

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

April 24, 2024

Kevin Danahy Chief Executive Officer Pulse Biosciences, Inc. 3957 Point Eden Way Hayward, CA 94545

> Re: Pulse Biosciences, Inc. Amendment No. 2 to Registration Statement on Form S-3 Filed April 23, 2024 File No. 333-278494

Dear Kevin Danahy:

We have reviewed your amended registration statement and have the following comment.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe a comment applies to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to this letter, we may have additional comments. Unless we note otherwise, any references to prior comments are to comments in our April 18, 2024 letter.

Amendment No. 2 to Form S-3 filed April 23, 2024

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

1. We acknowledge your revised disclosure in response to prior comment 1. Please revise to clearly articulate the opinion being rendered with respect to each material tax consequence being opined upon, including the receipt of the subscription rights. We also note your statement on page 32 that the tax discussion "assumes that the receipt by a holder of subscription rights with respect to such holder's common stock pursuant to this rights offering is non-taxable for U.S. federal income tax purposes." Please revise to remove language assuming certain tax consequences. For guidance, refer to Section III.C of Staff Legal Bulletin 19.

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Please contact Juan Grana at 202-551-6034 or Jane Park at 202-551-7439 with any other questions.

Sincerely,

Division of Corporation Finance Office of Industrial Applications and Services

cc: Adam Finerman, Esq.