

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**  
Washington, D.C. 20549

**AMENDMENT NO. 2  
TO  
FORM S-3  
REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933**

**PULSE BIOSCIENCES, INC.  
(Exact name of registrant as specified in its charter)**

Delaware  
(State or other jurisdiction of incorporation or organization)

46-5696597  
(I.R.S. Employer Identification Number)

3957 Point Eden Way  
Hayward, California 94545  
(510) 906-4600  
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Darrin R. Uecker  
President and Chief Executive Officer  
Pulse Biosciences, Inc.  
3957 Point Eden Way  
Hayward, California  
(510) 906-4600  
(Name, address, including zip code, and telephone number, including area code, of agent for service)

*Copies to:*

Andrew D. Hoffman  
Wilson Sonsini Goodrich & Rosati  
650 Page Mill Road  
Palo Alto, CA 94304  
(650) 493-9300

Sandra A. Gardiner  
Chief Financial Officer, Executive  
Vice President of Finance and  
Administration, Secretary and  
Treasurer  
Pulse Biosciences, Inc.  
3957 Point Eden Way  
Hayward, California 94545  
(510) 906-4600

From time to time, after the effective date of this Registration Statement  
(Approximate date of commencement of proposed sale to the public)

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large Accelerated filer	<input type="checkbox"/>	Accelerated filer	<input checked="" type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input checked="" type="checkbox"/>

If an emerging growth company, indicate by check mark if the registrant has selected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

The registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until this Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

## EXPLANATORY NOTE

This Amendment No. 2 to the Registration Statement on Form S-3, as amended, is being filed solely for the purpose of correcting Exhibit 23.2 to the Registration Statement to include the conformed signature of Deloitte and Touche LLP and to update the Exhibit List accordingly. This Amendment No. 2 does not modify the prospectus that forms a part of the Registration Statement. Accordingly, it has been omitted.

---

## PART II

### INFORMATION NOT REQUIRED IN PROSPECTUS

#### Item 14. Other Expenses Of Issuance And Distribution.

The following table sets forth the costs and expenses payable by the registrant in connection with the sale of the common stock being registered. All of the amounts shown are estimates except the SEC registration fee.

SEC Registration Fee	\$ 3,894
Subscription and Information Agent Fees and Expenses	12,000
Legal Fees and Expenses	300,000
Accounting Fees and Expenses	55,000
Printing and Mailing Expenses	45,000
Miscellaneous Expenses	10,106
Total	\$ 426,000

#### Item 15. Indemnification of Directors and Officers.

Under Section 145 of the Delaware General Corporation Law, Registrant has broad powers to indemnify its directors and officers against liabilities they may incur in such capacities, including liabilities under the Securities Act of 1933, as amended (the "Securities Act"). Registrant's Bylaws (the "Bylaws") provide that Registrant shall indemnify its directors and officers if such officer or director acted (i) in good faith, (ii) in a manner reasonably believed to be in or not opposed to the best interests of Registrant, and (iii) with respect to any criminal action or proceeding, had no reasonable cause to believe such conduct was unlawful. Registrant believes that indemnification under its Bylaws covers at least negligence and gross negligence, and requires Registrant to advance litigation expenses in the case of stockholder derivative actions or other actions, against an undertaking by the directors and officers to repay such advances if it is ultimately determined that the director is not entitled to indemnification. The Bylaws further provide that rights conferred under such Bylaws shall not be deemed to be exclusive of any other right such persons may have or acquire under any agreement, vote of stockholders or disinterested directors, or otherwise.

In addition, Registrant's Certificate of Incorporation (the "Certificate of Incorporation") provides that, pursuant to Delaware law, none of its directors shall be liable for monetary damages for breach of his or her fiduciary duty of care to Registrant and its stockholders to the fullest extent permitted by the Delaware General Corporation Law as it presently exists or may hereafter be amended from time to time. This provision in the Certificate of Incorporation does not eliminate the duty of care, and in appropriate circumstances equitable remedies such as injunctive or other forms of non-monetary relief will remain available under Delaware law. In addition, each director will continue to be subject to liability for breach of the director's duty of loyalty to Registrant for acts or omissions not in good faith or involving intentional misconduct, for knowing violations of law, for actions leading to improper personal benefit to the director, and for payment of dividends or approval of stock repurchases or redemptions that are in willful or negligent violation of applicable Delaware law. The provision also does not affect a director's responsibilities under any other law, such as the federal securities laws or state or federal environmental laws. The Certificate of Incorporation further provides that Registrant shall indemnify its directors and officers to the fullest extent permitted by law and requires Registrant to advance litigation expenses in the case of stockholder derivative actions or other actions, against an undertaking by the director to repay such advances if it is ultimately determined that the director is not entitled to indemnification. The Certificate of Incorporation also provides that rights conferred under such Certificate of Incorporation shall not be deemed to be exclusive of any other right such persons may have or acquire under any statute, the Certificate of Incorporation, the Bylaws, agreement, vote of stockholders or disinterested directors, or otherwise.

Registrant has obtained liability insurance policies for the officers and directors that, subject to certain limitations, terms and conditions, will insure them against losses arising from wrongful acts (as defined by the policy) in their capacity as directors or officers.

In addition, Registrant has entered into agreements to indemnify its directors and certain of its officers in addition to the indemnification provided for in the Certificate of Incorporation and Bylaws. These agreements, among other things, indemnify Registrant's directors and certain of its officers for certain expenses (including attorney's fees), judgments, fines and settlement amounts incurred by such person in any action or proceeding, including any action by or in the right of Registrant, on account of services as a director or officer of Registrant or as a director or officer of any subsidiary of Registrant, or as a director or officer of any other company or enterprise that the person provides services to at the request of Registrant.

---

**Item 16. Exhibits.**

The following exhibits are filed herewith or incorporated by reference herein:

Exhibit Number	Exhibit Description	Form	Incorporation by Reference		
			File No.	Exhibit(s)	Filing Date
<a href="#">2.1</a>	Plan of Conversion of Pulse Biosciences, Inc.	8-K12B	001-37744	2.1	June 18, 2018
<a href="#">3.1</a>	Articles of Conversion	8-K12B	001-37744	3.1	June 18, 2018
<a href="#">3.2</a>	Certificate of Conversion	8-K12B	001-37744	3.2	June 18, 2018
<a href="#">3.3</a>	Certificate of Incorporation of Pulse Biosciences, Inc.	8-K12B	001-37744	3.3	June 18, 2018
<a href="#">3.4</a>	Bylaws of Pulse Biosciences, Inc.	8-K12B	001-37744	3.4	June 18, 2018
<a href="#">4.1</a>	Specimen Common Stock Certificate	8-K12B	001-37744	4.1	June 18, 2018
<a href="#">4.2</a>	Form of Non-Transferable Subscription Rights Certificates	S-3	333-237577	4.2	April 6, 2020
<a href="#">5.1</a>	Opinion of Wilson Sonsini Goodrich & Rosati, P.C.	S-3	333-237577	5.1	April 6, 2020
<a href="#">23.1</a>	Consent of Gumbiner Savett Inc., Independent Registered Public Accounting Firm	S-3/A	333-237577	23.1	April 14, 2020
<a href="#">23.2*</a>	Consent of Deloitte and Touche LLP, Independent Registered Public Accounting Firm				
<a href="#">23.3</a>	Consent of Wilson Sonsini Goodrich & Rosati, P.C. (contained in Exhibit 5.1 to the original filing of this registration statement)	S-3	333-237577	23.3	April 6, 2020
<a href="#">24.1</a>	Powers of Attorney (included on the signature page to the original filing of this registration statement)	S-3	333-237577	24.1	April 6, 2020
<a href="#">99.1</a>	Form of Instruction for Use of Pulse Biosciences, Inc.'s Non-Transferable Subscription Rights Certificates	S-3	333-237577	99.1	April 6, 2020
<a href="#">99.2</a>	Form of Letter to Stockholders Who are Record Holders	S-3	333-237577	99.2	April 6, 2020
<a href="#">99.3</a>	Form of Letter to Brokers and Other Nominee Holders	S-3	333-237577	99.3	April 6, 2020
<a href="#">99.4</a>	Form of Letter to Clients of Brokers and Other Nominee Holders	S-3	333-237577	99.4	April 6, 2020
<a href="#">99.5</a>	Form of Nominee Holder Certification	S-3	333-237577	99.5	April 6, 2020
<a href="#">99.6</a>	Form of Beneficial Owner Election	S-3	333-237577	99.6	April 6, 2020

\* Filed herewith

**Item 17. Undertakings.**

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

*provided, however*, that paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act to any purchaser:

(i) If the registrant is relying on Rule 430B,

(A) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5) or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii) or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date; or

(ii) If the registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.



(5) That, for the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer and sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(c) The undersigned registrant hereby undertakes to supplement the prospectus, after the expiration of the subscription period, to set forth the results of the subscription offer, the transactions by the underwriters during the subscription period, the amount of unsubscribed securities to be purchased by the underwriters, and the terms of any subsequent reoffering thereof. If any public offering by the underwriters is to be made on terms differing from those set forth on the cover page of the prospectus, a post-effective amendment will be filed to set forth the terms of such offering.

(d) The undersigned registrant hereby undertakes to deliver or cause to be delivered with the prospectus, to each person to whom the prospectus is sent or given, the latest annual report to security holders that is incorporated by reference in the prospectus and furnished pursuant to and meeting the requirements of Rule 14a-3 or Rule 14c-3 under the Exchange Act; and, where interim financial information required to be presented by Article 3 of Regulation S-X are not set forth in the prospectus, to deliver, or cause to be delivered to each person to whom the prospectus is sent or given, the latest quarterly report that is specifically incorporated by reference in the prospectus to provide such interim financial information.

(e) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding), is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

(f) The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

---

## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement on Form S-3 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Hayward, California, on April 21, 2020.

### PULSE BIOSCIENCES, INC.

By: /s/ Darrin R. Uecker  
Darrin R. Uecker  
*President and Chief Executive Officer*

Pursuant to the requirements of the Securities Act of 1933 this registration statement has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Darrin R. Uecker</u> Darrin R. Uecker	President, Chief Executive Officer and Director <i>(Principal Executive Officer)</i>	April 21, 2020
<u>/s/ Sandra A. Gardiner</u> Sandra A. Gardiner	Chief Financial Officer, Executive Vice President of Finance and Administration, Secretary and Treasurer <i>(Principal Financial and Accounting Officer)</i>	April 21, 2020
<u>*</u> Robert W. Duggan	Chairman of the Board of Directors	April 21, 2020
<u>*</u> Kenneth A. Clark	Director	April 21, 2020
<u>*</u> Mitchell E. Levinson	Director	April 21, 2020
<u>*</u> Manmeet S. Soni	Director	April 21, 2020
<u>*</u> Mahkam Zanganeh	Director	April 21, 2020
<u>*By: /s/ Sandra A Gardiner</u> Sandra A. Gardiner Attorney-in-fact		

---



**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in this Registration Statement on Amendment No. 1 to Form S-3 of our report dated March 16, 2020, relating to the financial statements of Pulse Biosciences, Inc. appearing in the Annual Report on Form 10-K of Pulse Biosciences, Inc. for the year ended December 31, 2019. We also consent to the reference to us under the heading “Experts” in such Registration Statement.

/s/ Deloitte and Touche LLP

San Jose, California

April 14, 2020

---