Filed Pursuant to Rule 424(b)(5) Registration No. 333-249999

SUBJECT TO COMPLETION, DATED JANUARY 24, 2023

PROSPECTUS SUPPLEMENT (To Prospectus dated November 10, 2020)

\$150,000,000



Pacific Biosciences of California, Inc.

COMMON STOCK

We are offering \$150,000,000 of shares of our common stock.

Our common stock is listed on The Nasdaq Global Select Market under the symbol "PACB." On January 23, 2023, the last reported sale price for our common stock on The Nasdaq Global Select Market was \$11.33 per share. Assuming a public offering price equal to such last reported sale price, we would offer 13,239,187 shares in this offering.

Our business and an investment in our common stock involve significant risks. These risks are described under the caption "Risk Factors" beginning on page <u>S-6</u> of this prospectus supplement.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

	Public Offering Price	Discounts and Commissions ⁽¹⁾	Proceeds to Pacific Biosciences of California, Inc. (before expenses)
Per Share	\$	\$	\$
Total	\$	\$	\$

⁽¹⁾ See "Underwriting" beginning in page <u>S-16</u> of this prospectus supplement for additional information regarding the compensation payable to the underwriters.

We have granted the underwriters an option for a period of 30 days to purchase up to an additional \$22,500,000 of shares of our common stock.

The underwriters expect to deliver the shares to purchasers on or about , 2023.

Joint Book Running Managers

GOLDMAN SACHS & CO. LLC MORGAN STANLEY COWEN ALLEN & COMPANY LLC

Prospectus supplement dated

, 2023

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ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying prospectus relate to the offering of our common stock. Before buying any of the common stock that we are offering, we urge you to carefully read this prospectus supplement, the accompanying prospectus, any free writing prospectus that we have authorized for use in connection with this offering, and the information incorporated by reference as described under the headings "Where You Can Find More Information" and "Information Incorporated by Reference" in this prospectus supplement. These documents contain important information that you should consider when making your investment decision.

This document is comprised of two parts. The first part is this prospectus supplement, which describes the specific terms of this offering and also adds to, and updates information contained in, the accompanying prospectus and the documents incorporated by reference into this prospectus supplement and the accompanying prospectus. The second part, the accompanying prospectus, including the documents incorporated by reference into the accompanying prospectus, provides more general information, some of which may not apply to this offering. Generally, when we refer to this prospectus, we are referring to the combined document consisting of this prospectus supplement and the accompanying prospectus. In this prospectus supplement, as permitted by law, we "incorporate by reference" information from other documents that we file with the Securities and Exchange Commission, or the SEC. This means that we can disclose important information to you by referring to those documents. The information incorporated by reference is considered to be a part of this prospectus supplement and the accompanying prospectus and should be read with the same care. When we make future filings with the SEC to update the information contained in documents that have been incorporated by reference, the information included or incorporated by reference in this prospectus supplement is considered to be automatically updated and superseded. In other words, in case of a conflict or inconsistency between information contained in this prospectus supplement and information in the accompanying prospectus or incorporated by reference into this prospectus supplement, you should rely on the information contained in the document that was filed later.

We have not, and the underwriters have not, authorized anyone to provide any information other than that contained or incorporated by reference in this prospectus supplement, the accompanying prospectus or in any free writing prospectus that we have authorized for use in connection with this offering. We and the underwriters take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We and the underwriters are not making an offer to sell or soliciting an offer to buy our securities in any jurisdiction in which an offer or solicitation is not authorized or in which the person making that offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make an offer or solicitation. You should assume that the information appearing in this prospectus supplement, the accompanying prospectus, the documents incorporated by reference into this prospectus supplement and the accompanying prospectus, and in any free writing prospectus that we have authorized for use in connection with this offering, is accurate only as of the date of those respective documents. Our business, financial condition, results of operations, and prospects may have changed since those dates

Unless the context otherwise requires, as used in this prospectus supplement, "we," "us," "Pacific Biosciences," "PacBio," "the Company" and "our" refer to Pacific Biosciences of California, Inc., a Delaware corporation. The names "Pacific Biosciences," "PacBio," "Circulomics," "Omniome," "SMRT," "SMRTbell," "Iso-Seq," "Sequel," "Nanobind," "SBB," "Revio," "Onso" and our logo are our trademarks.

SUMMARY

This summary highlights selected information contained elsewhere or incorporated by reference in this prospectus supplement and does not contain all the information that you need to consider in making your investment decision. This summary sets forth the material terms of this offering, but does not contain all of the information you should consider before investing in our common stock. You should carefully read this entire prospectus supplement, the accompanying prospectus and any free writing prospectus, as well as the information to which we refer you and the information incorporated by reference herein, before deciding whether to invest in shares of our common stock. You should pay special attention to the "Risk Factors" section of this prospectus supplement to determine whether an investment in the shares of our common stock is appropriate for you.

Our Company

We are a premier life science technology company that is designing, developing, and manufacturing advanced sequencing solutions that enable scientists and clinical researchers to improve their understanding of the genome and ultimately, resolve genetically complex problems.

Our products and technology under development stem from two highly differentiated core technologies focused on accuracy, quality and completeness, which include our existing HiFi long-read sequencing and our emerging SBB short-read sequencing technologies. Our products address solutions across a broad set of research applications including human germline sequencing, plant and animal sciences, infectious disease and microbiology, oncology, and other emerging applications.

Our focus is on providing our customers with advanced sequencing technologies with higher throughput and improved workflows that we believe will enable dramatic advancements in routine healthcare.

Our customers include academic and governmental research institutions, commercial testing and service laboratories, genome centers, public health labs, hospitals and clinical research institutes, contract research organizations (CROs), pharmaceutical companies and agricultural companies.

Recent Developments

Product Announcements

On October 25, 2022, we announced two new sequencing platforms, Revio and Onso.

Revio is a new long-read sequencing system designed to enable the use of HiFi sequencing for large studies in human genetics, cancer research, and agricultural genomics. We expect first commercial shipments of Revio to occur later this quarter.

Onso, a short-read DNA sequencing system, is designed to deliver industry-leading sensitivity and specificity for novel insights in oncology, disease research, and other applications. We commenced the beta program for Onso in the fourth quarter of 2022. We began taking orders for Onso during the first quarter of 2023 and expect to start shipping by the end of the second quarter of 2023.

Preliminary Financial and Operational Highlights for the Three and Twelve Months Ended December 31, 2022

The following are our expected financial and operational results as of and for the quarter and year ended December 31, 2022. They are preliminary and subject to adjustment as described below.

- Received orders for 96 instruments in the fourth quarter of 2022, which included orders for 76 Revio systems for delivery in 2023.
- Preliminary unaudited fourth quarter revenue is expected to be approximately \$27.3 million, representing a decrease of approximately 24% compared with \$36.0 million for the fourth quarter of 2021. As a result, preliminary unaudited annual 2022 revenue is expected to be approximately \$128.2 million, representing a decline of approximately 2% from 2021.
- Preliminary instrument revenue for the fourth quarter of 2022 is expected to be approximately \$6.1 million, compared with \$16.2 million for the fourth quarter of 2021. The decline was primarily

- due to the robust demand for Revio, displacing previously-anticipated Sequel IIe sales in the fourth quarter. Preliminary instrument revenue for 2022 is expected to be approximately \$48.7 million.
- Preliminary consumables revenue for the fourth quarter of 2022 is expected to be approximately \$16.6 million, compared with \$15.0 million for the fourth quarter of 2021. Preliminary consumables revenue for 2022 is expected to be approximately \$59.9 million. Consumable growth reflects approximately 24% growth in Sequel II and IIe SMRT cells shipped in 2022, as compared to 2021.
- Preliminary service and other revenue for the fourth quarter of 2022 is expected to be approximately \$4.6 million, compared with \$4.8 million for the fourth quarter of 2021. Preliminary service and other revenue for 2022 is expected to be approximately \$19.6 million.
- Preliminary gross profit is expected to be in the range of \$3.0 million to \$7.0 million and \$47.0 million to \$51.0 million for the three and twelve months ended December 31, 2022, respectively. Preliminary operating loss is expected to be in the range of \$94.0 million to \$80.0 million and \$314.0 million to \$300.0 million for the three and twelve months ended December 31, 2022, respectively. Preliminary gross profit and preliminary operating loss for the three months ended December 31, 2022 reflect adjustments for excess inventory, either on hand or at our contract manufacturer, of \$5.0 million to \$9.0 million related to a faster than expected ramp in Revio demand, which resulted in a faster than expected decline in Sequel II demand upon the launch of Revio.
- Our near-term future financial performance will be dependent on (1) the success of the Revio launch and (2) the related product introduction expenses and associated margin impact.
- Total preliminary cash, cash equivalents, and investments balance as of December 31, 2022 is expected to be approximately \$772.3 million.

The amounts set forth above are preliminary estimates. We are in the process of finalizing our results of operations for the three- and twelve-month periods ended December 31, 2022, and therefore final results are not yet available. These preliminary estimates are based solely upon information available to management as of the date of this prospectus supplement and are therefore subject to change. Our actual results may differ from these estimates due to the completion of our quarter- and year-end closing procedures, final adjustments, audit by our independent registered public accounting firm, and developments that may arise between now and the time our financial results for the three- and twelve-month periods ended December 31, 2022 are finalized, all of which will occur after this offering is completed. The preliminary financial data included in this prospectus supplement have been prepared by, and are the responsibility of, our management. Ernst & Young LLP has not audited, reviewed, or applied agreed-upon procedures with respect to the preliminary financial data. Accordingly, Ernst & Young LLP does not express an opinion or any other form of assurance with respect thereto.

In addition, although we expect to experience a net loss for the three- and twelve-month periods ended December 31, 2022, we are not able to provide an estimate of such results at the time of this prospectus supplement. However, no conclusions should be drawn as to the size of our net loss for the three months ended December 31, 2022 based on the foregoing preliminary results. Our expectations regarding revenue for the three- and twelve-month periods ended December 31, 2022 are not necessarily indicative of results expected in future periods.

Corporate Information

Pacific Biosciences of California, Inc., formerly Nanofluidics, Inc., was incorporated in the State of Delaware in 2000. Our executive offices are located at 1305 O'Brien Drive, Menlo Park, California 94025, and our telephone number is (650) 521-8000. We maintain a website at www.pacb.com where general information about us is available. Our website, and the information on or that can be accessed through our website, is not a part of, or incorporated by reference into, this prospectus supplement, and the inclusion of our website address is an inactive textual reference only.

Summary Risk Factors

The following is a summary of the principal risks that could adversely affect our business, operations and financial results. Such risks are discussed more fully in the sections of this prospectus supplement and

the documents incorporated by reference into this prospectus supplement captioned "Risk Factors" and include, but are not limited to, risks related to:

- Our ability to successfully market, commercialize, and sell current and future products and related maintenance services;
- Our ability to achieve profitability for our business;
- Our ability to successfully leverage and integrate our acquisitions and future acquisitions;
- · Our ability to successfully research, develop and timely manufacture our current and future products;
- Management of new product introductions and transitions, resultant costs, and ability of new products to generate promised performance;
- Recent significant changes to our leadership team and resultant disruptions to our business;
- Retention, recruitment, and training of senior management, key personnel, scientists and engineers;
- Our ability to further penetrate nucleic acid sequencing applications, as well as grow product demand;
- Our reliance on outsourcing to other companies for manufacturing certain components and subassemblies, some of which are sole-sourced;
- Our ability to consistently manufacture our instruments and consumables to meet customers' specifications, quantity, cost, or performance requirements;
- The high amount of competition we face in our industry;
- Our ability to attract customers and increase sales of current and future products;
- Reliance on a limited number of customers for a significant portion of our revenues, including academic, research and government institutions;
- The complexity of our products giving rise to defects or errors;
- Our unpredictable and lengthy sales cycles;
- Our business, financial condition and results of operations could be adversely affected by political
 and economic tensions between the United States and other countries, including China and Russia;
- Securing and maintaining patent or other intellectual property protection for our products and related improvements;
- Current and future legal proceedings filed against us claiming intellectual property infringement;
- The potential adverse impact of health epidemics, including the ongoing COVID-19 pandemic;
- Governmental regulations that burden operations or narrow the market for our products;
- Evolving ethical, legal, privacy, social, and regulatory concerns regarding genetic testing;
- · Volatility of the price of our common stock; and
- Our stock price falling as a result of future offerings or sales of securities.

Our risk factors are not guarantees that no such conditions exist as of the date of this prospectus supplement and should not be interpreted as an affirmative statement that such risks or conditions have not materialized, in whole or in part.

THE OFFERING

\$150.0 million of shares of our common stock (\$172.5 million of Common stock offered by us

shares if the underwriters option to purchase additional shares is

exercised in full).

Option to purchase additional

shares

We have granted the underwriters an option to purchase up additional shares of our common stock. This option is exercisable, in whole or in part, for a period of 30 days from the date of this prospectus supplement.

Common stock to be outstanding immediately after this

offering

shares if the underwriters' option shares (or

to purchase additional shares is exercised in full).

Use of Proceeds We currently intend to use the net proceeds from this offering for

> (1) research and development, (2) commercial infrastructure expansion, and (3) working capital and general corporate purposes. We may also use a portion of the net proceeds from this offering to acquire or invest in complementary businesses, technologies, product candidates or other intellectual property, although we have no present commitments or agreements to do so. See "Use of

Proceeds" on page S-9 of this prospectus supplement.

Risk Factors Before deciding to invest in shares of our common stock, you

> should read carefully the risks set forth under the caption "Risk Factors" beginning on page S-6 of this prospectus supplement and the risks described in our annual, periodic and current reports incorporated by reference into this prospectus supplement and the accompanying prospectus, including those set forth in our Current

Report on Form 8-K filed on January 24, 2023.

Nasdaq Global Select Market

symbol

"PACB"

The number of shares of our common stock to be outstanding immediately after this offering is based upon 225,915,570 shares outstanding as of September 30, 2022 and excludes the following:

- 15,537,080 shares of our common stock issuable upon the exercise of stock options outstanding as of September 30, 2022, with a weighted average exercise price of \$10.32 per share;
- 8,668,237 shares of our common stock issuable upon the vesting of time-based restricted stock units, or RSUs, outstanding as of September 30, 2022;
- 384,200 shares of our common stock issuable upon the vesting of time-based RSUs granted subsequent to September 30, 2022;
- 9,932,505 shares of our common stock reserved for future issuance under our Employee Stock Purchase Plan as of September 30, 2022 (and any future automatic increase in shares reserved for issuance thereunder):
- 18,129,552 shares of our common stock reserved for future issuance under our 2020 Equity Incentive Plan as of September 30, 2022;
- · 197,584 shares of our common stock reserved for future issuance under our 2020 Inducement Equity Incentive Plan;
- · 389,247 shares of our common stock reserved for future issuance under our Omniome Equity Incentive Plan:

- 20,689,650 shares of our common stock initially reserved for future issuance upon conversion of our 1.50% Convertible Senior Notes due 2028; and
- any shares that may become payable pursuant to the terms of the contingent consideration arrangements in connection with our acquisition of Omniome, Inc., including \$100 million in shares of our common stock to be issued as part of a commercial milestone.

Except as otherwise indicated, all information in this prospectus supplement assumes no exercise or settlement of the outstanding stock options, RSUs or other equity awards described above, no conversion of our 1.50% Convertible Senior Notes due 2028, no issuance of shares under our Employee Stock Purchase Plan, 2020 Inducement Equity Incentive Plan or Omniome Equity Incentive Plan, no grant of additional awards under our 2020 Equity Incentive Plan, and no repurchase of shares of our common stock subsequent to September 30, 2022 and no exercise of the underwriters' option to purchase additional shares of common stock.

RISK FACTORS

An investment in the shares of our common stock involves a high degree of risk. You should consider carefully the risks and uncertainties described below, together with the risk factors included in our most recent annual report on Form 10-K, as revised or supplemented by our subsequent quarterly reports on Form 10-Q or our current reports on Form 8-K, as well as any amendments thereto, each as filed with the SEC and incorporated by reference into this prospectus supplement and the accompanying prospectus. The risks described below and in the documents incorporated by reference are not the only risks facing us. Risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially affect our business, financial condition, results of operations and prospects. In addition, any worsening of the economic environment and the ongoing COVID-19 pandemic may exacerbate the risks described below, any of which could have a material impact on us. This situation is changing rapidly and additional impacts may arise that we are not aware of currently. If any of these risks occur, our business, financial condition and operating results could be harmed, the trading price of our common stock could decline and you could lose part or all of your investment. This prospectus supplement also contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including the risks faced by us described below and elsewhere in this prospectus supplement and the accompanying prospectus and in the documents incorporated by reference, including our Current Report on Form 8-K filed on January 24, 2023.

Risks Related to this Offering

We will have broad discretion in the use of proceeds from this offering and our existing cash and cash equivalents and marketable securities, and may invest or spend the proceeds in ways with which you do not agree and in ways that may not yield a return.

We will have broad discretion in the application of the net proceeds to us from this offering, including for any of the purposes described in the section of this prospectus supplement entitled "Use of Proceeds," and our existing cash and cash equivalents and marketable securities. You may not agree with our decisions, and our use of the proceeds and our existing cash and cash equivalents and marketable securities may not improve our results of operations or enhance the value of our shares of common stock. You will be relying on the judgment of our management regarding the application of the proceeds of this offering. The results and effectiveness of the use of proceeds are uncertain, and we could spend the net proceeds in ways that you do not agree with or that do not improve our results of operations or enhance the value of our shares of common stock. Our failure to apply these funds effectively could have a material adverse effect on our business and cause the price of our shares of common stock to decline.

New investors in our shares of common stock will experience immediate and substantial dilution after this offering.

Since the public offering price for our shares of common stock in this offering is substantially higher than the net tangible book deficit per share of common stock outstanding prior to this offering, you will suffer immediate and substantial dilution in the net tangible book deficit of the shares of common stock you purchase in this offering. If the underwriters exercise their option to purchase additional shares of common stock, you will experience additional dilution. See the section entitled "Dilution" below for a more detailed discussion of the dilution you will incur if you purchase shares in this offering.

The issuance of additional shares of common stock could be dilutive to stockholders if they do not invest in future offerings. In addition, we have a significant number of outstanding securities exercisable for or convertible into shares of our common stock, including our 1.50% Convertible Senior Notes due 2028. If such securities are exercised for or converted into common stock, you may incur further dilution. Moreover, to the extent that we issue additional securities exercisable for, convertible into or exchangeable for, shares of common stock in the future and those securities are exercised, converted or exchanged, our stockholders may experience further dilution.

FORWARD-LOOKING STATEMENTS

Discussions in this prospectus supplement, the accompanying prospectus, the documents we have filed with the SEC that are incorporated by reference and any free writing prospectus that we have authorized for use in connection with this offering contain or may contain forward-looking statements that are based on the beliefs and assumptions of our management and on information currently available to our management. The statements contained in this prospectus supplement, the accompanying prospectus, the documents we have filed with the SEC that are incorporated by reference and any free writing prospectus that we have authorized for use in connection with this offering that are not purely historical are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act.

Our forward-looking statements include, but are not limited to, statements regarding:

- the availability, uses, accuracy, sensitivity, advantages, compatibility, pricing, specifications, quality
 or performance of, or benefits or expected benefits or using, our products or technologies, including
 the Revio and Onso systems;
- our current and future products;
- our strategic and commercial plans, including our expectations and plans for the commercial launches of the Revio and Onso systems;
- our market opportunity, including market size and expected market growth;
- our expectations regarding the conversion of backlog to revenue and the pricing and gross margin for products;
- our manufacturing plans including developing and scaling of manufacturing and delivery of our products;
- · our research and development plans;
- the anticipated impact of the COVID-19 pandemic on our business, business plans and results of operations;
- product development including, among other things, statements relating to future uses, quality or
 performance of, or benefits of using, products or technologies, updates or improvements of our
 products;
- our intentions regarding seeking regulatory approval for our products;
- our competitive landscape, including competition in the short- and long-read sequencing technologies markets;
- our expectations regarding collaborations and partnerships;
- our expectations regarding unrecognized income tax benefits;
- our expectations regarding market risk, including interest rate changes and general macroeconomic conditions;
- the sufficiency of cash, cash equivalents and investments to fund projected operating requirements;
- the effects of recent accounting pronouncements on our financial statements; and
- our anticipated use of proceeds from this offering.

Such statements may be signified by terms such as "anticipates," "believes," "could," "estimates," "expects," "intends," "may," "plans," "potential," "predicts," "projects," "seeks," "should," "target," "will," "would" or similar expressions and the negatives of those terms. Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those discussed under the heading "Risk Factors" in this prospectus supplement,

the accompanying prospectus, or the documents we have filed with the SEC that are incorporated by reference. Given these risks and uncertainties, you should not place undue reliance on forward-looking statements. Also, forward-looking statements represent management's beliefs and assumptions as of the date of this prospectus supplement. Except as required by law, we assume no obligation to update forward-looking statements publicly, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future. Our Risk Factors are not guarantees that no such conditions exist as of the date of this prospectus supplement and should not be interpreted as an affirmative statement that such risks or conditions have not materialized, in whole or in part.

If any of these risks or uncertainties materializes or any of these assumptions proves incorrect, our results could differ materially from the expectations in these statements.

The forward-looking statements included in this prospectus supplement are made only as of the date of this prospectus supplement, and we are not under any obligation to update our respective forward-looking statements and do not intend to do so. You should not assume that the information contained in this prospectus supplement or the accompanying prospectus is accurate as of any date other than the date on the front of this prospectus supplement or the accompanying prospectus, as applicable, or that any information incorporated by reference into this prospectus supplement or the accompanying prospectus is accurate as of any date other than the date of the document so incorporated by reference.

You should read this prospectus supplement, the accompanying prospectus, the documents we have filed with the SEC that are incorporated by reference and any free writing prospectus that we have authorized for use in connection with this offering completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of the forward-looking statements in the foregoing documents by these cautionary statements.

USE OF PROCEEDS

We estimate the net proceeds from the sale of common stock by us in this offering will be approximately \$\\$million (or approximately \$\\$million if the underwriters' option to purchase additional shares is exercised in full) after deducting the underwriting discount and estimated offering expenses payable by us.

We currently intend to use the net proceeds from this offering for (1) research and development, (2) commercial infrastructure expansion, and (3) working capital and general corporate purposes.

We may also use a portion of the net proceeds from this offering to acquire or invest in complementary businesses, technologies, product candidates or other intellectual property, although we have no present commitments or agreements to do so.

As of the date of this prospectus supplement, we cannot specify with certainty all of the particular uses for the net proceeds to us from this offering. As a result, our management will have broad discretion regarding the timing and application of the net proceeds from this offering. Pending our use of the net proceeds from this offering as described above, we plan to invest the net proceeds of this offering in short-term, interest-bearing, investment-grade instruments, certificates of deposit or direct or guaranteed obligations of the U.S. government.

DIVIDEND POLICY

We have never paid or declared any cash dividends on our common stock and do not anticipate paying cash dividends in the foreseeable future. We anticipate that we will retain all of our future earnings for use in the operation of our business and for general corporate purposes. Any determination to pay dividends in the future will be at the discretion of our board of directors. Accordingly, investors must rely on sales of their common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investments.

DILUTION

The net tangible book deficit of our common stock on September 30, 2022 was approximately \$(193.7) million, or approximately \$(0.86) per share. Net tangible book deficit per share is equal to the amount of our total tangible assets, less total liabilities, divided by the number of shares of common stock outstanding. Dilution in net tangible book deficit per share represents the difference between the amount per share paid by purchasers of shares of common stock in this offering and the net tangible book deficit per share of our common stock immediately afterwards. After giving effect to the sale by us of shares of per share and after deducting the common stock in this offering at the public offering price of \$ underwriting discount and estimated offering expenses payable by us, our as adjusted net tangible book deficit at September 30, 2022 would have been approximately \$ million, or \$ per share. This represents an immediate decrease in net tangible book deficit of \$ per share to existing stockholders per share to new investors purchasing shares of common stock in this and an immediate dilution of \$ offering. The following table illustrates this dilution:

Public offering price per share		\$
Net tangible book deficit per share as of September 30, 2022	\$(0.86)	
Increase in net tangible book value per share attributable to new investors after giving effect to the offering		
Net tangible book deficit per share after giving effect to the offering		
Dilution in net tangible book value per share to new investors in this offering		\$

If the underwriters' option to purchase additional shares is exercised in full to purchase additional shares of common stock from us in this offering, based upon the public offering price of \$, the as adjusted net tangible book deficit per share after giving effect to the offering would be \$ per share, the decrease in the net tangible book deficit per share to existing stockholders would be \$ per share and the dilution to the new investors would be \$ per share.

The foregoing table does not take into effect further dilution to new investors that could occur upon the exercise of outstanding stock options having a per share exercise price less than the offering price per share in this offering or the release of RSUs. The foregoing table is based upon 225,915,570 shares outstanding as of September 30, 2022 and excludes the following:

- 15,537,080 shares of our common stock issuable upon the exercise of stock options outstanding as of September 30, 2022, with a weighted average exercise price of \$10.32 per share;
- 8,668,237 shares of our common stock issuable upon the vesting of time-based RSUs, outstanding as of September 30, 2022;
- 384,200 shares of our common stock issuable upon the vesting of time-based RSUs granted subsequent to September 30, 2022;
- 9,932,505 shares of our common stock reserved for future issuance under our Employee Stock Purchase Plan as of September 30, 2022 (and any future automatic increase in shares reserved for issuance thereunder);
- 18,129,552 shares of our common stock reserved for future issuance under our 2020 Equity Incentive Plan as of September 30, 2022;
- 197,584 shares of our common stock reserved for future issuance under our 2020 Inducement Equity Incentive Plan;
- 389,247 shares of our common stock reserved for future issuance under our Omniome Equity Incentive Plan;
- 20,689,650 shares of our common stock initially reserved for future issuance upon conversion of our 1.50% Convertible Senior Notes due 2028; and
- any shares that may become payable pursuant to the terms of the contingent consideration arrangements in connection with our acquisition of Omniome, Inc., including \$100 million in shares of our common stock to be issued as part of a commercial milestone.

MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS FOR NON-U.S. HOLDERS

The following is a summary of the material U.S. federal income tax consequences of the ownership and disposition of our common stock to non-U.S. holders (as defined below), but does not purport to be a complete analysis of all the potential tax considerations relating thereto. This summary is based upon the provisions of the Internal Revenue Code of 1986, as amended (the "Code"), Treasury regulations promulgated thereunder, administrative rulings and judicial decisions, all as of the date hereof. These authorities may be changed, possibly retroactively, so as to result in U.S. federal income tax consequences different from those set forth below. We have not sought any ruling from the Internal Revenue Service (the "IRS") with respect to the statements made and the conclusions reached in the following summary, and there can be no assurance that the IRS will agree with such statements and conclusions.

This summary also does not address the tax considerations arising under the laws of any U.S. state or local, non-U.S. or other taxing jurisdiction or under U.S. federal non-income tax laws, such as gift and estate tax laws or under any applicable tax treaty. In addition, this discussion does not address any potential application of the Medicare contribution tax on net investment income, the alternative minimum tax or any tax considerations applicable to an investor's particular circumstances or to investors that may be subject to special tax rules, including, without limitation:

- banks, insurance companies or other financial institutions;
- · tax-exempt organizations or accounts;
- controlled foreign corporations, passive foreign investment companies or corporations that accumulate earnings to avoid U.S. federal income tax;
- · dealers in securities or currencies;
- traders in securities that elect to use a mark-to-market method of tax accounting for their securities holdings;
- persons that own, or are deemed to own, more than five percent of our common stock;
- certain former citizens or long-term residents of the United States;
- persons who hold our common stock as a position in a hedging transaction, "straddle," "conversion transaction" or other risk reduction transaction;
- persons who do not hold our common stock as a capital asset within the meaning of Section 1221 of the Code (generally, for investment purposes);
- entities or arrangements treated as partnerships for U.S. federal income tax purposes and other passthrough entities (and investors therein);
- persons subject to special tax accounting rules as a result of any item of gross income with respect to our common stock being taken into account in an applicable financial statement as defined in Section 451(b) of the Code;
- persons who hold or receive our common stock pursuant to the exercise of any employee stock option or otherwise as compensation; or
- persons deemed to sell our common stock under the constructive sale provisions of the Code.

In addition, if a partnership, including any entity or arrangement, domestic or foreign, classified as a partnership for U.S. federal income tax purposes, holds our common stock, the tax treatment of a partner generally will depend on the status of the partner and the activities of the partnership. Accordingly, partnerships that hold our common stock, and partners in such partnerships, should consult their tax advisors.

You are urged to consult your tax advisor with respect to the application of the U.S. federal income tax laws to your particular situation, as well as any tax consequences of the purchase, ownership and disposition of our common stock arising under the U.S. federal estate or gift tax rules or under the laws of any U.S. state or local, non-U.S. or other taxing jurisdiction, or under any applicable tax treaty.

Non-U.S. Holder Defined

For purposes of this discussion, the term non-U.S. holder means a beneficial owner of our common stock that is not a partnership (or entity or arrangement treated as a partnership for U.S. federal income tax purposes) and is not, for U.S. federal income tax purposes, any of the following:

- an individual who is a citizen or resident of the United States;
- a corporation or other entity taxable as a corporation created or organized in the United States or under the laws of the United States, any state thereof or the District of Columbia;
- an estate whose income is subject to U.S. federal income tax regardless of its source; or
- a trust (x) the administration of which is subject to the primary supervision of a U.S. court and that has one or more U.S. persons who have the authority to control all substantial decisions of the trust or (y) that has made an election to be treated as a U.S. person.

Distributions

As described under "Dividend Policy," above, we have not and do not anticipate paying dividends to holders of our common stock in the foreseeable future. However, if we make distributions on our common stock, those payments will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. To the extent those distributions exceed both our current and our accumulated earnings and profits, the excess will be treated as a tax-free return of capital and will first reduce your basis in our common stock (determined separately with respect to each share of our common stock), but not below zero, and any remaining excess will be treated as capital gain from the sale of that stock (subject to tax as described below under "Gain on Sale or Other Disposition of Common Stock"). Any such distributions will also be subject to the discussions below under the sections titled "Backup Withholding and Information Reporting" and "Foreign Account Tax Compliance Act."

Subject to the discussion below on effectively connected income, any dividend paid to you generally will be subject to U.S. withholding tax either at a rate of 30% of the gross amount of the dividend or such lower rate as may be specified by an applicable income tax treaty between the United States and your country of residence. In order to receive a reduced treaty rate, you must provide us or our paying agent with an IRS Form W-8BEN or IRS Form W-8BEN-E (including, if required, a non-U.S. or U.S. taxpayer identification number) or other appropriate version of IRS Form W-8 certifying qualification for the reduced rate. If you hold our common stock through a financial institution or other agent acting on your behalf, you will be required to provide appropriate documentation to the agent, who then will be required to provide the required certification to us or our paying agent, either directly or through other intermediaries. You should consult your tax advisor regarding your entitlement to benefits under any applicable income tax treaty. If you are eligible for a reduced rate of withholding tax pursuant to an income tax treaty, you may be able to obtain a refund of any excess amounts currently withheld if you timely file an appropriate claim for refund with the IRS.

Dividends received by you that are effectively connected with your conduct of a U.S. trade or business (and, if an income tax treaty applies, are attributable to a permanent establishment or fixed base maintained by you in the United States) are includible in your gross income in the taxable year received, and are generally exempt from such withholding tax, subject to the discussions below under the sections titled "Backup Withholding and Information Reporting" and "Foreign Account Tax Compliance Act." In order to obtain this exemption, you must provide us or our paying agent with an IRS Form W-8ECI properly certifying such exemption. Such effectively connected dividends, although not subject to withholding tax, are taxed at the same rates applicable to U.S. persons, net of certain deductions and credits, subject to an applicable income tax treaty providing otherwise. In addition, if you are a corporate non-U.S. holder, dividends you receive that are effectively connected with your conduct of a U.S. trade or business (and, if an income tax treaty applies, are attributable to a permanent establishment or fixed base maintained by you in the United States) may also be subject to a branch profits tax at a rate of 30% or such lower rate as may be specified by an applicable income tax treaty. You should consult your tax advisor regarding any applicable tax treaties that may provide for different rules.

Gain on Sale or Other Disposition of Common Stock

Subject to the discussion of backup withholding below, you generally will not be required to pay U.S. federal income tax on any gain realized upon the sale or other disposition of our common stock unless:

- the gain is effectively connected with your conduct of a U.S. trade or business (and, if an income tax treaty applies, the gain is attributable to a permanent establishment or fixed base maintained by you in the United States), in which case you will be required to pay tax on the net gain derived from the sale under regular U.S. federal income tax rates, and for a non-U.S. holder that is a corporation, such non-U.S. holder may be subject to the branch profits tax at a 30% rate on such effectively connected gain or such lower rate as may be specified by an applicable income tax treaty;
- you are an individual who is present in the United States for a period or periods aggregating 183 days or more during the calendar year in which the sale or disposition occurs and certain other conditions are met, in which case you will be required to pay a flat 30% tax (or such lower rate specified by an applicable income tax treaty) on the gain derived from the sale, which gain may be offset by certain U.S. source capital losses (even though you are not considered a resident of the United States); provided that you have timely filed U.S. federal income tax returns with respect to such losses; or
- our common stock constitutes a "United States real property interest" by reason of our status as a "United States real property holding corporation" for U.S. federal income tax purposes (a "USRPHC") at any time within the shorter of the five-year period preceding the disposition of, or your holding period for, our common stock. We believe that we are not currently and will not become a USRPHC. However, because the determination of whether we are a USRPHC depends on the fair market value of our U.S. real property interests relative to the fair market value of our worldwide real property and our other assets held for use in a trade or business, there can be no assurance that we will not become a USRPHC in the future. Even if we become a USRPHC, however, as long as our common stock is "regularly traded," as defined by applicable Treasury regulations, on an established securities market during the calendar year in which the sale or disposition occurs, such common stock will be treated as a U.S. real property interest only if you actually or constructively hold more than five percent of such regularly traded common stock at any time during the applicable period previously described. You are encouraged to consult your own tax advisor regarding the possible consequences to you if we are, or were to become, a USRPHC.

Backup Withholding and Information Reporting

Generally, we or the applicable paying agent must report annually to the IRS the amount of any distributions (whether or not they constitute dividends for U.S. federal income tax purposes) paid to you, your name and address, and the amount of tax withheld, if any. A similar report will be sent to you. Pursuant to applicable income tax treaties or other agreements, the IRS may make these reports available to tax authorities in your country of residence.

Payments of dividends or of proceeds on the disposition of stock made to you may be subject to additional information reporting and backup withholding at a current rate of 24% unless you establish an exemption, for example by properly certifying your non-U.S. status on an IRS Form W-8BEN, IRS Form W-8BEN-E (or another appropriate version of IRS Form W-8) or you otherwise meet the documentary evidence requirements for establishing that you are not a United States person or otherwise establish an exemption. Notwithstanding the foregoing, backup withholding and information reporting may apply if either we or our paying agent has actual knowledge, or reason to know, that you are a U.S. person.

Backup withholding is not an additional tax; rather, the U.S. income tax liability of persons subject to backup withholding will be reduced by the amount of tax withheld. If withholding results in an overpayment of taxes, a refund or credit may generally be obtained from the IRS, provided that the required information is furnished to the IRS in a timely manner.

Foreign Account Tax Compliance Act

The Foreign Account Tax Compliance Act, Treasury regulations issued thereunder and administrative guidance (collectively, "FATCA") generally imposes a U.S. federal withholding tax of 30% on any dividends

paid and, subject to the proposed Treasury regulations discussed below, the gross proceeds of a sale or other disposition of our common stock paid to (i) a "foreign financial institution" (as specially defined under these rules), whether such foreign financial institution is the beneficial owner or an intermediary, unless such institution enters into an agreement with the U.S. government to withhold on certain payments and to collect and provide to the U.S. tax authorities substantial information regarding U.S. account holders of such institution (which includes certain equity and debt holders of such institution, as well as certain account holders that are foreign entities with U.S. owners) or otherwise establishes an exemption, or (ii) a "non-financial foreign entity," (as specially defined under these rules) whether such non-financial foreign entity is the beneficial owner or an intermediary, unless otherwise provided by the Treasury Secretary or such entity provides a certification that the beneficial owner of the payment does not have any substantial U.S. owners, provides the withholding agent with a certification identifying the direct and indirect U.S. owners of the entity or otherwise establishes an exemption.

The withholding obligations under FATCA generally apply to dividends on our common stock. The U.S. Department of the Treasury has issued proposed regulations, which may be relied upon by taxpayers until final regulations are issued, providing that, if finalized in their present form, the withholding provisions under FATCA do not apply with respect to payment of gross proceeds from a sale or other disposition of our common stock. The withholding tax will apply regardless of whether the payment otherwise would be exempt from U.S. nonresident and backup withholding tax, including under the other exemptions described above. Under certain circumstances, a non-U.S. holder might be eligible for refunds or credits of such taxes from the IRS, provided that the required information is furnished to the IRS in a timely manner. In certain cases, the relevant foreign financial institution or non-financial foreign entity may qualify for an exemption from, or be deemed to be in compliance with, these rules. If the country in which the payee is resident has entered into an "intergovernmental agreement" with the United States regarding FATCA, the payee may be permitted to report to that country instead of the United States, and the intergovernmental agreement may otherwise modify the requirements described in this paragraph. Prospective investors are encouraged to consult with their own tax advisors regarding the possible implications of FATCA on their investment in our common stock.

The preceding discussion of U.S. federal income tax considerations is for general information only. It is not tax advice. Each prospective investor should consult their own tax advisor regarding the particular U.S. federal, state and local and non-U.S. tax consequences of purchasing, holding and disposing of our common stock, including the consequences of any proposed change in applicable laws.

UNDERWRITING

We and the underwriters named below have entered into an underwriting agreement with respect to the shares being offered. Subject to certain conditions, each underwriter has severally agreed to purchase the number of shares indicated in the following table. Goldman Sachs & Co. LLC, Morgan Stanley & Co. LLC and Cowen and Company, LLC are the representatives of the underwriters.

Underwriters	Number of Shares
Goldman Sachs & Co. LLC	
Morgan Stanley & Co. LLC	
Cowen and Company, LLC	
Allen & Company LLC	
Total	

The underwriters are committed to take and pay for all of the shares being offered, if any are taken, other than the shares covered by the option described below unless and until this option is exercised.

The underwriters have an option to buy up to an additional shares from us to cover sales by the underwriters of a greater number of shares than the total number set forth in the table above. They may exercise that option for 30 days. If any shares are purchased pursuant to this option, the underwriters will severally purchase shares in approximately the same proportion as set forth in the table above.

The following table shows the per share and total underwriting discounts and commissions to be paid to the underwriters by us. Such amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

Paid by Us	No Exercise	Full Exercise
Per Share	\$	\$
Total	\$	\$

Shares sold by the underwriters to the public will initially be offered at the initial public offering price set forth on the cover of this prospectus. Any shares sold by the underwriters to securities dealers may be sold at a discount of up to \$ per share from the initial public offering price. After the initial offering of the shares, the representatives may change the offering price and the other selling terms. The offering of the shares by the underwriters is subject to receipt and acceptance and subject to the underwriters' right to reject any order in whole or in part.

We have agreed that, without the prior written consent of Goldman Sachs & Co. LLC and Morgan Stanley & Co. LLC, for a period of 60 days after the date of this prospectus supplement, we will not (i) sell, offer to sell, contract to sell or lend any shares of our common stock or any securities convertible into or exchangeable or exercisable for shares of our common stock; (ii) effect any short sale, or establish or increase any "put equivalent position" (as defined in Rule 16a-1(h) under the Exchange Act) or liquidate or decrease any "call equivalent position" (as defined in Rule 16a 1(b) under the Exchange Act) of any shares of our common stock or any securities convertible into or exchangeable or exercisable for shares of our common stock; (iii) pledge, hypothecate or grant any security interest in any shares of our common stock or any securities convertible into or exchangeable or exercisable for shares of our common stock; (iv) in any other way transfer or dispose of any shares of our common stock or any securities convertible into or exchangeable or exercisable for shares of our common stock; (v) enter into any swap, hedge or similar arrangement or agreement that transfers, in whole or in part, the economic risk of ownership of any shares of our common stock or any securities convertible into or exchangeable or exercisable for shares of our common stock, regardless of whether any such transaction is to be settled in securities, in cash or otherwise; (vi) announce the offering of any shares of our common stock or any securities convertible into or exchangeable or exercisable for shares of our common stock; (vii) file any registration statement under the Securities Act in respect of any shares of our common stock or any securities convertible into or exchangeable or exercisable for shares of our common stock (other than as contemplated by the underwriting agreement); or (viii) publicly announce the intention to do any of the foregoing. However, subject to certain conditions

we may (A) effect the transactions contemplated by the underwriting agreement; (B) issue shares of our common stock or options to purchase shares of our common stock or restricted stock units or similar equity securities, or issue shares of our common stock upon exercise of options, restricted stock units or similar equity securities, pursuant to any stock option, stock bonus or other stock plan or arrangement described in this prospectus supplement, the accompanying prospectus or in a filing incorporated by reference therein; (C) file registration statements on Form S-8 or amendments thereto; (D) issue shares of our common stock upon conversion of convertible debt securities outstanding on the date of the underwriting agreement and in accordance with their terms, provided that such convertible debt securities are described in this prospectus supplement, the accompanying prospectus or in a filing incorporated by reference therein; (E) facilitate the establishment of trading plans on behalf of our stockholders, officers or directors pursuant to Rule 10b5-1 under the Exchange Act, provided that such plan does not provide for the transfer of shares of our common stock during the restricted period (defined below) and (F) issue shares of our common stock or any related securities in connection with any bona fide merger or acquisition of securities, businesses, property or other assets or strategic investment, provided that in case of this clause (F), such shares or related securities shall not in the aggregate exceed 5% of our outstanding shares of common stock.

Our directors and executive officers have entered into lock-up agreements with the representatives prior to the commencement of this offering, pursuant to which each such person or entity, for a period of 60 days after the date of this prospectus supplement (the "restricted period"), may not, without the prior written consent of Goldman Sachs & Co. LLC and Morgan Stanley & Co. LLC, (i) offer, sell, contract to sell, pledge, grant any option to purchase, make any short sale, lend or otherwise dispose of any shares of common stock, or any options or warrants to purchase any shares of common stock, or any securities convertible into, exchangeable for or that represent the right to receive shares of common stock, (ii) engage in any hedging or other transaction or arrangement which is designed to or which reasonably could be expected to lead to or result in a sale, loan, pledge, other disposition or transfer of any of the economic consequences of ownership, in whole or in part, directly or indirectly, of any shares, whether any such transaction or arrangement would be settled by delivery of common stock, other securities or cash, (iii) make any demand for or exercise any right with respect to the registration of any shares of our common stock or other securities or (iv) otherwise make any public announcement or filing relating to any intention to engage in any of the foregoing transactions, other than any shares sold to the underwriters pursuant to the underwriting agreement.

The restrictions described in the immediately preceding paragraph do not prohibit the following, subject to certain conditions:

- transfers as a bona fide gift or gifts, including as a charitable donation, or for bona fide estate planning purposes;
- transfers to any trust for the direct or indirect benefit of the lock-up party or an immediate family member of the lock-up party;
- transfers made by operation of law, including pursuant to a qualified domestic order or in connection with a divorce settlement or any other court order;
- transfers by will or intestate succession to the legal representative, heir, beneficiary or immediate family of the lock-up party upon the death of the lock-up party;
- transfers of shares of our common stock acquired in open market transactions after this offering;
- the exercise of options, warrants or other rights to acquire shares of our common stock outstanding on the date hereof in accordance with their terms;
- transfers to us pursuant to any agreement under which we have the option to repurchase shares of our common stock or a right of first refusal with respect to transfers of shares of our common stock upon termination of service of the lock-up party;
- transfers to us in connection with the vesting or settlement of restricted stock units or the "net" or "cashless" exercise of options or other rights to purchase shares of our common stock for purposes of exercising such options or rights and any "sell-to-cover" transaction involving a sale of any shares of our common stock in connection with such vesting, settlement, or exercise to cover payment of the applicable exercise price, tax obligations, or remittance payments due upon such event;

- transfers pursuant to a bona fide third-party tender offer, merger, consolidation or other similar transaction made to all holders of our common stock involving a change of control of our Company;
- transfers of shares of common stock pursuant to a written plan meeting the requirements of Rule 10b5-1 under the Exchange Act in effect as of the date of the lock-up agreement;
- establishing, amending or modifying a written plan meeting the requirements of Rule 10b5-1 under the Exchange Act, provided that such plan does not provide for the transfer of the lock-up party's shares of our common stock during the restricted period; or
- transfers to any wholly-owned subsidiary of the lock-up party or to the parent entity of the lock-up party, to limited partners, members or stockholders of the lock-up party and to any corporation, partnership, limited liability company, investment fund or other entity controlled or managed, or under common control or management by the lock-up party or an immediate family member of the lock-up party.

In connection with the offering, the underwriters may purchase and sell shares of common stock in the open market. These transactions may include short sales, stabilizing transactions and purchases to cover positions created by short sales. Short sales involve the sale by the underwriters of a greater number of shares than they are required to purchase in the offering, and a short position represents the amount of such sales that have not been covered by subsequent purchases. A "covered short position" is a short position that is not greater than the amount of additional shares for which the underwriters' option described above may be exercised. The underwriters may cover any covered short position by either exercising their option to purchase additional shares or purchasing shares in the open market. In determining the source of shares to cover the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase additional shares pursuant to the option described above. "Naked" short sales are any short sales that create a short position greater than the amount of additional shares for which the option described above may be exercised. The underwriters must cover any such naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the common stock in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of various bids for or purchases of common stock made by the underwriters in the open market prior to the completion of the offering.

The underwriters may also impose a penalty bid. This occurs when a particular underwriter repays to the underwriters a portion of the underwriting discount received by it because the representatives have repurchased shares sold by or for the account of such underwriter in stabilizing or short covering transactions.

Purchases to cover a short position and stabilizing transactions, as well as other purchases by the underwriters for their own accounts, may have the effect of preventing or retarding a decline in the market price of our stock, and together with the imposition of the penalty bid, may stabilize, maintain or otherwise affect the market price of our common stock. As a result, the price of our common stock may be higher than the price that otherwise might exist in the open market. The underwriters are not required to engage in these activities and may end any of these activities at any time. These transactions may be effected on The Nasdaq Global Select Market, in the over-the-counter market or otherwise.

We estimate that our share of the total expenses of the offering, excluding underwriting discounts and commissions, will be approximately \$ million.

We have agreed to indemnify the several underwriters against certain liabilities, including liabilities under the Securities Act.

The underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include sales and trading, commercial and investment banking, advisory, investment management, investment research, principal investment, hedging, market making, brokerage and other financial and non-financial activities and services. Certain of the underwriters and their respective affiliates have provided, and may in the future provide, a variety of these services to the issuer and to persons and entities with relationships with the issuer, for which they received or will receive customary fees and expenses.

In the ordinary course of their various business activities, the underwriters and their respective affiliates, officers, directors and employees may purchase, sell or hold a broad array of investments and

actively trade securities, derivatives, loans, commodities, currencies, credit default swaps and other financial instruments for their own account and for the accounts of their customers, and such investment and trading activities may involve or relate to assets, either securities or instruments, or both, of the issuer (directly, as collateral securing other obligations or otherwise) or persons and entities with relationships with the issuer. The underwriters and their respective affiliates may also communicate independent investment recommendations, market color or trading ideas or publish or express independent research views in respect of such assets, securities or instruments and may at any time hold, or recommend to clients that they should acquire, long or short positions in such assets, securities and instruments.

Selling Restrictions

Other than in the United States, no action has been taken by us or the underwriters that would permit a public offering of the securities offered by this prospectus supplement in any jurisdiction where action for that purpose is required. The securities offered by this prospectus supplement may not be offered or sold, directly or indirectly, nor may this prospectus supplement or any other offering material or advertisements in connection with the offer and sale of any such securities be distributed or published in any jurisdiction, except under circumstances that will result in compliance with the applicable rules and regulations of that jurisdiction. Persons into whose possession this prospectus supplement comes are advised to inform themselves about and to observe any restrictions relating to the offering and the distribution of this prospectus supplement. This prospectus supplement does not constitute an offer to sell or a solicitation of an offer to buy any securities offered by this prospectus in any jurisdiction in which such an offer or a solicitation is unlawful.

European Economic Area

In relation to each Member State of the European Economic Area (each, a "Member State"), no shares of common stock ("Shares") have been offered or will be offered pursuant to the offering to the public in that Member State prior to the publication of a prospectus in relation to the Shares which has been approved by the competent authority in that Member State or, where appropriate, approved in another Member State and notified to the competent authority in that Member State, all in accordance with the Prospectus Regulation, except that offer of Shares may be made to the public in that Member State at any time under the following exemptions under the Prospectus Regulation:

- (a) to any legal entity which is a qualified investor as defined under the Prospectus Regulation;
- (b) to fewer than 150 natural or legal persons (other than qualified investors as defined under the Prospectus Regulation), subject to obtaining the prior consent of the Representatives for any such offer; or
- (c) in any other circumstances falling within Article 1(4) of the Prospectus Regulation,

provided that no such offer of Shares shall require us or any Representative to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of Prospectus Regulation and each person who initially acquires any shares or to whom any offer is made will be deemed to have represented, acknowledged and agreed to and with each of the underwriters and us that it is a "qualified investor" within the meaning of Article 2(e) of the Prospectus Regulation. In the case of any shares being offered to a financial intermediary as that term is used in the Prospectus Regulation, each such financial intermediary will be deemed to have represented, acknowledged and agreed that the shares acquired by it in the offer have not been acquired on a non-discretionary basis on behalf of, nor have they been acquired with a view to their offer or resale to, persons in circumstances which may give rise to an offer of any shares to the public other than their offer or resale in a Member State to qualified investors as so defined or in circumstances in which the prior consent of the underwriters have been obtained to each such proposed offer or resale.

For the purposes of this provision, the expression an "offer to the public" in relation to any Shares in any Member State means the communication in any form and by any means of sufficient information on the terms of the offer and any Shares to be offered so as to enable an investor to decide to purchase or subscribe for any Shares, and the expression "Prospectus Regulation" means Regulation (EU) 2017/1129.

United Kingdom

No shares have been offered or will be offered pursuant to the offering to the public in the United Kingdom prior to the publication of a prospectus in relation to the shares which is to be treated as if it had been approved by the Financial Conduct Authority in accordance with the transitional provisions in Article 74 (transitional provisions) of the Prospectus (Amendment etc.) (EU Exit) Regulations 2019/1234, except that the shares may be offered to the public in the United Kingdom at any time:

- (a) to any legal entity which is a qualified investor as defined under Article 2 of the UK Prospectus Regulation;
- (b) to fewer than 150 natural or legal persons (other than qualified investors as defined under Article 2 of the UK Prospectus Regulation), subject to obtaining the prior consent of underwriters for any such offer; or
- (c) in any other circumstances falling within Section 86 of the FSMA,

provided that no such offer of the Shares shall require the issuer or any underwriter to publish a prospectus pursuant to Section 85 of the FSMA or supplement a prospectus pursuant to Article 23 of the UK Prospectus Regulation. For the purposes of this provision, the expression an "offer to the public" in relation to the Shares in the United Kingdom means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares and the expression "UK Prospectus Regulation" means Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018.

In addition, in the United Kingdom, this document is being distributed only to, and is directed only at, and any offer subsequently made may only be directed at persons who are "qualified investors" (as defined in the Prospectus Regulation) (i) who have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended (the "Order") and/or (ii) who are high net worth companies (or persons to whom it may otherwise be lawfully communicated) falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as "relevant persons") or otherwise in circumstances which have not resulted and will not result in an offer to the public of the shares in the United Kingdom within the meaning of the Financial Services and Markets Act 2000.

Any person in the United Kingdom that is not a relevant person should not act or rely on the information included in this document or use it as basis for taking any action. In the United Kingdom, any investment or investment activity that this document relates to may be made or taken exclusively by relevant persons.

Canada

The common stock may be sold in Canada only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 *Prospectus Exemptions* or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 *Registration Requirements, Exemptions, and Ongoing Registrant Obligations*. Any resale of the common stock must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory of these rights or consult with a legal advisor.

Pursuant to section 3A.3 of National Instrument 33-105 *Underwriting Conflicts* ("NI 33-105"), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

Hong Kong

The contents of this prospectus supplement and the accompanying prospectus have not been reviewed by any regulatory authority in Hong Kong. You are advised to exercise caution in relation to the offer. If you are in any doubt about any of the contents of this prospectus supplement or the accompanying prospectus, you should obtain independent professional advice. Please note that (i) our common stock may not be offered or sold in Hong Kong by means of this prospectus supplement or the accompanying prospectus or any document other than to "professional investors" within the meaning of Part I of Schedule 1 of the Securities and Futures Ordinance (Cap.571, Laws of Hong Kong) ("SFO") and any rules made thereunder, or in other circumstances which do not result in the document being a "prospectus" within the meaning of the Companies Ordinance (Cap.32, Laws of Hong Kong) ("CO") or which do not constitute an offer or invitation to the public for the purpose of the CO or the SFO, and (ii) no advertisement, invitation or document relating to our securities may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to the securities which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" within the meaning of the SFO and any rules made thereunder.

Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the common stock may not be circulated or distributed, nor may the common stock be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor (as defined under Section 4A of the Securities and Futures Act, Chapter 289 of Singapore (the "SFA")), under Section 274 of the SFA, (ii) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA, in each case subject to conditions set forth in the SFA.

Where the shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is (i) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor, or (ii) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor, securities or securities-based derivatives contracts (each term as defined in Section 2(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the shares pursuant to an offer made under Section 275 of the SFA except (a) to an institutional investor or to a relevant person, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i) (B) of the SFA; (b) where no consideration is or will be given for the transfer; (c) where the transfer is by operation of law; (d) as specified in Section 276(7) of the SFA; or (e) as specified in Regulation 37A of the Securities and Futures (Offers of Investments) (Securities and Securities-based Derivatives Contracts) Regulations 2018.

In connection with Section 309B of the SFA and the Capital Markets Products, or the CMP, Regulations 2018, the shares are prescribed capital markets products (as defined in the CMP Regulations 2018) and Excluded Investment Products (as defined in Monetary Authority of Singapore Notice SFA 04-N12: Notice on the Sale of Investment Products and Monetary Authority of Singapore Notice FAA-N16: Notice on Recommendations on Investment Products).

Japan

The common stock has not been and will not be registered under the Financial Instruments and Exchange Act of Japan (Act No. 25 of 1948, as amended) (the "FIEA"). The common stock may not be

offered or sold, directly or indirectly, in Japan or to or for the benefit of any resident of Japan (including any person resident in Japan or any corporation or other entity organized under the laws of Japan) or to others for reoffering or resale, directly or indirectly, in Japan or to or for the benefit of any resident of Japan, except pursuant to an exemption from the registration requirements of the FIEA and otherwise in compliance with any relevant laws and regulations of Japan.

LEGAL MATTERS

Certain legal matters with respect to the validity of our shares of common stock offered by this prospectus supplement will be passed upon for us by Wilson Sonsini Goodrich & Rosati, Professional Corporation, Palo Alto, California. Certain legal matters will be passed upon for the underwriters by Davis Polk & Wardwell LLP, Menlo Park, California.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our consolidated financial statements included in our <u>Annual Report on Form 10-K for the year ended December 31, 2021</u>, and the effectiveness of our internal control over financial reporting as of December 31, 2021, as set forth in their reports, which are incorporated by reference in this prospectus supplement and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on Ernst & Young LLP's reports, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the common stock offered by this prospectus supplement and the accompanying prospectus. This prospectus supplement and the accompanying prospectus, filed as part of the registration statement, do not contain all the information set forth in the registration statement and its exhibits and schedules, portions of which have been omitted as permitted by the rules and regulations of the SEC. For further information about us, we refer you to the registration statement and to its exhibits and schedules.

We file annual, quarterly and other reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at www.sec.gov. Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K, including any amendments to those reports, and other information that we file with or furnish to the SEC pursuant to Section 13(a) or 15(d) of the Exchange Act can also be accessed free of charge through the Internet. These filings will be available as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC.

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to incorporate by reference into this prospectus supplement and the accompanying prospectus certain information we file with it, which means that we can disclose important information by referring you to those documents. The information incorporated by reference is considered to be a part of this prospectus supplement and the accompanying prospectus, and information that we file later with the SEC will automatically update and supersede information contained in this prospectus supplement and the accompanying prospectus. We incorporate by reference the documents listed below that we have previously filed with the SEC (excluding any portions of any Form 8-K that are not deemed "filed" pursuant to the General Instructions of Form 8-K):

- our Annual Report on <u>Form 10-K</u> for the fiscal year ended December 31, 2021 filed on February 28, 2022;
- our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2022, June 30, 2022 and September 30, 2022, filed on May 6, 2022, August 8, 2022, and November 8, 2022, respectively;
- the portions of our Definitive Proxy Statement on <u>Schedule 14A</u> that are incorporated by reference into our Annual Report on Form 10-K, filed with the SEC on April 14, 2022;
- our Current Reports on Form 8-K filed with SEC on May 17, 2022, May 26, 2022, June 30, 2022, November 7, 2022 (other than information furnished rather than filed), January 9, 2023 (other than information furnished rather than filed) and January 24, 2023; and
- the description of our common stock contained in our Registration Statement on <u>Form 8-A</u> as filed with the SEC on October 6, 2010, including any amendment or report filed for the purpose of updating such description.

We also incorporate by reference into this prospectus supplement and the accompanying prospectus additional documents that we may file with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the completion or termination of the offering, but excluding any information deemed furnished and not filed with the SEC. Any statements contained in a previously filed document incorporated by reference into this prospectus supplement and the accompanying prospectus is deemed to be modified or superseded for purposes of this prospectus supplement and the accompanying prospectus to the extent that a statement contained in this prospectus supplement and the accompanying prospectus, or in a subsequently filed document also incorporated by reference herein and therein, modifies or supersedes that statement.

We will provide to each person to whom this prospectus supplement and the accompanying prospectus is delivered, upon written or oral request, at no cost to the requester, a copy of any and all of the information that is incorporated by reference in this prospectus supplement and the accompanying prospectus. Requests for such documents should be directed to:

Pacific Biosciences of California, Inc. 1305 O'Brien Drive Menlo Park, California 94025 (650) 521-8000 Attn: Investor Relations

You may also access the documents incorporated by reference in this prospectus supplement through our website at www.pacb.com. Except for the specific incorporated documents listed above, no information available on or accessible through our website shall be deemed to be incorporated in this prospectus supplement or the registration statement of which it forms a part.

PROSPECTUS



Pacific Biosciences of California, Inc.

Common Stock
Preferred Stock
Debt Securities
Depositary Shares
Warrants
Subscription Rights
Purchase Contracts
Units

We may issue securities from time to time in one or more offerings, in amounts, at prices and on terms determined at the time of offering. This prospectus describes the general terms of these securities and the general manner in which these securities will be offered. We will provide the specific terms of these securities in supplements to this prospectus, which will also describe the specific manner in which these securities will be offered and may also supplement, update or amend information contained in this prospectus. You should read this prospectus and any applicable prospectus supplement before you invest.

In addition, the selling securityholders to be named in a supplement to this prospectus may from time to time offer or sell shares of our common stock. To the extent that any selling securityholders resell any securities, the selling securityholders may be required to provide you with this prospectus and a prospectus supplement identifying and containing specific information about the selling securityholders and the amount and terms of the securities being offered. We will not receive any proceeds from the sale of our common stock by the selling securityholders.

The securities may be sold directly to you, through agents or through underwriters and dealers. If agents, underwriters or dealers are used to sell the securities, we will name them and describe their compensation in a prospectus supplement. The price to the public of those securities and the net proceeds we expect to receive from that sale will also be set forth in a prospectus supplement.

Our common stock is listed on the Nasdaq Global Select Market under the symbol "PACB." Each prospectus supplement will indicate whether the securities offered thereby will be listed on any securities exchange.

Investing in these securities involves risks. Please carefully read the information under the headings "Risk Factors" beginning on page 4 of this prospectus and "Item 1A – Risk Factors" of our most recent report on Form 10-K or 10-Q that is incorporated by reference in this prospectus before you invest in our securities.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is November 10, 2020.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or the SEC, using a "shelf" registration process. Under this shelf registration process, we or the selling securityholders may from time to time sell any combination of the securities described in this prospectus in one or more offerings.

This prospectus provides you with a general description of the securities that may be offered. Each time we or the selling securityholders sell securities, we will provide one or more prospectus supplements that will contain specific information about the terms of the offering. The prospectus supplement may also add, update or change information contained in this prospectus. You should read both this prospectus and any applicable prospectus supplement together with the additional information described under the heading "Where You Can Find More Information."

We have not authorized anyone to provide you with information that is different from that contained, or incorporated by reference, in this prospectus, any applicable prospectus supplement or in any related free writing prospectus. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus and any applicable prospectus supplement or any related free writing prospectus do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the securities described in the applicable prospectus supplement or an offer to sell or the solicitation of an offer to buy such securities in any circumstances in which such offer or solicitation is unlawful. You should assume that the information appearing in this prospectus, any prospectus supplement, the documents incorporated by reference and any related free writing prospectus is accurate only as of their respective dates. Our business, financial condition, results of operations and prospects may have changed materially since those dates.

PROSPECTUS SUMMARY

This summary highlights selected information that is presented in greater detail elsewhere, or incorporated by reference, in this prospectus. It does not contain all of the information that may be important to you and your investment decision. Before investing in our securities, you should carefully read this entire prospectus, including the matters set forth under the section of this prospectus captioned "Risk Factors" and the financial statements and related notes and other information that we incorporate by reference herein, including our Annual Report on Form 10-K and our Quarterly Reports on Form 10-Q. Unless the context indicates otherwise, references in this prospectus to "Pacific Biosciences," "PacBio," "we," "our" and "us" refer, collectively, to Pacific Biosciences of California, Inc., a Delaware corporation, and its subsidiaries taken as a whole.

Company Overview

We design, develop and manufacture sequencing systems to help scientists resolve genetically complex problems. Based on our novel Single Molecule, Real-Time (SMRT®) sequencing technology, our products enable: de novo genome assembly to finish genomes in order to more fully identify, annotate and decipher genomic structures; full-length transcript analysis to improve annotations in reference genomes, characterize alternatively spliced isoforms in important gene families, and find novel genes; targeted sequencing to more comprehensively characterize genetic variations; and real-time kinetic information for epigenome characterization. Our technology provides high accuracy, ultra-long reads, uniform coverage and the ability to simultaneously detect epigenetic changes. PacBio® sequencing systems, including consumables and software, provide a simple and fast end-to-end workflow for SMRT sequencing.

Our current products include the Sequel II instrument and SMRT Cell 8M, which together are capable of sequencing up to approximately eight million DNA molecules simultaneously, and the previous generation Sequel instrument and Sequel SMRT Cell 1M, which together are capable of sequencing up to approximately one million DNA molecules simultaneously. In October 2020, we launched the Sequel IIe System, which has increased computational capacity, and is designed to enable customers to generate PacBio HiFi reads more efficiently.

Our customers and our scientific collaborators have published numerous peer-reviewed articles in journals including Nature, Science, Cell, PNAS and The New England Journal of Medicine highlighting the power and applications of SMRT sequencing in projects such as finishing genomes, structural variation discovery, isoform transcriptome characterization, rare mutation discovery and the identification of chemical modifications of DNA related to virulence and pathogenicity. Our research and development efforts are focused on developing new products and further improving our existing products including continuing chemistry and sample preparation improvements to increase throughput and expand our supported applications. By providing access to genetic information that was previously inaccessible, we enable scientists to confidently increase their understanding of biological systems.

Corporate Information

Pacific Biosciences of California, Inc., formerly Nanofluidics, Inc. was incorporated in the State of Delaware in 2000. Our executive offices are located at 1305 O'Brien Drive, Menlo Park, California 94025, and our telephone number is (650) 521-8000. We maintain a website at www.pacb.com where general information about us is available. Our website, and the information contained therein, is not a part of this prospectus.

The Securities That May Be Offered

We may offer or sell common stock, preferred stock, depositary shares, debt securities, warrants, subscription rights, purchase contracts and units in one or more offerings and in any combination, and the selling securityholders to be named in a supplement to this prospectus may from time to time offer and sell shares of our common stock. Each time securities are offered with this prospectus, we will provide a prospectus supplement that will describe the specific amounts, prices and terms of the securities being offered and the net proceeds we expect to receive from that sale. We will not receive any proceeds from the sale of our common stock by the selling securityholders.

The securities may be sold to or through underwriters, dealers or agents or directly to purchasers or as otherwise set forth in the section of this prospectus captioned "Plan of Distribution." Each prospectus supplement will set forth the names of any underwriters, dealers, agents or other entities involved in the sale of securities described in that prospectus supplement and any applicable fee, commission or discount arrangements with them.

Common Stock

We or the selling securityholders may offer shares of our common stock, par value \$0.001 per share, either alone or underlying other registered securities convertible into our common stock. Holders of our common stock are entitled to receive dividends declared by our board of directors out of funds legally available for the payment of dividends, subject to rights, if any, of preferred stockholders. We have not paid dividends in the past and have no current plans to pay dividends. Each holder of common stock is entitled to one vote per share. The holders of common stock have no preemptive rights.

Preferred Stock

Our board of directors has the authority, subject to limitations prescribed by Delaware law, to issue preferred stock in one or more series, to establish from time to time the number of shares to be included in each series, and to fix the designation, powers, preferences and rights of the shares of each series and any of its qualifications, limitations or restrictions, in each case without further vote or action by our stockholders. Each series of preferred stock offered by us will be more fully described in the particular prospectus supplement that will accompany this prospectus, including redemption provisions, rights in the event of our liquidation, dissolution or winding up, voting rights and rights to convert into common stock.

Depositary Shares

We may issue fractional shares of preferred stock that will be represented by depositary shares and depositary receipts.

Each series of depositary shares or depositary receipts offered by us will be more fully described in the particular prospectus supplement that will accompany this prospectus, including redemption provisions, rights in the event of our liquidation, dissolution or winding up, voting rights and rights to convert into common stock.

Debt Securities

We may offer secured or unsecured obligations in the form of one or more series of senior or subordinated debt. The senior debt securities and the subordinated debt securities are together referred to in this prospectus as the "debt securities." The subordinated debt securities generally will be entitled to payment only after payment of our senior debt. Senior debt generally includes all debt for money borrowed by us, except debt that is stated in the instrument governing the terms of that debt to be not senior to, or to have the same rank in right of payment as, or to be expressly junior to, the subordinated debt securities. We may issue debt securities that are convertible into shares of our common stock.

The debt securities will be issued under an indenture between us and a trustee to be identified in an accompanying prospectus supplement. We have summarized the general features of the debt securities to be governed by the indenture in this prospectus and the form of indenture has been filed as an exhibit to the registration statement of which this prospectus forms a part. We encourage you to read the indenture.

Warrants

We may offer warrants for the purchase of common stock, preferred stock, debt securities or depositary shares. We may offer warrants independently or together with other securities.

Subscription Rights

We may offer subscription rights to purchase our common stock, preferred stock, debt securities, depositary shares, warrants or units consisting of some or all of these securities. These subscription rights

may be offered independently or together with any other security offered hereby and may or may not be transferable by the stockholder receiving the subscription rights in such offering.
Purchase Contracts
We may offer purchase contracts, including contracts obligating holders or us to purchase from the other a specific or variable number of securities at a future date or dates.
Units
We may offer units comprised of one or more of the other classes of securities described in this prospectus in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit.

RISK FACTORS

An investment in our securities involves a high degree of risk. The prospectus supplement applicable to each offering of our securities will contain a discussion of the risks applicable to an investment in our securities. Prior to making a decision about investing in our securities, you should carefully consider the specific factors discussed under the section in the applicable prospectus supplement captioned "Risk Factors," together with all of the other information contained or incorporated by reference in the prospectus supplement or appearing or incorporated by reference in this prospectus. You should also consider the risks, uncertainties and assumptions discussed under "Part I — Item 1A — Risk Factors" of our most recent Annual Report on Form 10-K and in "Part II — Item 1A — Risk Factors" in our most recent Quarterly Report on Form 10-Q filed subsequent to such Form 10-K that are incorporated herein by reference, as may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future. The risks and uncertainties we have described are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our operations.

FORWARD-LOOKING STATEMENTS

This prospectus, each prospectus supplement and the information incorporated by reference in this prospectus and each prospectus supplement contain certain statements that constitute "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. The words "believe," "may," "will," "estimate," "continue," "anticipate," "intend," "expect," "could," "would," "project," "plan," "potentially," "likely," and similar expressions and variations thereof are intended to identify forward-looking statements, but are not the exclusive means of identifying such statements. Those statements appear in this prospectus, any accompanying prospectus supplement and the documents incorporated herein and therein by reference, particularly in the sections captioned "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and include statements regarding the intent, belief or current expectations of our management that are subject to known and unknown risks, uncertainties and assumptions. You are cautioned that any such forward-looking statements are not guarantees of future performance and involve risks and uncertainties, and that actual results may differ materially from those projected in the forward-looking statements as a result of various factors.

Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified, you should not rely upon forward-looking statements as predictions of future events. The events and circumstances reflected in the forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Except as required by applicable law, including the securities laws of the United States and the rules and regulations of the SEC, we do not plan to publicly update or revise any forward-looking statements contained herein after we distribute this prospectus, whether as a result of any new information, future events or otherwise.

In addition, statements that "we believe" and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this prospectus, and although we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted a thorough inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and investors are cautioned not to unduly rely upon these statements.

This prospectus and the documents incorporated by reference in this prospectus may contain market data that we obtain from industry sources. These sources do not guarantee the accuracy or completeness of the information. Although we believe that our industry sources are reliable, we do not independently verify the information. The market data may include projections that are based on a number of other projections. While we believe these assumptions to be reasonable and sound as of the date of this prospectus, actual results may differ from the projections.

USE OF PROCEEDS

We will retain broad discretion over the use of the net proceeds to us from the sale of our securities under this prospectus. Unless otherwise provided in the applicable prospectus supplement, we currently expect to use the net proceeds that we receive from this offering for working capital and other general corporate purposes. We may also use a portion of the net proceeds to acquire, license or invest in complementary products, technologies or businesses; however, we currently have no agreements or commitments to complete any such transaction. The expected use of net proceeds of this offering represents our current intentions based on our present plans and business conditions. We cannot specify with certainty all of the particular uses for the net proceeds to be received upon the closing of this offering. Pending these uses, we plan to invest the net proceeds of this offering in short- and intermediate-term, interest-bearing obligations, investment-grade instruments, certificates of deposit or direct or guaranteed obligations of the U.S. government.

We will not receive any of the proceeds from the sale of our securities by selling securityholders.

SELLING SECURITYHOLDERS

This prospectus also relates to the possible resale by certain of our stockholders, who we refer to in this prospectus as the "selling securityholders," of shares of our common stock that were issued and outstanding prior to the original date of filing of the registration statement of which this prospectus forms a part. Information about any selling securityholders, where applicable, including their identities and the number of shares of common stock to be registered on their behalf, will be set forth in a prospectus supplement, in a post-effective amendment, or in filings we make with the SEC under the Exchange Act that are incorporated by reference. The selling securityholders shall not sell any shares of our common stock pursuant to this prospectus until we have identified such selling securityholders and the shares being offered for resale by such selling securityholders. However, the selling securityholders may sell or transfer all or a portion of their shares of our common stock pursuant to any available exemption from the registration requirements of the Securities Act.

DESCRIPTION OF CAPITAL STOCK

The description of our capital stock is incorporated by reference to Exhibit 4.2 to our Annual Report on Form 10-K for the fiscal year ended December 31, 2019, filed with the SEC on February 28, 2020.

DESCRIPTION OF DEBT SECURITIES

The following description, together with the additional information we include in any applicable prospectus supplement, summarizes certain general terms and provisions of the debt securities that we may offer under this prospectus. When we offer to sell a particular series of debt securities, we will describe the specific terms of the series in a supplement to this prospectus. We will also indicate in the supplement to what extent the general terms and provisions described in this prospectus apply to a particular series of debt securities

We may issue debt securities either separately, or together with, or upon the conversion or exercise of or in exchange for, other securities described in this prospectus. Debt securities may be our senior, senior subordinated or subordinated obligations and, unless otherwise specified in a supplement to this prospectus, the debt securities will be our direct, unsecured obligations and may be issued in one or more series.

The debt securities will be issued under an indenture between us and a trustee to be identified in an accompanying prospectus supplement. We have summarized select portions of the indenture below. The summary is not complete. The form of the indenture has been filed as an exhibit to the registration statement of which this prospectus forms a part and you should read the indenture for provisions that may be important to you. In the summary below, we have included references to the section numbers of the indenture so that you can easily locate these provisions. Capitalized terms used in the summary and not defined herein have the meanings specified in the indenture.

General

The terms of each series of debt securities will be established by or pursuant to a resolution of our board of directors and set forth or determined in the manner provided in a resolution of our board of directors, in an officer's certificate or by a supplemental indenture. The particular terms of each series of debt securities will be described in a prospectus supplement relating to such series (including any pricing supplement or term sheet).

We can issue an unlimited amount of debt securities under the indenture that may be in one or more series with the same or various maturities, at par, at a premium, or at a discount. We will set forth in a prospectus supplement (including any pricing supplement or term sheet) relating to any series of debt securities being offered the aggregate principal amount and the following terms of the debt securities, if applicable:

- the title and ranking of the debt securities (including the terms of any subordination provisions);
- the price or prices (expressed as a percentage of the principal amount) at which we will sell the debt securities;
- any limit upon the aggregate principal amount of the debt securities;
- the date or dates on which the principal of the securities of the series is payable;
- the rate or rates (which may be fixed or variable) per annum or the method used to determine the rate or rates (including any commodity, commodity index, stock exchange index or financial index) at which the debt securities will bear interest, the date or dates from which interest will accrue, the date or dates on which interest will commence and be payable and any regular record date for the interest payable on any interest payment date;
- the place or places where principal of, and interest, if any, on the debt securities will be payable (and
 the method of such payment), where the securities of such series may be surrendered for registration
 of transfer or exchange, and where notices and demands to us in respect of the debt securities may be
 delivered;
- the period or periods within which, the price or prices at which and the terms and conditions upon which we may redeem the debt securities;
- any obligation we have to redeem or purchase the debt securities pursuant to any sinking fund or analogous provisions or at the option of a holder of debt securities and the period or periods within

which, the price or prices at which and the terms and conditions upon which securities of the series shall be redeemed or purchased, in whole or in part, pursuant to such obligation;

- the dates on which and the price or prices at which we will repurchase debt securities at the option of the holders of debt securities and other detailed terms and provisions of these repurchase obligations;
- the denominations in which the debt securities will be issued, if other than denominations of \$1,000 and any integral multiple thereof;
- whether the debt securities will be issued in the form of certificated debt securities or global debt securities;
- the portion of principal amount of the debt securities payable upon declaration of acceleration of the maturity date, if other than the principal amount;
- the currency of denomination of the debt securities, which may be United States dollars or any foreign currency, and if such currency of denomination is a composite currency, the agency or organization, if any, responsible for overseeing such composite currency;
- the designation of the currency, currencies or currency units in which payment of principal of, premium and interest on the debt securities will be made;
- if payments of principal of, premium or interest on the debt securities will be made in one or more currencies or currency units other than that or those in which the debt securities are denominated, the manner in which the exchange rate with respect to these payments will be determined;
- the manner in which the amounts of payment of principal of, premium, if any, or interest on the debt securities will be determined, if these amounts may be determined by reference to an index based on a currency or currencies or by reference to a commodity, commodity index, stock exchange index or financial index;
- any provisions relating to any security provided for the debt securities;
- any addition to, deletion of or change in the Events of Default described in this prospectus or in the indenture with respect to the debt securities and any change in the acceleration provisions described in this prospectus or in the indenture with respect to the debt securities;
- any addition to, deletion of or change in the covenants described in this prospectus or in the indenture with respect to the debt securities;
- any depositaries, interest rate calculation agents, exchange rate calculation agents or other agents with respect to the debt securities;
- any other terms of the debt securities, which may supplement, modify or delete any provision of the indenture as it applies to that series, including any terms that may be required under applicable law or regulations or advisable in connection with the marketing of the securities; and
- whether any of our direct or indirect subsidiaries will guarantee the debt securities of that series, including the terms of subordination, if any, of such guarantees.

We may issue debt securities that provide for an amount less than their stated principal amount to be due and payable upon declaration of acceleration of their maturity pursuant to the terms of the indenture. We will provide you with information on the federal income tax considerations and other special considerations applicable to any of these debt securities in the applicable prospectus supplement.

If we denominate the purchase price of any of the debt securities in a foreign currency or currencies or a foreign currency unit or units, or if the principal of and any premium and interest on any series of debt securities is payable in a foreign currency or currencies or a foreign currency unit or units, we will provide you with information on the restrictions, elections, general tax considerations, specific terms and other information with respect to that issue of debt securities and such foreign currency or currencies or foreign currency unit or units in the applicable prospectus supplement.

Transfer and Exchange

Each debt security will be represented by either one or more global securities registered in the name of a clearing agency registered under the Exchange Act, which we refer to as the depositary, or a nominee of the depositary (we will refer to any debt security represented by a global debt security as a "book-entry debt security"), or a certificate issued in definitive registered form (we will refer to any debt security represented by a certificated security as a "certificated debt security") as set forth in the applicable prospectus supplement. Except as set forth under the heading "Global Debt Securities and Book-Entry System" below, book-entry debt securities will not be issuable in certificated form.

Certificated Debt Securities

You may transfer or exchange certificated debt securities at any office we maintain for this purpose in accordance with the terms of the indenture. No service charge will be made for any transfer or exchange of certificated debt securities, but we may require payment of a sum sufficient to cover any tax or other governmental charge payable in connection with a transfer or exchange.

You may effect the transfer of certificated debt securities and the right to receive the principal of, premium and interest on certificated debt securities only by surrendering the certificate representing those certificated debt securities and either reissuance by us or the trustee of the certificate to the new holder or the issuance by us or the trustee of a new certificate to the new holder.

Global Debt Securities and Book-Entry System

Each global debt security representing book-entry debt securities will be deposited with, or on behalf of, the depositary, and registered in the name of the depositary or a nominee of the depositary.

Covenants

We will set forth in the applicable prospectus supplement any restrictive covenants applicable to any issue of debt securities.

No Protection in the Event of a Change of Control

Unless we state otherwise in the applicable prospectus supplement, the debt securities will not contain any provisions which may afford holders of the debt securities protection in the event we have a change in control or in the event of a highly leveraged transaction (whether or not such transaction results in a change in control) which could adversely affect holders of debt securities.

Consolidation, Merger and Sale of Assets

We may not consolidate with or merge with or into, or convey, transfer or lease all or substantially all of our properties and assets to any person, which we refer to as a successor person, unless:

- we are the surviving corporation or the successor person (if other than us) is a corporation organized and validly existing under the laws of any U.S. domestic jurisdiction and expressly assumes our obligations on the debt securities and under the indenture; and
- immediately after giving effect to the transaction, no Default or Event of Default, shall have occurred and be continuing.

Notwithstanding the above, any of our subsidiaries may consolidate with, merge into or transfer all or part of its properties to us.

Events of Default

"Event of Default" means with respect to any series of debt securities, any of the following:

default in the payment of any interest upon any debt security of that series when it becomes due and
payable, and continuance of such default for a period of 30 days (unless the entire amount of the
payment is deposited by us with the trustee or with a paying agent prior to the expiration of the 30day period);

- default in the payment of principal of any security of that series at its maturity;
- default in the performance or breach of any other covenant or warranty by us in the indenture (other
 than a covenant or warranty that has been included in the indenture solely for the benefit of a series
 of debt securities other than that series), which default continues uncured for a period of 60 days
 after we receive written notice from the trustee, or we and the trustee receive written notice from the
 holders of not less than 25% in principal amount of the outstanding debt securities of that series as
 provided in the indenture;
- · certain voluntary or involuntary events of bankruptcy, insolvency or reorganization of us; and
- any other Event of Default provided with respect to debt securities of that series that is described in the applicable prospectus supplement.

No Event of Default with respect to a particular series of debt securities (except as to certain events of bankruptcy, insolvency or reorganization) necessarily constitutes an Event of Default with respect to any other series of debt securities. The occurrence of certain Events of Default or an acceleration under the indenture may constitute an event of default under certain indebtedness of ours or our subsidiaries outstanding from time to time.

We will provide the trustee written notice of any Default or Event of Default within 30 days of becoming aware of the occurrence of such Default or Event of Default, which notice will describe in reasonable detail the status of such Default or Event of Default and what action we are taking or propose to take in respect thereof.

If an Event of Default with respect to debt securities of any series at the time outstanding occurs and is continuing, then the trustee or the holders of not less than 25% in principal amount of the outstanding debt securities of that series may, by a notice in writing to us (and to the trustee if given by the holders), declare to be due and payable immediately the principal of (or, if the debt securities of that series are discount securities, that portion of the principal amount as may be specified in the terms of that series) and accrued and unpaid interest, if any, on all debt securities of that series. In the case of an Event of Default resulting from certain events of bankruptcy, insolvency or reorganization, the principal (or such specified amount) of and accrued and unpaid interest, if any, on all outstanding debt securities will become and be immediately due and payable without any declaration or other act on the part of the trustee or any holder of outstanding debt securities. At any time after a declaration of acceleration with respect to debt securities of any series has been made, but before a judgment or decree for payment of the money due has been obtained by the trustee, the holders of a majority in principal amount of the outstanding debt securities of that series may rescind and annul the acceleration if all Events of Default, other than the non-payment of accelerated principal and interest, if any, with respect to debt securities of that series, have been cured or waived as provided in the indenture. We refer you to the prospectus supplement relating to any series of debt securities that are discount securities for the particular provisions relating to acceleration of a portion of the principal amount of such discount securities upon the occurrence of an Event of Default.

The indenture provides that the trustee may refuse to perform any duty or exercise any of its rights or powers under the indenture unless the trustee receives indemnity satisfactory to it against any cost, liability or expense which might be incurred by it in performing such duty or exercising such right or power. Subject to certain rights of the trustee, the holders of a majority in principal amount of the outstanding debt securities of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the trustee or exercising any trust or power conferred on the trustee with respect to the debt securities of that series.

No holder of any debt security of any series will have any right to institute any proceeding, judicial or otherwise, with respect to the indenture or for the appointment of a receiver or trustee, or for any remedy under the indenture, unless:

- that holder has previously given to the trustee written notice of a continuing Event of Default with respect to debt securities of that series; and
- the holders of not less than 25% in principal amount of the outstanding debt securities of that series have made written request, and offered indemnity or security satisfactory to the trustee, to the trustee to institute the proceeding as trustee, and the trustee has not received from the holders of not

less than a majority in principal amount of the outstanding debt securities of that series a direction inconsistent with that request and has failed to institute the proceeding within 60 days.

Notwithstanding any other provision in the indenture, the holder of any debt security will have an absolute and unconditional right to receive payment of the principal of, premium and any interest on that debt security on or after the due dates expressed in that debt security and to institute suit for the enforcement of payment.

The indenture requires us, within 120 days after the end of our fiscal year, to furnish to the trustee a statement as to compliance with the indenture. If a Default or Event of Default occurs and is continuing with respect to the securities of any series and if it is known to a responsible officer of the trustee, the trustee shall send to each securityholder of the securities of that series notice of a Default or Event of Default within 90 days after it occurs or, if later, after a responsible officer of the trustee has knowledge of such Default or Event of Default. The indenture provides that the trustee may withhold notice to the holders of debt securities of any series of any Default or Event of Default (except in payment on any debt securities of that series) with respect to debt securities of that series if the trustee determines in good faith that withholding notice is in the interest of the holders of those debt securities.

Modification and Waiver

We and the trustee may modify, amend or supplement the indenture or the debt securities of any series without the consent of any holder of any debt security:

- to cure any ambiguity, defect or inconsistency;
- to comply with covenants in the indenture described above under the heading "Consolidation, Merger and Sale of Assets";
- to provide for uncertificated securities in addition to or in place of certificated securities;
- to add guarantees with respect to debt securities of any series or secure debt securities of any series;
- to surrender any of our rights or powers under the indenture;
- to add covenants or events of default for the benefit of the holders of debt securities of any series;
- to comply with the applicable procedures of the applicable depositary;
- to make any change that does not adversely affect the rights of any holder of debt securities;
- to provide for the issuance of and establish the form and terms and conditions of debt securities of any series as permitted by the indenture;
- to effect the appointment of a successor trustee with respect to the debt securities of any series and to add to or change any of the provisions of the indenture to provide for or facilitate administration by more than one trustee: or
- to comply with requirements of the SEC in order to effect or maintain the qualification of the indenture under the Trust Indenture Act.

We may also modify and amend the indenture with the consent of the holders of at least a majority in principal amount of the outstanding debt securities of each series affected by the modifications or amendments. We may not make any modification or amendment without the consent of the holders of each affected debt security then outstanding if that amendment will:

- reduce the amount of debt securities whose holders must consent to an amendment, supplement or waiver;
- reduce the rate of or extend the time for payment of interest (including default interest) on any debt security;
- reduce the principal of or premium on or change the fixed maturity of any debt security or reduce the amount of, or postpone the date fixed for, the payment of any sinking fund or analogous obligation with respect to any series of debt securities;
- reduce the principal amount of discount securities payable upon acceleration of maturity;

- waive a default in the payment of the principal of, premium or interest on any debt security (except a
 rescission of acceleration of the debt securities of any series by the holders of at least a majority in
 aggregate principal amount of the then outstanding debt securities of that series and a waiver of the
 payment default that resulted from such acceleration);
- make the principal of or premium or interest on any debt security payable in currency other than that stated in the debt security;
- make any change to certain provisions of the indenture relating to, among other things, the right of holders of debt securities to receive payment of the principal of, premium and interest on those debt securities and to institute suit for the enforcement of any such payment and to waivers or amendments; or
- waive a redemption payment with respect to any debt security.

Except for certain specified provisions, the holders of at least a majority in principal amount of the outstanding debt securities of any series may on behalf of the holders of all debt securities of that series waive our compliance with provisions of the indenture. The holders of a majority in principal amount of the outstanding debt securities of any series may on behalf of the holders of all the debt securities of such series waive any past default under the indenture with respect to that series and its consequences, except a default in the payment of the principal of, premium or any interest on any debt security of that series; provided, however, that the holders of a majority in principal amount of the outstanding debt securities of any series may rescind an acceleration and its consequences, including any related payment default that resulted from the acceleration.

Defeasance of Debt Securities and Certain Covenants in Certain Circumstances

Legal Defeasance

The indenture provides that, unless otherwise provided by the terms of the applicable series of debt securities, we may be discharged from any and all obligations in respect of the debt securities of any series (subject to certain exceptions). We will be so discharged upon the irrevocable deposit with the trustee, in trust, of money and/or U.S. government obligations or, in the case of debt securities denominated in a single currency other than U.S. dollars, government obligations of the government that issued or caused to be issued such currency, that, through the payment of interest and principal in accordance with their terms, will provide money or U.S. government obligations in an amount sufficient in the opinion of a nationally recognized firm of independent public accountants or investment bank to pay and discharge each installment of principal, premium and interest on and any mandatory sinking fund payments in respect of the debt securities of that series on the stated maturity of those payments in accordance with the terms of the indenture and those debt securities.

This discharge may occur only if, among other things, we have delivered to the trustee an opinion of counsel stating that we have received from, or there has been published by, the United States Internal Revenue Service a ruling or, since the date of execution of the indenture, there has been a change in the applicable United States federal income tax law, in either case to the effect that, and based thereon such opinion shall confirm that, the holders of the debt securities of that series will not recognize income, gain or loss for United States federal income tax purposes as a result of the deposit, defeasance and discharge and will be subject to United States federal income tax on the same amounts and in the same manner and at the same times as would have been the case if the deposit, defeasance and discharge had not occurred.

Defeasance of Certain Covenants

The indenture provides that, unless otherwise provided by the terms of the applicable series of debt securities, upon compliance with certain conditions:

- we may omit to comply with the covenant described under the heading "Consolidation, Merger and Sale of Assets" and certain other covenants set forth in the indenture, as well as any additional covenants which may be set forth in the applicable prospectus supplement; and
- any omission to comply with those covenants will not constitute a Default or an Event of Default with respect to the debt securities of that series.

We refer to this as covenant defeasance. The conditions include:

- depositing with the trustee money and/or U.S. government obligations or, in the case of debt
 securities denominated in a single currency other than U.S. dollars, government obligations of the
 government that issued or caused to be issued such currency, that, through the payment of interest
 and principal in accordance with their terms, will provide money in an amount sufficient in the
 opinion of a nationally recognized firm of independent public accountants or investment bank to pay
 and discharge each installment of principal of, premium and interest on and any mandatory sinking
 fund payments in respect of the debt securities of that series on the stated maturity of those payments
 in accordance with the terms of the indenture and those debt securities;
- such deposit will not result in a breach or violation of, or constitute a default under the indenture or any other agreement to which we are a party;
- no Default or Event of Default with respect to the applicable series of debt securities shall have
 occurred or is continuing on the date of such deposit; and
- delivering to the trustee an opinion of counsel to the effect that we have received from, or there has been published by, the United States Internal Revenue Service a ruling or, since the date of execution of the indenture, there has been a change in the applicable United States federal income tax law, in either case to the effect that, and based thereon such opinion shall confirm that, the holders of the debt securities of that series will not recognize income, gain or loss for United States federal income tax purposes as a result of the deposit and related covenant defeasance and will be subject to United States federal income tax on the same amounts and in the same manner and at the same times as would have been the case if the deposit and related covenant defeasance had not occurred.

No Personal Liability of Directors, Officers, Employees or Stockholders

None of our past, present or future directors, officers, employees or stockholders, as such, will have any liability for any of our obligations under the debt securities or the indenture or for any claim based on, or in respect or by reason of, such obligations or their creation. By accepting a debt security, each holder waives and releases all such liability. This waiver and release is part of the consideration for the issue of the debt securities. However, this waiver and release may not be effective to waive liabilities under U.S. federal securities laws, and it is the view of the SEC that such a waiver is against public policy.

Governing Law

The indenture and the debt securities, including any claim or controversy arising out of or relating to the indenture or the securities, will be governed by the laws of the State of New York.

The indenture will provide that we, the trustee and the holders of the debt securities (by their acceptance of the debt securities) irrevocably waive, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to the indenture, the debt securities or the transactions contemplated thereby.

The indenture will provide that any legal suit, action or proceeding arising out of or based upon the indenture or the transactions contemplated thereby may be instituted in the federal courts of the United States of America located in the City of New York or the courts of the State of New York in each case located in the City of New York, and we, the trustee and the holder of the debt securities (by their acceptance of the debt securities) irrevocably submit to the non-exclusive jurisdiction of such courts in any such suit, action or proceeding. The indenture will further provide that service of any process, summons, notice or document by mail (to the extent allowed under any applicable statute or rule of court) to such party's address set forth in the indenture will be effective service of process for any suit, action or other proceeding brought in any such court. The indenture will further provide that we, the trustee and the holders of the debt securities (by their acceptance of the debt securities) irrevocably and unconditionally waive any objection to the laying of venue of any suit, action or other proceeding in the courts specified above and irrevocably and unconditionally waive and agree not to plead or claim any such suit, action or other proceeding has been brought in an inconvenient forum.

DESCRIPTION OF DEPOSITARY SHARES

General

We may, at our option, elect to offer fractional shares of preferred stock, or depositary shares, rather than full shares of preferred stock. If we do, we will issue to the public receipts, called depositary receipts, for depositary shares, each of which will represent a fraction, to be described in the applicable prospectus supplement, of a share of a particular series of preferred stock. Unless otherwise provided in the prospectus supplement, each owner of a depositary share will be entitled, in proportion to the applicable fractional interest in a share of preferred stock represented by the depositary share, to all the rights and preferences of the preferred stock represented by the depositary share. Those rights include dividend, voting, redemption, conversion and liquidation rights.

The shares of preferred stock underlying the depositary shares will be deposited with a bank or trust company selected by us to act as depositary under a deposit agreement between us, the depositary and the holders of the depositary receipts. The depositary will be the transfer agent, registrar and dividend disbursing agent for the depositary shares.

The depositary shares will be evidenced by depositary receipts issued pursuant to the depositary agreement. Holders of depositary receipts agree to be bound by the deposit agreement, which requires holders to take certain actions such as filing proof of residence and paying certain charges.

The summary of terms of the depositary shares contained in this prospectus is not complete. You should refer to the form of the deposit agreement, our amended and restated certificate of incorporation and the certificate of designation for the applicable series of preferred stock that are, or will be, filed with the SEC.

Dividends and Other Distributions

The depositary will distribute all cash dividends or other cash distributions, if any, received in respect of the preferred stock underlying the depositary shares to the record holders of depositary shares in proportion to the numbers of depositary shares owned by those holders on the relevant record date. The relevant record date for depositary shares will be the same date as the record date for the underlying preferred stock.

If there is a distribution other than in cash, the depositary will distribute property (including securities) received by it to the record holders of depositary shares, unless the depositary determines that it is not feasible to make the distribution. If this occurs, the depositary may, with our approval, adopt another method for the distribution, including selling the property and distributing the net proceeds from the sale to the holders.

Liquidation Preference

If a series of preferred stock underlying the depositary shares has a liquidation preference, in the event of the voluntary or involuntary liquidation, dissolution or winding up of us, holders of depositary shares will be entitled to receive the fraction of the liquidation preference accorded each share of the applicable series of preferred stock, as set forth in the applicable prospectus supplement.

Withdrawal of Stock

Unless the related depositary shares have been previously called for redemption, upon surrender of the depositary receipts at the office of the depositary, the holder of the depositary shares will be entitled to delivery, at the office of the depositary to or upon his or her order, of the number of whole shares of the preferred stock and any money or other property represented by the depositary shares. If the depositary receipts delivered by the holder evidence a number of depositary shares in excess of the number of depositary shares representing the number of whole shares of preferred stock to be withdrawn, the depositary will deliver to the holder at the same time a new depositary receipt evidencing the excess number of depositary shares. In no event will the depositary deliver fractional shares of preferred stock upon surrender of depositary receipts. Holders of preferred stock thus withdrawn may not thereafter deposit those shares under the deposit agreement or receive depositary receipts evidencing depositary shares therefor.

Redemption of Depositary Shares

Whenever we redeem shares of preferred stock held by the depositary, the depositary will redeem as of the same redemption date the number of depositary shares representing shares of the preferred stock so redeemed, so long as we have paid in full to the depositary the redemption price of the preferred stock to be redeemed plus an amount equal to any accumulated and unpaid dividends on the preferred stock to the date fixed for redemption. The redemption price per depositary share will be equal to the redemption price and any other amounts per share payable on the preferred stock multiplied by the fraction of a share of preferred stock represented by one depositary share. If less than all the depositary shares are to be redeemed, the depositary shares to be redeemed will be selected by lot or pro rata or by any other equitable method as may be determined by the depositary.

After the date fixed for redemption, depositary shares called for redemption will no longer be deemed to be outstanding and all rights of the holders of depositary shares will cease, except the right to receive the monies payable upon redemption and any money or other property to which the holders of the depositary shares were entitled upon redemption upon surrender to the depositary of the depositary receipts evidencing the depositary shares.

Voting the Preferred Stock

Upon receipt of notice of any meeting at which the holders of the preferred stock are entitled to vote, the depositary will mail the information contained in the notice of meeting to the record holders of the depositary receipts relating to that preferred stock. The record date for the depositary receipts relating to the preferred stock will be the same date as the record date for the preferred stock. Each record holder of the depositary shares on the record date will be entitled to instruct the depositary as to the exercise of the voting rights pertaining to the number of shares of preferred stock represented by that holder's depositary shares. The depositary will endeavor, insofar as practicable, to vote the number of shares of preferred stock represented by the depositary shares in accordance with those instructions, and we will agree to take all action that may be deemed necessary by the depositary in order to enable the depositary to do so. The depositary will not vote any shares of preferred stock except to the extent that it receives specific instructions from the holders of depositary shares representing that number of shares of preferred stock.

Charges of the Depositary

We will pay all transfer and other taxes and governmental charges arising solely from the existence of the depositary arrangements. We will pay charges of the depositary in connection with the initial deposit of the preferred stock and any redemption of the preferred stock. Holders of depositary receipts will pay transfer, income and other taxes and governmental charges and such other charges (including those in connection with the receipt and distribution of dividends, the sale or exercise of rights, the withdrawal of the preferred stock and the transferring, splitting or grouping of depositary receipts) as are expressly provided in the deposit agreement to be for their accounts. If these charges have not been paid by the holders of depositary receipts, the depositary may refuse to transfer depositary shares, withhold dividends and distributions and sell the depositary shares evidenced by the depositary receipt.

Amendment and Termination of the Deposit Agreement

The form of depositary receipt evidencing the depositary shares and any provision of the deposit agreement may be amended by agreement between us and the depositary. However, any amendment that materially and adversely alters the rights of the holders of depositary shares, other than fee changes, will not be effective unless the amendment has been approved by the holders of a majority of the outstanding depositary shares. The deposit agreement may be terminated by the depositary or us only if:

- · all outstanding depositary shares have been redeemed; or
- there has been a final distribution of the preferred stock in connection with our dissolution and such distribution has been made to all the holders of depositary shares.

Resignation and Removal of Depositary

The depositary may resign at any time by delivering to us notice of its election to do so, and we may remove the depositary at any time. Any resignation or removal of the depositary will take effect upon our appointment of a successor depositary and its acceptance of such appointment. The successor depositary must be appointed within 60 days after delivery of the notice of resignation or removal and must be a bank or trust company having its principal office in the United States and having the requisite combined capital and surplus as set forth in the applicable agreement.

Notices

The depositary will forward to holders of depositary receipts all notices, reports and other communications, including proxy solicitation materials received from us, that are delivered to the depositary and that we are required to furnish to the holders of the preferred stock. In addition, the depositary will make available for inspection by holders of depositary receipts at the principal office of the depositary, and at such other places as it may from time to time deem advisable, any reports and communications we deliver to the depositary as the holder of preferred stock.

Limitation of Liability

Neither we nor the depositary will be liable if either is prevented or delayed by law or any circumstance beyond its control in performing its obligations. Our obligations and those of the depositary will be limited to performance in good faith of our and its duties thereunder. We and the depositary will not be obligated to prosecute or defend any legal proceeding in respect of any depositary shares or preferred stock unless satisfactory indemnity is furnished. We and the depositary may rely upon written advice of counsel or accountants, on information provided by persons presenting preferred stock for deposit, holders of depositary receipts or other persons believed to be competent to give such information and on documents believed to be genuine and to have been signed or presented by the proper party or parties.

DESCRIPTION OF WARRANTS

We may issue warrants to purchase debt securities, preferred stock, depositary shares or common stock. We may offer warrants separately or together with one or more additional warrants, debt securities, preferred stock, depositary shares or common stock, or any combination of those securities in the form of units, as described in the applicable prospectus supplement. If we issue warrants as part of a unit, the applicable prospectus supplement will specify whether those warrants may be separated from the other securities in the unit prior to the expiration date of the warrants. The applicable prospectus supplement will also describe the following terms of any warrants:

- the specific designation and aggregate number of, and the offering price at which we will issue, the warrants;
- the currency or currency units in which the offering price, if any, and the exercise price are payable;
- the date on which the right to exercise the warrants will begin and the date on which that right will expire or, if you may not continuously exercise the warrants throughout that period, the specific date or dates on which you may exercise the warrants;
- whether the warrants are to be sold separately or with other securities as parts of units;
- whether the warrants will be issued in definitive or global form or in any combination of these forms, although, in any case, the form of a warrant included in a unit will correspond to the form of the unit and of any security included in that unit;
- any applicable material U.S. federal income tax consequences;
- the identity of the warrant agent for the warrants and of any other depositaries, execution or paying agents, transfer agents, registrars or other agents;
- the proposed listing, if any, of the warrants or any securities purchasable upon exercise of the warrants on any securities exchange;
- the designation and terms of any equity securities purchasable upon exercise of the warrants;
- the designation, aggregate principal amount, currency and terms of any debt securities that may be purchased upon exercise of the warrants;
- if applicable, the designation and terms of the debt securities, preferred stock, depositary shares or common stock with which the warrants are issued and the number of warrants issued with each security;
- if applicable, the date from and after which any warrants issued as part of a unit and the related debt securities, preferred stock, depositary shares or common stock will be separately transferable;
- the number of shares of preferred stock, the number of depositary shares or the number of shares of common stock purchasable upon exercise of a warrant and the price at which those shares may be purchased;
- if applicable, the minimum or maximum amount of the warrants that may be exercised at any one time:
- information with respect to book-entry procedures, if any;
- the antidilution provisions, and other provisions for changes to or adjustment in the exercise price, of the warrants, if any;
- any redemption or call provisions; and
- any additional terms of the warrants, including terms, procedures and limitations relating to the exchange or exercise of the warrants.

DESCRIPTION OF SUBSCRIPTION RIGHTS

We may issue subscription rights to purchase our common stock, preferred stock, debt securities, depositary shares, warrants or units consisting of some or all of these securities. These subscription rights may be offered independently or together with any other security offered hereby and may or may not be transferable by the stockholder receiving the subscription rights in such offering. In connection with any offering of subscription rights, we may enter into a standby arrangement with one or more underwriters or other purchasers pursuant to which the underwriters or other purchasers may be required to purchase any securities remaining unsubscribed for after such offering.

The prospectus supplement relating to any subscription rights we offer, if any, will, to the extent applicable, include specific terms relating to the offering, including some or all of the following:

- the price, if any, for the subscription rights;
- the exercise price payable for our common stock, preferred stock, debt securities, depositary shares, warrants or units consisting of some or all of these securities upon the exercise of the subscription rights:
- the number of subscription rights to be issued to each stockholder;
- the number and terms of our common stock, preferred stock, debt securities, depositary shares, warrants or units consisting of some or all of these securities which may be purchased per each subscription right;
- the extent to which the subscription rights are transferable;
- any other terms of the subscription rights, including the terms, procedures and limitations relating to the exchange and exercise of the subscription rights;
- the date on which the right to exercise the subscription rights shall commence, and the date on which the subscription rights shall expire;
- the extent to which the subscription rights may include an over-subscription privilege with respect to unsubscribed securities or an over-allotment privilege to the extent the securities are fully subscribed; and
- if applicable, the material terms of any standby underwriting or purchase arrangement which may be entered into by us in connection with the offering of subscription rights.

The descriptions of the subscription rights in this prospectus and in any prospectus supplement are summaries of the material provisions of the applicable subscription right agreements. These descriptions do not restate those subscription right agreements in their entirety and may not contain all the information that you may find useful. We urge you to read the applicable subscription right agreements because they, and not the summaries, define your rights as holders of the subscription rights. For more information, please review the forms of the relevant subscription right agreements, which will be filed with the SEC promptly after the offering of subscription rights and will be available as described in the section of this prospectus captioned "Where You Can Find More Information."

DESCRIPTION OF PURCHASE CONTRACTS

The following description summarizes the general features of the purchase contracts that we may offer under this prospectus. Although the features we have summarized below will generally apply to any future purchase contracts we may offer under this prospectus, we will describe the particular terms of any purchase contracts that we may offer in more detail in the applicable prospectus supplement. The specific terms of any purchase contracts may differ from the description provided below as a result of negotiations with third parties in connection with the issuance of those purchase contracts, as well as for other reasons. Because the terms of any purchase contracts we offer under a prospectus supplement may differ from the terms we describe below, you should rely solely on information in the applicable prospectus supplement if that summary is different from the summary in this prospectus.

We will incorporate by reference into the registration statement of which this prospectus is a part the form of any purchase contract that we may offer under this prospectus before the sale of the related purchase contract. We urge you to read any applicable prospectus supplement related to specific purchase contracts being offered, as well as the complete instruments that contain the terms of the securities that are subject to those purchase contracts. Certain of those instruments, or forms of those instruments, have been filed as exhibits to the registration statement of which this prospectus is a part, and supplements to those instruments or forms may be incorporated by reference into the registration statement of which this prospectus is a part from reports we file with the SEC.

We may issue purchase contracts, including contracts obligating holders to purchase from us, and for us to sell to holders, a specific or variable number of our securities at a future date or dates. Alternatively, the purchase contracts may obligate us to purchase from holders, and obligate holders to sell to us, a specific or varying number of our securities.

If we offer any purchase contracts, certain terms of that series of purchase contracts will be described in the applicable prospectus supplement, including, without limitation, the following:

- the price of the securities or other property subject to the purchase contracts (which may be determined by reference to a specific formula described in the purchase contracts);
- whether the purchase contracts are issued separately, or as a part of units each consisting of a purchase contract and one or more of our other securities, including U.S. Treasury securities, securing the holder's obligations under the purchase contract;
- any requirement for us to make periodic payments to holders or vice versa, and whether the payments are unsecured or pre-funded;
- any provisions relating to any security provided for the purchase contracts;
- whether the purchase contracts obligate the holder or us to purchase or sell, or both purchase and sell, the securities subject to purchase under the purchase contract, and the nature and amount of each of those securities, or the method of determining those amounts;
- whether the purchase contracts are to be prepaid or not;
- whether the purchase contracts are to be settled by delivery, or by reference or linkage to the value, performance or level of the securities subject to purchase under the purchase contract;
- any acceleration, cancellation, termination or other provisions relating to the settlement of the purchase contracts;
- a discussion of certain U.S. federal income tax considerations applicable to the purchase contracts;
- whether the purchase contracts will be issued in fully registered or global form; and
- any other terms of the purchase contracts and any securities subject to such purchase contracts.

DESCRIPTION OF UNITS

We may issue units comprising two or more securities described in this prospectus in any combination. For example, we might issue units consisting of a combination of debt securities and warrants to purchase common stock. The following description sets forth certain general terms and provisions of the units that we may offer pursuant to this prospectus. The particular terms of the units and the extent, if any, to which the general terms and provisions may apply to the units so offered will be described in the applicable prospectus supplement.

Each unit will be issued so that the holder of the unit also is the holder of each security included in the unit. Thus, the unit will have the rights and obligations of a holder of each included security. Units will be issued pursuant to the terms of a unit agreement, which may provide that the securities included in the unit may not be held or transferred separately at any time or at any time before a specified date. A copy of the forms of the unit agreement and the unit certificate relating to any particular issue of units will be filed with the SEC each time we issue units, and you should read those documents for provisions that may be important to you. For more information on how you can obtain copies of the forms of the unit agreement and the related unit certificate, see the section of this prospectus captioned "Where You Can Find More Information"

The prospectus supplement relating to any particular issuance of units will describe the terms of those units, including, to the extent applicable, the following:

- the designation and terms of the units and the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;
- any provision for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units; and
- whether the units will be issued in fully registered or global form.

PLAN OF DISTRIBUTION

We and the selling securityholders may sell securities:

- · through underwriters;
- · through dealers;
- · through agents;
- · directly to purchasers; or
- through a combination of any of these methods of sale.

In addition, we may issue the securities as a dividend or distribution or in a subscription rights offering to our existing securityholders.

We or the selling securityholders may directly solicit offers to purchase securities or agents may be designated to solicit such offers. We will, in the prospectus supplement relating to such offering, name any agent that could be viewed as an underwriter under the Securities Act and describe any commissions that we must pay. Any such agent will be acting on a best efforts basis for the period of its appointment or, if indicated in the applicable prospectus supplement, on a firm commitment basis. This prospectus may be used in connection with any offering of our securities through any of these methods or other methods described in the applicable prospectus supplement.

The distribution of the securities may be effected from time to time in one or more transactions:

- at a fixed price or prices that may be changed from time to time;
- at market prices prevailing at the time of sale;
- at prices related to such prevailing market prices; or
- · at negotiated prices.

Each prospectus supplement will describe the method of distribution of the securities and any applicable restrictions.

The prospectus supplement with respect to the securities of a particular series will describe the terms of the offering of the securities, including the following:

- the name of the agent or any underwriters;
- the public offering or purchase price;
- if applicable, the names of any selling securityholders;
- any discounts and commissions to be allowed or paid to the agent or underwriters;
- all other items constituting underwriting compensation;
- any discounts and commissions to be allowed or paid to dealers; and
- any exchanges on which the securities will be listed.

If any underwriters or agents are utilized in the sale of the securities in respect of which this prospectus is delivered, we and the selling securityholders will enter into an underwriting agreement or other agreement with them at the time of sale to them, and we will set forth in the prospectus supplement relating to such offering the names of the underwriters or agents and the terms of the related agreement with them.

If a dealer is utilized in the sale of the securities in respect of which the prospectus is delivered, we or the selling securityholders will sell such securities to the dealer, as principal. The dealer may then resell such securities to the public at varying prices to be determined by such dealer at the time of resale.

If we offer securities in a subscription rights offering to our existing securityholders, we may enter into a standby underwriting agreement with dealers, acting as standby underwriters. We may pay the standby

underwriters a commitment fee for the securities they commit to purchase on a standby basis. If we do not enter into a standby underwriting arrangement, we may retain a dealer-manager to manage a subscription rights offering for us.

Agents, underwriters, dealers and other persons may be entitled under agreements that they may enter into with us and the selling securityholders to indemnification by us against certain civil liabilities, including liabilities under the Securities Act.

If so indicated in the applicable prospectus supplement, we will authorize underwriters or other persons acting as our agents to solicit offers by certain institutions to purchase securities from us pursuant to delayed delivery contracts providing for payment and delivery on the date stated in the prospectus supplement. Each contract will be for an amount not less than, and the aggregate amount of securities sold pursuant to such contracts shall not be less nor more than, the respective amounts stated in the prospectus supplement. Institutions with whom the contracts, when authorized, may be made include commercial and savings banks, insurance companies, pension funds, investment companies, educational and charitable institutions and other institutions, but shall in all cases be subject to our approval. Delayed delivery contracts will not be subject to any conditions except that:

- the purchase by an institution of the securities covered under that contract shall not at the time of delivery be prohibited under the laws of the jurisdiction to which that institution is subject; and
- if the securities are also being sold to underwriters acting as principals for their own account, the underwriters shall have purchased such securities not sold for delayed delivery.

The underwriters and other persons acting as agents will not have any responsibility in respect of the validity or performance of delayed delivery contracts.

Certain agents, underwriters and dealers, and their associates and affiliates may be customers of, have borrowing relationships with, engage in other transactions with, and/or perform services, including investment banking services, for us or one or more of our respective affiliates in the ordinary course of business.

In order to facilitate the offering of the securities, any underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the securities or any other securities the prices of which may be used to determine payments on such securities. Specifically, any underwriters may over-allot in connection with the offering, creating a short position for their own accounts. In addition, to cover over-allotments or to stabilize the price of the securities or of any such other securities, the underwriters may bid for, and purchase, the securities or any such other securities in the open market. Finally, in any offering of the securities through a syndicate of underwriters, the underwriting syndicate may reclaim selling concessions allowed to an underwriter or a dealer for distributing the securities in the offering if the syndicate repurchases previously distributed securities in transactions to cover syndicate short positions, in stabilization transactions or otherwise. Any of these activities may stabilize or maintain the market price of the securities above independent market levels. Any such underwriters are not required to engage in these activities and may end any of these activities at any time.

Under Rule 15c6-1 of the Exchange Act, trades in the secondary market generally are required to settle in two business days, unless the parties to any such trade expressly agree otherwise. The applicable prospectus supplement may provide that the original issue date for your securities may be more than two scheduled business days after the trade date for your securities. Accordingly, in such a case, if you wish to trade securities on any date prior to the third business day before the original issue date for your securities, you will be required, by virtue of the fact that your securities initially are expected to settle in more than three scheduled business days after the trade date for your securities, to make alternative settlement arrangements to prevent a failed settlement.

The securities may be new issues of securities and may have no established trading market. The securities may or may not be listed on a national securities exchange. We can make no assurance as to the liquidity of or the existence of trading markets for any of the securities.

LEGAL MATTERS

The validity of the securities offered hereby will be passed upon for us by Wilson Sonsini Goodrich & Rosati, Professional Corporation, Palo Alto, California. Additional legal matters may be passed on for us, or any underwriters, dealers or agents by counsel we will name in the applicable prospectus supplement.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our consolidated financial statements included in our <u>Annual Report on Form 10-K for the year ended December 31, 2019</u>, and the effectiveness of our internal control over financial reporting as of December 31, 2019, as set forth in their reports, which are incorporated by reference in this prospectus and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on Ernst & Young LLP's reports, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at www.sec.gov. Copies of certain information filed by us with the SEC are also available on our website at www.pacb.com. Information accessible on or through our website is not a part of this prospectus.

This prospectus and any prospectus supplement is part of a registration statement that we filed with the SEC and do not contain all of the information in the registration statement. You should review the information and exhibits in the registration statement for further information on us and our consolidated subsidiaries and the securities that we are offering. Forms of any indenture or other documents establishing the terms of the offered securities are filed as exhibits to the registration statement of which this prospectus forms a part or under cover of a Current Report on Form 8-K and incorporated in this prospectus by reference. Statements in this prospectus or any prospectus supplement about these documents are summaries and each statement is qualified in all respects by reference to the document to which it refers. You should read the actual documents for a more complete description of the relevant matters.

INCORPORATION BY REFERENCE

The SEC allows us to incorporate by reference much of the information that we file with the SEC, which means that we can disclose important information to you by referring you to those publicly available documents. The information that we incorporate by reference in this prospectus is considered to be part of this prospectus. Because we are incorporating by reference future filings with the SEC, this prospectus is continually updated and those future filings may modify or supersede some of the information included or incorporated by reference in this prospectus. This means that you must look at all of the SEC filings that we incorporate by reference to determine if any of the statements in this prospectus or in any document previously incorporated by reference have been modified or superseded. This prospectus incorporates by reference the documents listed below and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (in each case, other than those documents or the portions of those documents furnished pursuant to Items 2.02 or 7.01 of any Current Report on Form 8-K and, except as may be noted in any such Form 8-K, exhibits filed on such form that are related to such information), until the offering of the securities under the registration statement of which this prospectus forms a part is terminated or completed:

- our Annual Report on Form 10-K for the year ended December 31, 2019;
- our Quarterly Reports on Form 10-Q for the quarters ended <u>March 31, 2020</u>, <u>June 30, 2020</u> and <u>September 30, 2020</u>;
- the portions of our <u>Definitive Proxy Statement on Schedule 14A</u> (other than information furnished rather than filed) that are incorporated by reference into our <u>Annual Report on Form 10-K</u>, filed with the SEC on April 28, 2020;
- our Current Reports on Form 8-K filed on <u>January 2, 2020</u> (other than information furnished rather than filed), <u>February 7, 2020</u>, <u>March 6, 2020</u>, <u>May 28, 2020</u>, <u>June 10, 2020</u> (other than information furnished rather than filed), <u>August 3, 2020</u> (other than information furnished rather than filed), <u>August 5, 2020</u>, <u>August 7, 2020</u>, <u>August 14, 2020</u>, <u>September 14, 2020</u> (other than information furnished rather than filed), <u>October 20, 2020</u> and <u>November 10, 2020</u>; and
- The description of our common stock contained in the Registration Statement on Form 8-A relating thereto, filed on October 6, 2010, including any amendment or report filed for the purpose of updating such description.

You may request a copy of these filings, at no cost, by writing or telephoning us at the following address:

Pacific Biosciences of California, Inc. 1305 O'Brien Drive Menlo Park, California 94025 Attn: Investor Relations (650) 521-8000

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