

PACIFIC BIOSCIENCES OF CALIFORNIA, INC.  
 Form 424B7  
 March 20, 2015

Filed Pursuant to Rule 424(b)(7)

Registration No. 333-187363

**PROSPECTUS SUPPLEMENT NO. 1**

**Dated March 20, 2015**

(To prospectus dated April 29, 2013)

**Shares of Common Stock Issuable Upon Exercise of Warrants**

**Pacific Biosciences of California, Inc.**

This Prospectus Supplement No. 1 supplements the prospectus dated April 29, 2013 included in a registration statement that we filed with the SEC using the shelf registration process.

The Selling Stockholders table on page 10 of the prospectus is hereby modified to reflect a transfer of a warrant representing the right to acquire 501,037 shares of our common stock from Deerfield Special Situations International Master Fund, L.P. to Deerfield Special Situations Fund, L.P. The information below is based on information provided to us by or on behalf of the selling stockholders listed below on or before March 20, 2015 and we have not independently verified this information.

This prospectus supplement should be read in conjunction with the prospectus, and this prospectus supplement is qualified by reference to the prospectus except to the extent that the information contained herein supersedes the information contained in the prospectus. Capitalized terms used in this prospectus supplement and not otherwise defined herein have the meanings specified in the prospectus.

**SELLING STOCKHOLDERS**

| <b>Name of Selling Stockholder(1)</b>           | <b>Number of Shares Beneficially Owned Prior to the Offering(2)</b> | <b>Number of Shares Offered Hereby(3)</b> | <b>Number of Shares Beneficially Owned After the Offering</b> | <b>Percent of Class Beneficially Owned After the Offering</b> |
|---|---|---|---|---|
| Deerfield Private Design Fund II, L.P.          | 2,000,390(3)(4)   | 2,000,390                                 |   |   |
| Deerfield Private Design International II, L.P. | 2,292,293(3)(4)   | 2,292,293                                 |   |   |

|   |                 |           |   |
|---|-----------------|-----------|---|
| Deerfield Special Situations Fund, L.P. | 1,207,317(3)(4) | 1,207,317 | % |
|---|-----------------|-----------|---|

- (1) Information concerning named selling stockholders or future transferees, pledgees, assignees, distributees, donees or successors of or from any such stockholder or others who later hold any selling stockholder's interests will be set forth in supplements to this prospectus, absent circumstances indicating that the change is material. In addition, post-effective amendments to the registration statement of which this prospectus forms a part will be filed to disclose any material changes to the plan of distribution from the description in the final prospectus.

- (2) Beneficial ownership is determined in accordance with the rules and regulations of the SEC. In computing the number of shares beneficially owned by a person and the percentage ownership of that person, securities that are currently convertible or exercisable into shares of our common stock, or convertible or exercisable into shares of our common stock within 60 days of the date hereof are deemed outstanding. Such shares, however, are not deemed outstanding for the purposes of computing the percentage ownership of any other person.
- (3) Represents shares of common stock issuable upon exercise of warrants. The number of shares of common stock issuable upon exercise of the warrants is subject to adjustment as a result of stock splits, stock dividends or similar transactions as set forth in the warrants. As a result, the number of shares issuable upon exercise of the warrants may increase or decrease in the future.
- (4) James E. Flynn, with an address at 780 Third Avenue, 37<sup>th</sup> Floor, New York, New York 10017 has voting and disposition power over these securities.