

April 15, 2024

Office of Industrial Applications and Services
Division of Corporate Finance
Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549
Attn: Juan Grana and Jane Park

**Re: Pulse Biosciences, Inc.
Registration Statement on Form S-3
Filed April 3, 2024
File No. 333-278494**

Ladies and Gentlemen:

On behalf of Pulse Biosciences, Inc., a Delaware corporation (“we” or “Company”), we submit to the staff (the “Staff”) of the Securities and Exchange Commission (the “Commission”) this letter setting forth the Company’s responses to the comments contained in the Staff’s letter dated April 10, 2024, regarding the Company’s Registration Statement on Form S-3 filed with the Commission on April 3, 2024 (File No. 333-278494) (the “Registration statement”). For the Staff’s convenience, we have repeated below each of the Staff’s comments in bold, and have followed such comment with the Company’s response. Concurrently with the transmission of this letter, we are filing the Company’s Amendment No. 1 to Form S-3 Registration Statement (the “Amended Registration Statement”) with the Commission through EDGAR, which reflects the Company’s responses to the comments received by the Staff. All page references in the responses set forth below refer to page numbers in the Amended Registration Statement. Capitalized terms used herein but not otherwise defined herein have the meanings set forth in the Amended Registration Statement.

Form S-3 filed April 3, 2024

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1. **With a view to disclosure, please tell us what consideration you gave to including a floor price for the offer.**

Given that the Company’s Board of Directors reserves the right to terminate the Rights Offering at any time, the Company concluded that a floor price was not in the best interests of the Company, especially given concerns that setting a floor price can have the effect of market forces leading to a price at the floor price. We further note that the Company believes that the Alternate Price’s 10 trading day VWAP feature is fair to the Company’s existing stockholders, because it causes the final price to be reflective of the market. The Company’s Board of Directors also concluded that the Rights Offering was the least dilutive financing option available to the Company and therefore fairest to our stockholders. In further response to the Staff’s comment, the Company has revised its disclosure on pages 18 and 19 of the Amended Registration Statement.

Certain U.S. Federal Income Tax Consequences, page 31

2. **Item 601(b)(8) of Regulation S-K states that a tax opinion must be filed whenever the tax consequences of a transaction “are material to an investor and a representation as to tax consequences is set forth in the filing.” We note your disclosure that you “believe and intend to take the position that the distribution of the subscription rights in connection with the Rights Offering generally should not be a taxable event to holders of [y]our common stock for U.S. federal income tax purposes.” Please file a tax opinion as an exhibit to the filing. We refer you to Section III.A.1 of Staff Legal Bulletin 19.**

The Company believes that an opinion on tax matters is not required under Item 601(b)(8) of Regulation S-K as the tax consequences are not material to an investor (as contemplated by Section III.A.2 of Staff Legal Bulletin No. 19) as a stockholder is not required to vote or make an investment decision with respect to receipt of the subscription rights received in the rights offering as the Company is issuing, at no charge, one subscription right with respect to each share of the Company’s common stock outstanding as of a record date. The Company notes that Section III.A.2 of Staff Legal Bulletin No. 19 provides that tax consequences are “material” if “there is a substantial likelihood that a reasonable investor would consider the information to be important in deciding how to vote or make an investment decision.”

Additionally, we ask the Staff to review its characterization of our disclosure that “we believe and intend to take the position that the distribution of the subscription rights in connection with the Rights Offering generally should not be a taxable event to holders of our common stock for U.S. federal income tax purposes” as a representation as to tax consequences. We point the Staff to the disclosure on page 32 of the Amended Registration Statement which says:

“Our position regarding the tax-free treatment of the receipt of subscription rights in this Rights Offering is not binding on the IRS or the courts, and there can be no assurance that the IRS or any applicable court would agree. If this position were finally determined to be incorrect, whether on the

basis that the issuance of the subscriptions rights constitutes a “disproportionate distribution” under the Code and Treasury Regulations or otherwise, the fair market value of the subscription rights would be taxable to holders of our common stock as a dividend on the date of the distribution to the extent of the holder’s pro rata share of our current and accumulated earnings and profits, if any, with any excess being treated as a return of capital to the extent of the holder’s basis in shares of our common stock and thereafter as capital gain.”

Read together, the disclosure of the Company’s position and the subsequent disclosure that the IRS may not agree with the Company’s position (and such disagreement would lead to different tax consequences than those anticipated by the Company’s position), is intended only (a) to disclose the uncertainty regarding such tax treatment and (b) to describe the position the Company intends to take with respect to such tax treatment.

Further, we believe that our position set out above is consistent with the Staff’s conclusion based on its review of correspondence filed on August 8, 2016 with the Staff by Par Pacific Holdings, Inc. (“Par Pacific”) in respect of its Registration Statement on Form S-3 (File No. 333-212107) (the “Par Pacific Registration Statement”) and related disclosure in the Par Pacific Registration Statement that was ultimately declared effective.

3. **We note that your heading refers to a discussion of "certain" U.S. federal income tax consequences. Please revise to refer to all material tax considerations. Refer to Section III.C.1 of Staff Legal Bulletin 19.**

Please see the revised heading in the Amended Registration Statement.

Exhibits

4. **We note that the legal opinion provided by Baker & Hostetler LLP assumes "with respect to Rights Shares and the Warrant Shares, that there will be sufficient shares of Common Stock authorized under the Company’s organizational documents that are not otherwise reserved for issuance". Please revise the legal opinion to remove this assumption. Refer to Section II.B.3 of Staff Legal Bulletin 19.**

In response to the Staff’s comment, Baker & Hostetler LLP has removed the assumption. Please see the revised opinion filed as Exhibit 5.1 to the Amended Registration Statement.

5. **We note that your filing fee table is registering common stock issuable upon exercise of subscription rights and exercise of warrants with a maximum aggregate offering price of \$126,000,000. We note, however, that you are registering 6,000,000 units, consisting of one share of common stock and 6,000,000 shares of common stock underlying the warrants included in the units, with a potential initial price of \$10.00 per unit. Please reconcile the maximum aggregate offering price in your filing fee table with the aggregate offering value disclosed in the registration statement.**

The \$126,000,000 maximum aggregate offering price is based: (a) the offer of 6,000,000 units (and the shares of common stock and warrants included in each such unit), for a maximum aggregate subscription price equal to \$60,000,000, based on a \$10.00 per unit maximum subscription price, and (b) the offer of the 6,000,000 shares of common stock underlying the warrants included in such 6,000,000 units, such underlying shares having a maximum aggregate exercise price of \$66,000,000, based on a \$11.00 maximum per share exercise price (which is 110% of the \$10.00 maximum subscription price per unit). We believe the dollar amounts referred to in the preceding sentence are consistent with the disclosure of the maximum per-unit subscription price and warrant exercise price provided throughout the Registration Statement. Please see the revised filing fee table filed as Exhibit 107 to the Amended Registration Statement.

We hope the foregoing has been responsive to the Staff’s comments and look forward to resolving any outstanding issues as quickly as possible. Please do not hesitate to contact me at (212) 589-4233 with any questions or further comments you may have regarding this submission or if you wish to discuss the above.

Sincerely,

/s/ Adam W. Finerman

Adam W. Finerman, Partner, Baker

& Hostetler LLP