balance your disclosure in your Prospectus Summary by including discussion regarding your company's recurring operating losses, negative cash flows from operating activities, and the auditor's going concern opinion.
 - Disclose in the Risk Factors Summary, if true, that you currently have cash on hand sufficient to fund your operations only into Q2 2022, and that your ability to continue as a going concern beyond that point is contingent upon obtaining funding from sales of your securities in this offering. State, if true, your belief that your existing cash position, together with the net proceeds from this offering, will fund your current operating plans through at least 12 months from the date of this offering, and further disclose that you will also need to raise additional capital beyond this offering to commence pivotal trails for any of your vaccine candidates as you have on page 68. Disclose that if you cannot continue as a viable entity, your stockholders may lose some or all of their investment in your company. Similarly, please make conforming revision to your going concern risk factor on page 14.

Risk Factors

<u>Risks Related to Owning our Common Stock and this Offering</u>
We have broad discretion in the use of the net proceeds from this offering..., page 49

9. We note the following statement in a risk factor on page 49: "While we set forth our anticipated use for the net proceeds from this offering in the section titled 'Use of Proceeds,' our management will have broad discretion on how to use and spend any proceeds that we receive from this offering and may use the proceeds in ways that differ from the anticipated uses set forth in this prospectus." We direct your attention to Instruction 7 to Item 504 of Regulation S-K, which allows your company to reserve the right to change the use of proceeds, provided such reservation is due to certain contingencies that are discussed specifically and the alternatives to such use in the event of such contingencies are indicated. Please revise your risk factor and Use of Proceeds disclosures accordingly.

Industry and Market Data, page 56

10. We note your statement that certain information contained in the prospectus involves a number of assumptions and limitations, and investors are cautioned not to give undue weight to such estimates. Please revise to remove any implication that investors are not entitled to rely on the disclosure in your registration statement.

Use of Proceeds, page 57

11. We note your statement on page 57 that you intend to use the net proceeds from this offering to: (i) Fund your research and development activities; (ii) Fund clinical trials and the regulatory review process for your products; and (iii) Use the remained for working capital and other general corporate purposes. We also refer to your statements on pages 6 and 14, respectively, that "[d]ue to the significant resources required for the development of vaccine candidates, and depending on [your] ability to access capital, [you] must prioritize the development of certain vaccine candidates" and "[you] must decide which vaccine candidates to pursue and advance and the amount of resources to allocate to each." In this regard, please revise your Use Of Proceeds disclosure to provide your best reasonable estimate regarding: (1) the specific vaccine candidate(s) for which you intend to fund R&D activities using proceeds from this offering; and (2) the specific vaccine candidate(s) you expect to advance into clinical trials, and how far into development and/or the regulatory review process you expect such programs to reach using the offering proceeds, including the specific phases of clinical trials.

Capitalization, page 59

- 12. Please address the following:
 - Tell us why it is appropriate to include the Accounts payable and accrued expenses in your Capitalization table.

- Place a double line beneath the Cash line item in the table.
- You state below the table that the number of shares of your common stock to be outstanding after this offering is based on 2,136,8555 shares of common stock as of August 1, 2021 (after giving effect to the conversion of all outstanding shares of preferred stock into an aggregate of 1,336,855 shares). If you believe the preferred stock will convert upon the offering, please tell us why. In this regard, we note the conversion requirements disclosed in Note 5 on page F-15. If the preferred stock will convert upon the IPO, revise your discussion above the table to include the conversion in the pro forma basis column and elsewhere in the filing as applicable.

Business

S60 nanoparticles may serve as a polyvalent potent vaccine platform, page 80

- We note your conclusion in this section and elsewhere in your prospectus that certain nanoparticles are "potent platforms" or "potent vaccine platforms." Given that you do not appear to have presented any data as to potency, please tell us the basis for these claims or revise.
 - Please also provide the basis for the following statements within this section. Where appropriate, you may revise to state that a claim reflects management's belief:
 - "Importantly, our S60 nanoparticles maintained the native conformation with authentic antigenicity; thus, our NoV S60 nanoparticle technology represents a significant bioengineering advancement."
 - "The self-assembled, polyvalent S60 nanoparticle with 60 flexibly exposed S domain C-termini is an ideal vaccine platform..."
 - We refer you to the final three bullets in this section, where you appear to present certain research findings without context. Please revise your disclosure to include a description of the research studies you refer to, including who performed such studies, how the tests were conducted, the number of animal models or human subjects used, the number of tests conducted, the range of results or effects observed in these tests, and how such results were measured. Expand your descriptions of any resulting data to include whether or not statistical analysis was performed, and if so, revise to indicate whether the results from each test were statistically significant and provide the relevant p and n values.

The P24 Nanoparticle as a versatile platform, page 81

14. We refer you to the final bullet in this section. As it is unclear to what studies demonstrating immune response you refer, please identify the relevant research studies.

Antigenic Drift Hypothesis Illustration, page 84

15. We refer you to the second, third, and fourth paragraphs in this section where you

discuss prior work conducted by "scientists" including "laboratory assays" and "vaccination of mice" and prior "research findings" that have informed the basis for your influenza vaccine candidates. As it is unclear to what scientists or research you refer, please identify the relevant studies. Please make similar changes where you discuss the prior scientific work of others on which you rely elsewhere in the prospectus.

BWV-101: Universal Influenza Vaccine, page 84

16. We refer to the final paragraph of this section, in which you state that you "have identified naturally immunogenic epitopes for H1, H3 and influenza B" through bioinformatics studies and wet lab studies that "suggest that these epitopes, especially H1N1, and the chimeric scaffold configuration of our vaccine induce immunity..."For this and each of your other vaccine candidates, please expand your disclosure of any referenced preclinical studies or early research data to provide appropriate context with which investors can evaluate your findings. To that end, please revise to include more detailed descriptions of each pre-clinical study conducted, including who conducted the study, the type and number of tests conducted, how the tests were conducted, the number of animal models or subjects used, the number of tests conducted, the range of results or effects observed in these tests, and how such results were measured. Expand your descriptions of any resulting data to include whether or not statistical analysis was performed, and if so, revise to indicate whether the results from each test were statistically significant and provide the relevant p and n values.

BVW-201: Streptococcus pneumoniae (S. pneumoniae) Vaccine, page 85

- On page 85, we note that you have provided a bulleted list of "additional statistics supporting the need for a novel preventive vaccine" for AOM. Please expand your disclosure to include the source or sources you used or otherwise describe how you arrived at the statistics you include.
 - Beginning on page 86, we note your discussion of pre-clinical results from the animal model research and development of BWV-201 for treatment of AOM. In that discussion, you compare the S. pneumoniae ftsY deletion strain from which your vaccine candidate is derived, BHN97ftsY, with alternative treatments such as currently approved pneumococcal vaccines. As you have not conducted head-to-head clinical trials, please tell us why you believe it is appropriate to include these comparisons. Include in your response whether you expect to be able to rely on this data to support an IND application for BWV-201 from the FDA.

Intellectual Property, page 105

18. In relation to the company's material patents, please further revise your intellectual property disclosure to clearly describe on an individual or patent family basis the type of patent protection granted for each product or technology (composition of matter, use, or process) and the jurisdiction, including any foreign jurisdiction, of each material pending or issued patent. Additionally, we note your disclosures that the term of various license

agreements may end upon the last-to-expire patent on a jurisdiction by jurisdiction and product by product basis. Please revise to clarify when the last of these patents are expected to expire.

- 19. Please revise your disclosures regarding each of your license and option agreements to include a discussion of all material payment terms, including quantification of the following:
 - Up-front or execution payments paid or received.
 - Annual maintenance fees.
 - Aggregate amounts paid or received.
 - Aggregate future potential milestone payments to be paid or received.
 - Profit or revenue-sharing provisions.
 - Applicable royalty rates to be paid by each party. In the event a range is provided in place of the actual royalty rate, such range should be within ten percentage points.
- 20. With respect to the option agreement between your company and Oxford University Innovation Limited, we note that obtaining the license agreement was conditioned upon the Company entering into a separate agreement with Oxford University to provide funding for three years' salary for Dr. Craig Thompson in the University's Department of Zoology, which was paid by the Company in January 2020. Please disclose the aggregate amount paid pursuant to such separate agreement.

Manufacturing and Supply, page 110

21. We note that you have entered into a development and manufacturing master services agreement with Ology. Please expand your disclosure to include the material terms of the agreement, including the financial terms and termination provisions. Additionally, please file the agreement as an exhibit or advise us why this is not a material contract. See Item 601(b)(10) of Regulation S-K.

Management, page 111

- 22. Please revise the discussion of your executive officers' and directors' business experience to provide clear disclosure regarding the business experience of each such officer and director during the past five years as required by Item 401(e)(1) of Regulation S-K. By way of example only, we note that the description of Erin Henderson's business experience begins in September 2018 and it is unclear from your disclosure whether Ronald Cobb's business experience with Nanotherapeutics beginning in 2011 continued until the start of his employment with Blue Water Vaccines in August 2021.
- 23. Based on your Management disclosures beginning on page 111, we note that several of your executive officers appear to have outside management, advisory or directorship positions with other companies and may allocate their time to other businesses. Please revise your prospectus disclosures as follows:

- Include an appropriately captioned risk factor to discuss, if true, that certain executive
 officers serve in their positions on a part-time basis and/or otherwise clarify the
 number of hours they have agreed to dedicate to the business affairs of your
 company. To the extent material, please also identify and describe any potential
 conflicts of interest that exist, or may exist, as a result of your executive officers'
 outside business relationships.
- Please balance your prospectus summary disclosures regarding your executive
 officers' experience and qualifications in the Management and History section of the
 prospectus summary with disclosure in that section and the Summary of Risks
 Related to Our Business section regarding their outside employment or business
 relationships, including specifying the amount of time they devote to your business
 activities and the nature of any material conflicts of interest that may exist as a result
 of them working for your company on a part-time basis.

Choice of Forum, page 132

We note your choice of forum provision. We refer you to the penultimate and final 24. sentences of the Choice of Forum section beginning on page 132, which pertain to the provision's intended application to claims arising under the Securities Act. We note that these sentences seem to conflict. Please revise your disclosure to state that investors cannot waive compliance with the federal securities laws and the rules and regulations thereunder, and clarify whether your Amended and Restated Certificate of Incorporation will provide for concurrent jurisdiction or whether the federal district courts of the United States will be the exclusive forum for asserting any cause of action under the Securities Act, unless you consent in writing to an alternative forum. To the extent the latter will apply, please revise your disclosure to state that there is uncertainty as to whether a court would enforce a provision that limits limits the choice of forum to federal court. In this regard, we note that Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder. Please also revise your risk factors to provide clear and prominent risk factor disclosure of the impact and risks to shareholders related to the provision. Such risks may include, but are not limited to, increased costs to bring a claim and that these provisions can discourage claims or limit investors' ability to bring a claim in a judicial forum that they find favorable.

Notes to Financial Statements

Note 1 - Organization, Plan of Business Operations, page F-7

25. Please clarify that all of your vaccine candidates in the preclinical developmental stage.

Note 7 - Commitments and Contingencies Significant Agreements, page F-18

Significant rigicements, page 1-10

26. Please separately disclose in the filing the amount of milestone payments you may be

required to pay for each type of event (e.g. development, regulatory and commercial).

General

27. Please supplementally provide us with copies of all written communications, as defined in Rule 405 under the Securities Act, that you, or anyone authorized to do so on your behalf, present to potential investors in reliance on Section 5(d) of the Securities Act, whether or not they retain copies of the communications.

You may contact Mary Mast at 202-551-3613 or Tara Harkins at 202-551-3639 if you have questions regarding comments on the financial statements and related matters. Please contact Lauren Hamill at 303-844-1008 or Celeste Murphy at 202-551-3257 with any other questions.

Sincerely,

Division of Corporation Finance Office of Life Sciences

cc: Jessica Yuan