MARRONE BIO INNOVATIONS INC Form 424B5 April 17, 2018

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This preliminary prospectus supplement relates to an effective registration statement under the Securities Act of 1933, but the information in this preliminary prospectus supplement is not complete and may be changed. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell and are not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED APRIL 17, 2018

PROSPECTUS SUPPLEMENT

(To Prospectus dated January 6, 2017)

Shares of Common Stock

We are selling shares of our common stock.

Our common stock trades on the Nasdaq Capital Market under the symbol "MBII." On April 16, 2018, the last reported sale price of our common stock on The Nasdaq Capital Market was 1.945 per share.

INVESTING IN OUR SECURITIES INVOLVES A HIGH DEGREE OF RISK. YOU SHOULD CAREFULLY READ AND CONSIDER THE RISK FACTORS DESCRIBED IN THIS PROSPECTUS

SUPPLEMENT, THE ACCOMPANYING PROSPECTUS AND IN THE DOCUMENTS INCORPORATED BY REFERENCE INTO THIS PROSPECTUS SUPPLEMENT. SEE "RISK FACTORS" BEGINNING ON PAGE S-6.

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

	Per Share	Total
Public Offering Price	\$	\$
Underwriting Discount (1)	\$	\$
Proceeds to Us (Before Expenses)	\$	\$

(1) In addition, we have agreed to reimburse up to \$40,000 of the out-of-pocket fees and expenses of the underwriter in connection with this offering. See "Underwriting" for additional information about compensation arrangements.

We have granted the underwriter a 45-day option to purchase up to additional shares of common stock from us at the public offering price, less the underwriting discount, set forth above to cover over-allotments, if any.

The underwriter expects to deliver the shares against payment through the facilities of the Depository Trust Company on or about , 2018.

National Securities Corporation

Sole Book-Running Manager

The date of this prospectus supplement is , 2018.

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Base Prospectus

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ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying base prospectus is part of a registration statement that we have filed with the Securities and Exchange Commission, or the SEC, utilizing a "shelf" registration process. Under the shelf registration process, we may offer shares of our common stock having an aggregate offering price of up to \$50,000,000 from time to time under this prospectus supplement at prices and on terms to be determined by market conditions at the time of offering. The shelf registration statement was initially filed with the SEC on December 9, 2016, and was declared effective by the SEC on January 6, 2017.

We provide information to you about this offering of shares of our common stock in two separate documents that are bound together: (1) this prospectus supplement, which describes the specific details regarding this offering; and (2) the accompanying base prospectus, which provides general information, some of which may not apply to this offering. Generally, when we refer to this "prospectus," we are referring to both documents combined. If information in this prospectus supplement is inconsistent with the accompanying base prospectus, you should rely on this prospectus supplement. However, if any statement in one of these documents is inconsistent with a statement in another document having a later date—for example, a document incorporated by reference in this prospectus—the statement in the document having the later date modifies or supersedes the earlier statement as our business, financial condition, results of operations and prospects may have changed since the earlier dates.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference herein were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreement, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

You should rely only on the information contained in, or incorporated by reference into, this prospectus and in any free writing prospectus that we may authorize for use in connection with this offering. We have not, and the underwriter has not, authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We and the underwriter are offering to sell, and soliciting offers to buy, shares of common stock only in jurisdictions where offers and sales are permitted and are not offering to sell or soliciting offers 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. The distribution of this prospectus and the offering of the common stock in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the common stock and the distribution of this prospectus outside the United States. You should assume that the information appearing in this prospectus, the documents incorporated by reference into this prospectus, and in any free writing prospectus that we may authorize 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. You should read this prospectus, the documents incorporated by reference into this prospectus, and any free writing prospectus that we may authorize for use in connection with this offering, in their entirety before making an investment decision. You should also read and consider the information in the documents to which we have referred you in the sections of this prospectus entitled "Where You Can Find More Information" and "Incorporation of Certain Documents By Reference."

This prospectus supplement, the accompanying base prospectus and the documents we incorporate by reference contain and reference certain market data and industry statistics and forecasts that are based on Company-sponsored studies, independent industry publications and other publicly available information. Although we believe these sources are reliable, we do not guarantee the accuracy or completeness of this information and we have not verified any of this data. Further, many of these statements involve risks and uncertainties and are subject to change based on various factors, including those discussed under "Risk Factors" in this prospectus supplement and the accompanying base prospectus and under similar headings in the documents incorporated by reference herein and therein. Accordingly, investors should not place undue reliance on this information.

For purposes of this prospectus, references to the terms "MBI," "the Company," "we," "us" and "our" refer to Marrone Bio Innovations, Inc., unless the context otherwise requires. This prospectus and the information incorporated by reference herein and therein include trademarks, service marks and trade names owned by us or other companies. All trademarks, service marks and trade names included or incorporated by reference into this prospectus are the property of their respective owners.

Additionally, unless otherwise stated or the context requires otherwise, all information in this prospectus supplement assumes that the option to purchase up to additional shares of common stock that we have granted to the underwriter is not exercised.

PROSPECTUS SUMMARY

The following summary highlights certain information contained elsewhere in this prospectus supplement, the accompanying base prospectus, any free writing prospectus that we have been authorized to use and the documents incorporated by reference herein and in the accompanying base prospectus. This summary does not contain all of the information that is important to you or that you should consider before making a decision to invest in our common stock. You should carefully read this entire prospectus supplement the accompanying base prospectus, any free writing prospectus that we have been authorized to use and the documents incorporated by reference herein and in the accompanying base prospectus. You should pay special attention to the "Risk Factors" section of this prospectus and in the accompanying base prospectus and the financial statements and other information incorporated by reference in this prospectus and in the accompanying base prospectus.

Company Overview

We make bio-based pest management and plant health products, targeting the major markets that use conventional chemical pesticides, including certain agricultural and water markets, where our bio-based products are used as alternatives for, or mixed with, conventional chemical pesticides. We also target new markets for which (i) there are no available conventional chemical pesticides or (ii) the use of conventional chemical pesticides may not be desirable or permissible either because of health and environmental concerns (including for organically certified crops) or because the development of pest resistance has reduced the efficacy of conventional chemical pesticides. We deliver EPA-approved and registered biopesticide products and other bio-based products that address the global demand for effective, safe and environmentally responsible products. Six of our seven current products are approved by the United States Environmental Protection Agency, or EPA, and registered as "biopesticides." Our first non-EPA product, Haven, is a plant health product that is a "biostimulant," which requires state registrations, but does not require EPA registration. We believe our current portfolio of products and our pipeline address the growing global demand for effective, efficient and environmentally responsible products to control pests, increase crop yields and reduce crop stress.

We primarily sell our products to the crop protection market. Our five commercially available crop protection product lines are Regalia, for controlling plant disease and increasing plant health, Grandevo and Venerate, each for insect and mite control, Majestene and its turf and ornamentals counterpart brand Zelto, for nematode control, and Stargus and its row crop counterpart brand Amplitude, for downy mildew and white mold control. These products can be used in both conventional and organic crop production, and are primarily sold to growers of specialty crops. We also have had some sales for large-acre row crops, including Regalia and a product marketed by our strategic partner, Albaugh, LLC, that includes the microbe in Venerate. In March 2016, we entered into an agreement with Isagro USA to distribute Bio-Tam 2.0 for soil-borne disease control and grapevine trunk disease control, which complements our existing products, particularly Regalia, and in May 2017, we entered into an agreement with Jet Harvest Solutions to distribute Jet-Ag biofungicide and disinfectant in certain regions of the United States. In March 2017, we launched Haven, a plant health product that reduces plant stress in drought and intense sunlight. We believe that these existing

crop protection and plant health products, or variations thereof, such as the Zelto brand we launched in January 2018, can also be specifically targeted for industrial and institutional, turf and ornamental, home and garden or animal health uses.

In addition, we have developed Zequanox, a commercially available product line that we sell to the water treatment market. Zequanox selectively controls invasive mussels that cause significant infrastructure and ecological damage across a broad range of in-pipe and open-water applications, including hydroelectric and thermoelectric power generation, industrial applications and recreation. In November 2017, we signed an exclusive distribution agreement with a large water treatment company to distribute Zequanox for in-pipe treatments in the United States and Canada.

Additional details on these products are contained in our Annual Report on Form 10-K for the year ended December 31, 2017.

Recent Developments

February 2018 Financing Transactions

In December 2017, we entered into a securities purchase agreement (the "Purchase Agreement") with certain accredited investors named therein, including Ospraie Ag Science LLC ("Ospraie"), pursuant to which the investors thereunder agreed, subject to the satisfaction of certain closing conditions, to purchase units consisting of shares of our common stock and warrants to purchase a shares of our common stock. Concurrently with the entry into the Purchase Agreement, the Company entered into amendments to our senior promissory notes held by affiliates of Waddell & Reed Financial, Inc. (the "Waddell Notes") and to our secured promissory notes issued in October 2012 and April 2013 (the "October 2012 and April 2013 Promissory Notes"). Also in December 2017, we entered into an amendment and restatement to the unsecured convertible promissory note previously entered into with Dwight W. Anderson, an affiliate of Ospraie (the "October 2017 Convertible Note").

In February 2018, we completed the transactions contemplated in the Purchase Agreement, the note amendments and certain related agreements (the "February 2018 Financing Transactions"), which resulted in:

the issuance of an aggregate of 44,000,001 shares of our common stock and warrants to purchase an aggregate of 41,333,333 shares of our common stock to purchasers under the Purchase Agreement for an aggregate purchase price of \$30.0 million, which includes conversion of all outstanding principal under the October 2017 Convertible Note:

the conversion of \$35.0 million aggregate principal amount of the Waddell Notes into an aggregate of 20,000,000 shares of our common stock and warrants to purchase 4,000,000 shares of our common stock, such that \$5.0 million of principal under such notes remained outstanding, in connection with which the maturity of such notes was extended to December 31, 2022, all interest payments under such notes was deferred to maturity on December 31, 2022, and Ospraie was granted a right of first refusal to acquire such notes;

the conversion of \$10.0 million aggregate principal amount of indebtedness outstanding under the October 2012 and April 2013 Promissory Notes into an aggregate of 5,714,285 shares of our common stock and warrants to purchase 1,142,856 shares of our common stock, such that \$2.45 million of principal under such notes remained outstanding, and in connection with which the maturity of such notes was extended to December 31, 2022, the interest was reduced from 14% to 8% and all interest payments under such notes were deferred to the maturity on December 31, 2022;

the issuance of 800,000 shares of common stock and warrants to purchase 2,017,143 shares of common stock to National Securities Corporation, as placement agent facilitating the foregoing transactions, and its affiliates; and

the appointment of two new individuals designated by Ospraie to our board of directors, with Robert A. Woods serving as Chairman of the Board, Chairman of the Compensation Committee of the board of directors, and a member of the Audit Committee and Nominating and Corporate Governance Committee of the board of directors, and with Yogesh Mago serving as a member of our Nominating and Corporate Governance Committee of the board of directors.

In sum, the completion of the February 2018 Financing Transactions resulted in the issuance of an aggregate of 70.5 million shares of common stock and warrants to purchase an aggregate of 48.5 million shares of common stock, the deleveraging of our balance sheet by reducing principal payments that were outstanding as of December 31, 2017 by \$49 million, and the deferral of payment on \$7.5 million of remaining outstanding debt until December 31, 2022.

Dismissal of Ernst & Young LLP as Principal Accountant and Appointment of Marcum LLP as Principal Accountant

On April 12, 2018, upon the recommendation of the Audit Committee of our board of directors (the "Audit Committee"), we dismissed Ernst & Young LLP ("EY") as our principal independent registered public accounting firm, and we appointed Marcum LLP ("Marcum") as our new principal independent registered public accounting firm to audit

our financial statements for the fiscal year ending December 31, 2018.

In light of the Company's continued focus on cost control, the Audit Committee conducted a formal, competitive review process, in which they evaluated a number of potential firms that were invited to submit a proposal. As part of the process, the Audit Committee considered, among other things, the capabilities and resources of each firm and its primary engagement team, the firms' responsiveness, the proposed approach to scoping the audit and the firms' proposed fee structures. After consideration of these and other relevant factors, the Audit Committee, determined that Marcum offered the services necessary to support the Company at pricing that represented the best value for the Company.

First Quarter 2018 Preliminary Financial Data

Based on our review of preliminary information regarding financial results for the three months ended March 31, 2018, we currently estimate that (i) product shipments for that period will be significantly lower than the amount of product shipments for the three months ended March 31, 2017, (ii) as of March 31, 2018, our cash and cash equivalents were approximately \$14.7 million, and (iii) as of March 31, 2018, the aggregate principal amounts remaining outstanding under our debt agreements was approximately \$17.5 million.

We have not completed our quarter-end closing and review procedures and adjustments, and accordingly, these preliminary estimates should not be viewed as a substitute for full interim financial statements prepared in accordance with generally accepted accounting principles, which we will subsequently provide. This preliminary financial data has been prepared by, and is the responsibility of, our management. Neither our former nor our new independent registered public accounting firm has audited, reviewed, compiled or performed any procedures with respect to this preliminary estimate, and accordingly, neither our former nor our new independent registered public accounting firm expresses an opinion or any other form of assurance with respect thereto.

Company Information

Our corporate headquarters are located at 1540 Drew Avenue in Davis, California 95618. Our telephone number is (530) 750-2800, and our website address is www.marronebioinnovations.com. The information on or accessible through our website does not constitute part of this prospectus supplement or the accompanying prospectus and should not be relied upon in connection with making any investment in our securities.

The common stock of MBI is listed on the Nasdaq Capital Market under symbol "MBII."

THE OFFERING

The following is a brief summary of some of the terms of the offering and is qualified in its entirety by reference to the more detailed information appearing elsewhere in this prospectus supplement and the accompanying base prospectus. For a more complete description of the terms of our common stock, see "Description of Capital Stock" in the accompanying base prospectus.

Common stock shares of our common stock (shares if the underwriter exercises its over-allotment offered by us option in full).

Offering price \$ per share of common stock.

Common shares to be outstanding after this offering

shares (shares if the underwriter exercises its over-allotment option in full).

Use of proceeds

We estimate that our net proceeds from this offering will be approximately \$\\$million (or approximately \$\\$million if the underwriter exercises its over-allotment option in full), after deducting the underwriting discount and the estimated offering expenses payable by us. We intend to use the net proceeds primarily for general corporate purposes, which may include operating expenses, working capital to improve and promote our commercially available products, advance product candidates, expand international presence and commercialization, general capital expenditures and potential costs associated with litigation. See "Use of Proceeds" on page S-[___].

Nasdaq Capital Market symbol

"MBII"

Risk factors

Investing in our common stock involves a high degree of risk and purchasers of our common stock may lose their entire investment. Before investing in our common stock, you should carefully read and consider the "Risk Factors" beginning on page S-6 of this prospectus, and the risks set forth under the caption of Item 1A Risk Factors included in our most recent Annual Report on Form 10-K for the year ended December 31, 2017, and any documents incorporated by reference, for certain considerations relevant to an investment in our common stock.

The number of shares of common stock to be outstanding after this offering is based on 102,092,613 shares of common stock outstanding as of April 12, 2018 and excludes as of such date:

5,342,581 shares of common stock issuable upon the exercise of stock options outstanding at a weighted average exercise price of \$3.93 per share, 930,510 shares of common stock issuable upon settlement of restricted stock units and 4,883,219 additional shares of common stock reserved for issuance under our stock option plan; and

52,724,620 shares of common stock issuable upon the exercise of warrants outstanding at a weighted exercise price of \$1.10 per share.

RISK FACTORS

Investing in our securities involves a high degree of risk. You should carefully consider the specific risks described below and the risks described in our Annual Report on Form 10-K for the year ended December 31, 2017 which is incorporated by reference in this prospectus supplement in its entirety, as well as the other information contained in this prospectus supplement, the accompanying base prospectus and the other documents incorporated by reference, before making an investment decision. See the sections of this prospectus supplement entitled "Where You Can Find More Information" and "Incorporation of Certain Information By Reference." Any of the risks we describe below or in the information incorporated herein by reference in this prospectus supplement could cause our business, financial condition or operating results to suffer. The market price of our common stock could decline if one or more of these risks and uncertainties develop into actual events. You could lose all or part of your investment.

Risks Related to This Offering and Ownership of our Common Stock

The sale of shares in the market following this offering, or the perception that such sales will occur, may depress the market price for our common stock.

Sales of additional shares of our common stock in the public market during this offering could cause the market price of our common stock to decline. Upon completion of this offering, we will have outstanding an aggregate of shares of common stock or shares of common stock if the underwriter exercises its over-allotment option in full, assuming no exercise of outstanding stock options and no purchases of stock under our employee stock incentive plan. A substantial amount of the outstanding shares of our common stock are, and all of the shares sold in this offering upon issuance will be, freely tradable without restriction or further registration under the Securities Act of 1933, as amended, or the Securities Act, unless these shares are owned or purchased by "affiliates" as that term is defined in Rule 144 under the Securities Act.

Following the completion of this offering, \$\\$\\$\\$\\$\\$\\$\\$\\$\ million will be available for the public sale of common stock, preferred stock, warrants and units under our currently effective "shelf" registration statement on Form S-3 (Registration File No. 333-215024), of which this prospectus forms a part, including \$14.8 million shares of common stock available for offer and sale from time to time under our at-the-market offering program.

We have also filed a resale shelf registration statement on Form S-3 (Registration File No. 333-224193) with the SEC to register the resale of (i) 70,514,286 shares of common stock and (ii) 48,493,332 shares of common stock underlying warrants with a weighted average exercise price per share of \$1.03, all of which were issued in the February 2018 Financing Transactions. No new shares or shares issuable in the future are being offered through the resale registration

statement, other than those included in the February 2018 Financing Transactions. We filed the resale registration statement in order to satisfy the requirements of the registration rights agreement entered into with the parties to the February 2018 Financing Transactions (the "Financing Shareholders"). While registration of the shares does not mean that those shares will necessarily be offered or sold, and even if the registration statement is declared effective, the shares may not be sold by any of the Financing Shareholders until a lock-up agreement expires on August 4, 2018, the perception that such sales may occur, in addition to any future sales of such shares, may cause the market price of our common stock to decline.

We have also registered all of the shares of common stock that we may issue under our outstanding stock options and employee stock incentive plans, and as of April 12, 2018, 5,342,581 shares of common stock were issuable upon the exercise of outstanding stock options at a weighted average exercise price of \$3.93 per share, 930,510 shares of common stock were issuable upon settlement of restricted stock units and 4,883,219 additional shares of common stock were reserved for issuance under our stock option plan. As a result, these shares can be freely sold in the public market upon issuance, subject to restrictions under the securities laws. In addition, as of April 12, 2018, an aggregate of 4,231,288 shares of common stock were issuable upon the exercise of outstanding warrants not issued in connection with the February 2018 Financing Transaction, at a weighted exercise price of \$1.95 per share, which are not included in our resale shelf registration statement filing.

We may require additional financing in the future to meet our business requirements and to service our debt. Such capital raising may be costly, difficult or not possible to obtain and, if obtained, could significantly dilute current stockholders' equity interests, and we may be unable to repay our secured indebtedness.

We believe that our existing cash and cash equivalents of approximately \$14.7 million at March 31, 2018, together with expected revenues, the net proceeds from this offering, and cost management plans as well as anticipated cost reductions will be sufficient to fund operations as currently planned for at least the next 18 months. However, we expect to continue to incur losses until we are able to significantly increase our revenue, and we are obligated to repay \$17.5 million of principal under indebtedness outstanding as of March 31, 2018 (with approximately \$9.0 million of such principal accruing interest at a variable rate of 6.5% as per annum as of March 31, 2018, and which is repayable in monthly payments through June 2036, an aggregate of approximately \$7.5 million of such principal accruing interest at 8% per annum, and which is repayable upon maturity in December 2022, and approximately \$1.1 million of such principal accruing interest at 13.6% per annum, and which is repayable upon maturity in May 2018). Further, we cannot predict, with certainty, the outcome of our actions to grow revenue or to manage or reduce costs, and we may have greater than anticipated cash needs for general corporate purposes, which may include operating expenses, working capital to improve and promote our commercially available products, advance product candidates, expand international presence and commercialization, general capital expenditures, and potential costs associated with litigation, including a breach of contract claim brought by Piper Jaffray, Inc. alleging our failure to pay a \$2.0 million transaction fee. While we have based our beliefs on assumptions and estimates that management believes are reasonable, these assumptions and beliefs may prove to be wrong, and we could spend our available financial resources less or more rapidly than currently expected.

Accordingly, we may need significant additional financing to maintain and expand our business, as well as to meet the financial covenants of and pay the principal and interest under our debt agreements. We may seek additional funds from public or private equity offerings, debt financings, strategic collaborations involving up-front cash payments or other means. Additional capital may not be available on terms acceptable to us, or at all. Any additional equity financing may be significantly dilutive to you or, in some cases, require us to seek shareholder approval for the financing, and debt financing, if available, may include restrictive covenants and bear high rates of interest. In addition, our existing loan agreements contain certain restrictive covenants that either limit our ability to, or require a mandatory prepayment if we incur additional indebtedness and liens and enter into various specified transactions. We therefore may not be able to engage in any of the foregoing transactions unless we obtain the consent of our lenders or prepay the outstanding amounts under the debt agreements, which could require us to pay additional prepayment penalties. In addition, we may incur substantial costs in pursuing future capital financing, including investment banking fees, legal fees, accounting fees, securities law compliance fees, printing and distribution expenses and other costs. We also may be required to recognize non-cash expenses in connection with certain securities we issue, such as warrants, which may adversely impact our financial results.

Certain of our debt agreements also contain financial covenants, including maintaining minimum current, debt-to-worth and loan-to-value ratios and provisions providing for an event of default if there is a material adverse change in our financial condition or if we are in default under certain of our other agreements. While we are not currently in default under any of these agreements, and none of our lenders have previously declared an event of default on our indebtedness, prior to our recent receipt of waivers from our lenders, we had not been in compliance with certain of these covenants. Breach of covenants included in our debt agreements, which could result in the lenders demanding payment of the unpaid principal and interest balances. If we fail to pay any principal or interest under our indebtedness when due, or are otherwise in violation of certain covenants under our debt agreements, this may result in the acceleration of our indebtedness, which would have a material adverse effect upon our business and would likely require us to seek to renegotiate these debt arrangements with the lenders, as we may not have sufficient funds to repay that indebtedness.

If we cannot raise more money when needed, or are unable to use our future working capital, borrowings or equity financing to repay or refinance the amounts outstanding under our debt agreements or to renegotiate our debt arrangements with lenders, we may have to reduce our capital expenditures, scale-back our development of new products, reduce our workforce or license to others products that we otherwise would seek to commercialize ourselves. Any of these eventualities would likely have a material adverse impact on our value and the value of our equity.

You will experience immediate dilution in the book value per share of the common stock you purchase.

Because the price per share of our common stock being offered is substantially higher than the book value per share of our common stock, you will suffer substantial dilution in the net tangible book value of the common stock you purchase in this offering. If you purchase shares of common stock in this offering, you will suffer immediate and

substantial dilution of \$ per share in the pro forma net tangible book value of the common stock you purchase in this offering. See "Dilution" on page S-[__] of this prospectus supplement for a more detailed discussion of the dilution you will incur if you purchase shares of our common stock in this offering.

Management will have broad discretion as to the use of proceeds from this offering, and we may use the net proceeds in ways with which you may disagree, including in connection with pending litigation.

We intend to use the net proceeds of this offering for general corporate purposes, which may include operating expenses, working capital to improve and promote our commercially available products, advance product candidates, expand international presence and commercialization, general capital expenditures, and potential costs associated with litigation, including a breach of contract claim brought by Piper Jaffray, Inc. alleging our failure to pay a \$2.0 million transaction fee.

Our management will have broad discretion in the application of the net proceeds from this offering and could spend the proceeds in ways that do not improve our results of operations or enhance the value of our common stock. Accordingly, you will be relying on the judgment of our management with regard to the use of net proceeds, and you will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being used appropriately. Our failure to apply these funds effectively, including any adverse outcome with respect to the defense or settlement of litigation, could have a material adverse effect on our business, delay the development of our product candidates and cause the price of our common stock to decline.

Our common stock may experience extreme price and volume fluctuations, and you may not be able to resell shares of our common stock at or above the price you paid.

We have had a history of losses, and our business, financial results and stock price have historically been adversely affected by matters related to our 2015 financial restatement and, prior to the February 2018 Financing Transactions, concerns regarding our ability to continue operations. Since shares of our common stock were sold in our initial public offering in August 2013 at a price of \$12.00 per share, our stock price has ranged between \$0.60 and \$20.00 through March 31, 2018. The trading price of our common stock will likely continue to be highly volatile and could be subject to wide fluctuations in price in response to various factors, some of which are beyond our control. These factors include:

our small public float relative to the total number of shares of common stock that are issued and outstanding;

quarterly variations in our results of operations, those of our competitors or those of our customers;

announcements of technological innovations, new products or services or new commercial relationships by us or our competitors;

our ability to develop and market new products on a timely basis;

disruption to our operations;

media reports and publications about our financials or about pest management products;

announcements concerning our competitors or the pest management industry in general;

our entry into, modification of or termination of key license, research and development or collaborative agreements;

new regulatory pronouncements and changes in regulatory guidelines or the status of our regulatory approvals;

general and industry-specific economic conditions;

any major change in our board of directors or management;

the commencement of, or our involvement in, litigation;

changes in financial estimates, including our ability to meet our future net revenues and operating profit or loss projections;

changes in earnings estimates or recommendations by securities analysts; and

the announcement of other events related to our business and strategy described below under "—Risks to our Business and Strategy."

If equity research analysts do not publish research or reports, or publish unfavorable research or reports, about us, our business or our market, our stock price and trading volume could decline.

The trading market for our common stock may be influenced by the research and reports that equity research analysts publish about us and our business. We do not have any control over the analysts or the content and opinions included in their reports. The price of our stock could decline if one or more equity research analysts downgrade our stock or issue other unfavorable commentary or research. If one or more equity research analysts ceases coverage of our company or fails to publish reports on us regularly, demand for our stock could decrease, which in turn could cause our stock price or trading volume to decline. If our operating results fail to meet the forecast of analysts, our stock price will likely decline.

We do not anticipate paying dividends on our common stock in the foreseeable future.

We currently plan to invest all available funds, including the proceeds from this offering, and future earnings, if any, in the development and growth of our business. We currently do not anticipate paying any cash dividends on our common stock in the foreseeable future. As a result, a rise in the market price of our common stock, which is uncertain and unpredictable, will be your sole source of potential gain in the foreseeable future, and you should not rely on an investment in our common stock for dividend income.

Our principal stockholders will have significant voting power and may take actions that may not be in the best interest of other stockholders.

As of April 12, 2018, our executive officers and directors and their affiliates, including Ospraie, beneficially owned or controlled, directly or indirectly, an aggregate of approximately 64.2 million shares, or 47.7% of our common stock. In addition, affiliates of Waddell & Reed Financial Inc. ("Waddell"), beneficially own 27.1% of our common stock, and Ardsley Advisory Partners ("Ardsley") beneficially owns 14.6% of our common stock. Further, affiliates of Ospraie, Waddell and Ardsley, together with our Chief Executive Officer, Dr. Pamela Marrone, have entered into a voting and lock-up agreement, pursuant to which each agreed to vote their existing shares of our Common Stock, representing 65.2% of our outstanding shares as of April 12, 2018, in favor of the election of up to two directors designated by Ospraie at our 2018 Annual Meeting of Stockholders, subject to certain conditions and limitations. If all of these security holders act together, they will be able to exert significant control over our management and affairs, which could result in some corporate actions that our other stockholders do not view as beneficial such as failure to approve change of control transactions that could offer holders of our common stock a premium over the market value of our company. As a result, the market price of our common stock could be adversely affected.

We incur significant costs as a result of operating as a public company, and our management is required to devote substantial time to comply with the laws and regulations affecting public companies, which costs will increase after we are no longer an "emerging growth company" and become an "accelerated filer."

As a public company, we incur significant legal, accounting and other expenses, including costs associated with public company reporting and corporate governance requirements, in order to comply with the rules and regulations imposed by the Sarbanes-Oxley Act, as well as rules implemented by the SEC and the Nasdaq Capital Market ("Nasdaq"). Such costs will increase after we cease to qualify as an emerging growth company, which will occur no later than December 31, 2018, the last day of the fiscal year in which the fifth anniversary of our initial public offering occurred, and after we become an accelerated filer, which we believe could also occur as early as December 31, 2018, if we have an aggregate worldwide market value of the voting and non-voting common equity held by our non-affiliates of \$75 million or more, but less than \$700 million, as of the last business day of our second fiscal quarter of 2018. Our management and other personnel have needed to devote a substantial amount of time to these compliance initiatives, and our legal and accounting compliance costs have increased. The expenses incurred by public companies for reporting and corporate governance purposes have increased dramatically over the past several years. We expect these rules and regulations to continue to increase our legal and financial compliance costs substantially and to make some activities more time consuming and costly. We are currently unable to estimate these costs with any degree of certainty. Greater expenditures may be necessary in the future with the advent of new laws and regulations pertaining to public companies. We also expect that, as a public company, it will continue to be expensive for us to obtain directors' and officers' liability insurance.

The Sarbanes-Oxley Act requires, among other things, that we maintain effective internal control over financial reporting and disclosure controls and procedures. In particular, as a public company, we are required to perform

system and process evaluations and testing of our internal control over financial reporting to allow management to report on the effectiveness of our internal control over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act. As described above, as an emerging growth company, we are not yet required to comply with the auditor attestation provisions of Section 404. However, we are required to comply with management attestations of Section 404, and our testing, or the subsequent testing by our independent registered public accounting firm, may identify deficiencies in our internal control over financial reporting, in addition to those that have already been identified, that are deemed to be material weaknesses. We expect to incur substantial accounting expense and management time on compliance-related issues with respect to Section 404. Moreover, if we are not able to comply with the requirements of Section 404 in a timely manner, or if we or our independent registered public accounting firm identify deficiencies in our internal control over financial reporting that are deemed to be material weaknesses, we could lose investor confidence in the accuracy and completeness of our financial reports, which could cause our stock price to decline.

We have in the past identified material weaknesses, and if we fail to establish and maintain proper and effective internal controls, our ability to produce accurate financial statements on a timely basis could be impaired, which could adversely affect our consolidated operating results, our ability to operate our business, our stock price and investors' views of us.

Our management is responsible for establishing and maintaining adequate internal control over financial reporting to ensure that information regarding the reliability of our financial reporting and the preparation of financial statements for external purposes in accordance with GAAP.

In September 2014, our Audit Committee initiated an independent investigation regarding certain accounting matters concerning recognition of revenue in a sales transaction. As a result of the matters relating to the Audit Committee's independent investigation, we announced that certain of our previously filed financial statements could no longer be relied upon and subsequently completed a restatement. Based on the Audit Committee's independent investigation, management identified material weaknesses in internal control over financial reporting as of December 31, 2014 resulting in revenue transactions that were recognized prior to satisfaction of all required revenue recognition criteria. We developed and implemented a plan to remediate these material weaknesses, which focused on continued training for and communication with employees regarding our enhanced policies and procedures, and have determined that these material weaknesses were remediated as of December 31, 2015.

Also in connection with management's assessment of our internal control over financial reporting, management identified an additional deficiency that constituted a material weakness in our internal control over financial reporting as of December 31, 2014 in our governance practices related to ineffective controls over the timeliness and accuracy of documentation related to actions of our board of directors and compensation committee specific to approving stock option grants. While no financial statement accounts or disclosures were misstated, the potential impact could have led to a material misstatement. We developed and implemented a plan to conduct training with our legal department and those charged with governance, and had determined that this material weakness was remediated as of December 31, 2016.

In addition, as discussed further under Part II—Item 9A—"Controls and Procedures" of our Annual Report on Form 10-K incorporated herein by reference, we identified a deficiency related to disclosure controls and a material weakness in our internal controls over financial reporting as of December 31, 2017 related to the accounting for embedded derivative instruments that were a part of certain loan instruments that we entered into during the year ended December 31, 2017. We are developing and implementing a plan to remediate this material weakness.

Remedying our material weaknesses has required substantial management time and attention, and ensuring that we have adequate internal control over financial reporting and procedures in place to produce accurate financial statements on a timely basis will continue to be a costly and time consuming effort. Any failure to implement effective internal control over financial reporting or to complete and maintain the remediation of our identified control deficiencies may result in additional errors, material misstatements or delays in our financial reporting, failure to meet our financial reporting obligations or failure to avoid or detect fraud in our financial reporting. This in turn would have a material adverse effect on our business and results of operations and could have a substantial adverse impact on the trading price of our common stock and our relationships with customers and suppliers.

Our management does not expect that our internal control over financial reporting will prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, within the Company will have been detected. Further, we can provide no assurances that other material weaknesses in our internal control over financial reporting, such as the material weaknesses we have identified with respect to stock option grants and derivatives, will not be identified in the future.

Our appointment of a new registered independent accounting firm could result in delays in the filing of our reports with the SEC, and our new registered independent accounting firm may interpret accounting rules differently than our former firm, which could adversely impact our business.

On April 12, 2018, we dismissed our former registered independent accounting firm, Ernst & Young LLP, and engaged a new firm, Marcum LLP, to serve in that role. Consequently, our new registered independent accounting firm will be reviewing and auditing our financial reporting in the future. It is possible that our new independent auditor will require additional time to complete their review of our financial results, which could potentially delay the filing with the SEC of our quarterly report on Form 10-Q for the period ended March 31, 2018, and subsequent reports. In addition given the complexities of public-company accounting rules, the differences in how those rules are interpreted by various accounting firms, it is possible that our new independent auditor would require us to characterize certain transactions and/or present financial data differently than was approved by our former auditor. Similarly, it is possible that our new auditor will disagree with the way we have presented financial results in prior periods, in which case we may be required to restate those financial results. In either case, these changes could negatively impact our future financial results and/or previously reported financial results, could subject us to the expense and other consequences of restating our prior financial statements, and could lead to government investigation and/or shareholder litigation.

Unforeseen problems with the implementation and maintenance of our information systems, or failure to design and operate effective internal controls over information systems, could have an adverse effect on our operations and could result in ineffective internal control over our financial reporting.

In the fourth quarter of 2016, we began the process of implementing a cloud-based enterprise resource planning ("ERP") system. During the second quarter of fiscal 2017, we transitioned to our ERP system for manufacturing operations for material requirements planning, general ledger, procurement, cost accounting, payment, billings and cash receipts functions. This transition, including our engagement of third party experts to help in the design, training and implementation of the new ERP system, has accounted for increases in sales, general and administrative costs, relative to prior periods. As we add functionality and increase the use of the ERP system, we will incur additional costs and problems could arise that we have not foreseen, including interruptions in service, loss of data, or reduced functionality. Such problems could adversely impact our ability to provide quotes, take customer orders, and otherwise run our business in a timely manner. In addition, if our new systems fail to provide accurate and increased visibility into pricing and cost structures, it may be difficult to improve or maximize our profit margins. As such, our results of operations and cash flows could be adversely affected.

In addition, we do not have experience with implementing and maintaining controls over this ERP system. While we believe we have designed the appropriate controls around this ERP system, if we have not designed controls within or around these systems that are effective at preventing and detecting unreliable data, or if we are unable to design or operate controls within or around these systems to provide effective control around program changes and access to the systems, we may be at risk for future material weaknesses. The existence of a material weakness could result in errors in our financial statements that could result in a restatement of financial statements, which could cause us to fail to meet our reporting obligations, to be in breach of agreements with our lenders and equity inventor, lead to a loss of investor confidence and have a negative impact on the trading price of our common stock.

Our stock price has in the past and may in the future fail to meet minimum requirements for continued listing on The Nasdaq Capital Market. Our ability to publicly or privately sell equity securities and the liquidity of our common stock could be adversely affected if we are delisted from Nasdaq or if we are unable to transfer our listing to another stock market.

In the past we have received written notifications from Nasdaq informing us that we were not in compliance with certain continued listing requirements of The Nasdaq Stock Market LLC. As previously disclosed, on January 2, 2018, we received written notice from the Listing Qualifications Department of Nasdaq indicating that we were not in compliance with the rules for continued listing because we had not yet held an annual meeting of shareholders within twelve months of the end of our 2016 fiscal year end. As a result of our holding the 2017 Annual Meeting on January 31, 2018, we regained compliance with the applicable rule. There can be no assurance that we will continue to maintain compliance with the requirements for listing our common stock on Nasdaq. Delisting from Nasdaq could adversely affect our ability to raise additional financing through the public or private sale of equity securities, would significantly affect the ability of investors to trade our securities and would negatively affect the value and liquidity of our common stock. Delisting could also have other negative results, including the potential loss of confidence by employees, the loss of institutional investor interest and fewer business development opportunities.

We are an "emerging growth company" and we cannot be certain if the reduced disclosure requirements applicable to emerging growth companies will make our common stock less attractive to investors.

We are an "emerging growth company" as defined in the JOBS Act. For as long as we continue to be an emerging growth company, we may choose to take advantage of certain exemptions from various reporting requirements applicable to other public companies but not to emerging public companies, which include, among other things:

exemption from the auditor attestation requirements under Section 404 of the Sarbanes-Oxley Act of 2002; reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements;

exemption from the requirements of holding non-binding stockholder votes on executive compensation arrangements; and

exemption from any rules requiring mandatory audit firm rotation and auditor discussion and analysis and, unless the SEC otherwise determines, any future audit rules that may be adopted by the Public Company Accounting Oversight Board.

We could be an emerging growth company until no later than December 31, 2018, the last day of the fiscal year following the fifth anniversary after our initial public offering, or if sooner, the earliest of (i) the last day of the fiscal year in which we have annual gross revenues of \$1.7 billion or more; (ii) the date on which we have, during the previous three year period, issued more than \$1.0 billion in non-convertible debt; or (iii) the date on which we are deemed to be a large accelerated filer under the federal securities laws. In addition, we believe we may qualify as an accelerated filer as early as December 31, 2018, if we have an aggregate worldwide market value of the voting and non-voting common equity held by our non-affiliates of \$75 million or more, but less than \$700 million, as of the last business day of our second fiscal quarter of 2018.

Under the JOBS Act, emerging growth companies are also permitted to elect to delay adoption of new or revised accounting standards until companies that are not subject to periodic reporting obligations are required to comply, if such accounting standards apply with non-reporting companies. We have made an irrevocable decision to opt out of this extended transition period for complying with new or revised accounting standards.

We cannot predict if investors will find our common stock less attractive if we rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile.

Provisions in our charter documents and under Delaware law could discourage a takeover that stockholders may consider favorable.

Provisions in our amended and restated certificate of incorporation and bylaws may have the effect of delaying or preventing a change of control or changes in our management. These provisions include the following:

the right of our board of directors to elect directors to fill a vacancy created by the expansion of our board of directors or the resignation, death or removal of a director, which prevents stockholders from being able to fill vacancies on our board of directors:

the establishment of a classified board of directors requiring that only a subset of the members of our board of directors be elected at each annual meeting of stockholders;

the prohibition of cumulative voting in our election of directors, which would otherwise allow less than a majority of stockholders to elect director candidates:

the requirement that stockholders provide advance notice to nominate individuals for election to our board of directors or to propose matters that can be acted upon at a stockholders' meeting. These provisions may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of our company;

the ability of our board of directors to issue, without stockholder approval, shares of undesignated preferred stock with terms set by the board of directors, which rights could be senior to those of our common stock. The ability to authorize undesignated preferred stock makes it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to acquire us;

the ability of our board of directors to alter our bylaws without obtaining stockholder approval;

the inability of our stockholders to call a special meeting of stockholders and to take action by written consent in lieu of a meeting;

the required approval of the holders of at least two-thirds of the shares entitled to vote at an election of directors to adopt, amend or repeal our bylaws;

the required approval of the holders of at least two-thirds of the shares entitled to vote at an election of directors to repeal or adopt any provision of our certificate of incorporation regarding the election of directors;

the required approval of the holders of at least 80% of such shares to amend or repeal the provisions of our bylaws regarding the election and classification of directors; and

the required approval of the holders of at least two-thirds of the shares entitled to vote at an election of directors to remove directors without cause.

As a Delaware corporation, we are also subject to certain Delaware anti-takeover provisions. Under Delaware law, a corporation may not engage in a business combination with any holder of 15% or more of its common stock unless the holder has held the stock for three years or, among other things, the board of directors has approved the transaction. Our board of directors could rely on Delaware law to prevent or delay an acquisition of us.

Risks Related to our Business and Strategy

Our business and our strategy are subject to numerous risks, all of which you should consider carefully before making a decision to invest in our common stock. These risks include, among others, those listed below, which are more fully described in the reports we periodically file with the SEC, including our Annual Report on Form 10-K for the year ended December 31, 2017, and which are incorporated herein by reference. See "Where You Can Find More Information" and "Incorporation of Certain Documents by Reference" in this prospectus supplement for further information.

We have a limited number of commercialized products, have incurred significant losses to date and anticipate continuing to incur losses in the future, and we may not achieve or maintain profitability.

There is uncertainty about our ability to continue as a going concern.

Our business may fail if we are not able to increase sales.

We have limited experience in marketing and selling our products and will need to expand our sales and marketing infrastructure.

If we are unable to maintain and further establish successful relations with the third-party distributors that are our principal customers, or they do not focus adequate resources on selling our products or are unsuccessful in selling them to end users, sales of our products will be adversely affected.

The product candidates we select for development and commercialization may fail to generate significant revenues, and we may not be able to successfully enter into strategic collaborations with respect to our other product candidates.

Adverse weather conditions, climate change and other natural conditions can reduce acreage planted or incidence of crop disease or pest infestations, which can adversely affect our results of operations.

If our ongoing or future field trials are unsuccessful, we may be unable to obtain regulatory approval of, or commercialize, our products on a timely basis.

Our inability to obtain regulatory approvals, or to comply with ongoing and changing regulatory requirements, could delay or prevent sales of the products we are developing and commercializing.

Bio-based pest management and plant health products are not well understood, which necessitates investment in customer education and makes effectively marketing and selling our products difficult.

The high level of competition in the market for pest management and plant health products may result in pricing pressure, reduced margins or the inability of our products to achieve market acceptance.

Our product sales are subject to weather conditions and other factors beyond our control, which may cause our operating results to fluctuate significantly quarterly and annually.

We rely on the experience and expertise of our senior management team and other key personnel, and if we are unable to recruit or retain qualified personnel, our development and commercialization efforts may be significantly delayed.

If we or our third-party manufacturers are unable to produce our products at a satisfactory quality, in a timely manner, in sufficient quantities or at an acceptable cost, our business could be negatively impacted.

Failure to achieve expected manufacturing yields and pesticidal activity or contamination of our production runs could negatively impact our operating results.

Although we have developed alternative knotweed suppliers, we currently rely on a single supplier based in China for a key ingredient of Regalia.

Our collaborative efforts on Zequanox may not result in increased sales.

We depend on a limited number of distributors.

Any decline in U.S. agricultural production could have a material adverse effect on the market for pesticides and on our results of operations and financial position.

Our intellectual property is integral to our business. If we are unable to protect our patents and proprietary rights in the United States and foreign countries, our business could be adversely affected.

Intellectual property litigation could cause us to spend substantial resources and could distract our personnel from their normal responsibilities.

If we are unable to protect the confidentiality of our trade secrets, our business and competitive position could be harmed.

Third parties may misappropriate our microbial strains.

Other companies may claim that we infringe their intellectual property or proprietary rights, which could cause us to incur significant expenses or prevent us from selling our products.

We use some hazardous materials in our business and are subject to potential liability under environmental laws. Any claims relating to improper handling, storage or disposal of hazardous materials could be time consuming and costly to resolve.

Our headquarters and other facilities and certain manufacturers and suppliers are located in regions that are subject to natural disasters, as well as in some cases geopolitical risks and social upheaval.

Inability to comply with regulations applicable to our facilities and procedures could delay, limit or prevent our research and development or manufacturing activities.

We may be exposed to product liability and remediation claims, which could harm our business.

Our ability to use our net operating loss carryforwards to offset future taxable income may be subject to certain limitations.

Our business is subject to various governmental regulations, and compliance with these regulations may cause us to incur significant expenses. If we fail to maintain compliance with applicable regulations, we may be forced to recall products and cease their manufacture and distribution, which could subject us to civil or criminal penalties.

CAUTIONARY NOTE REGARDING FORWARD LOOKING INFORMATION

This prospectus and the documents we incorporate by reference in this prospectus contain forward-looking statements. All statements, other than statements of historical facts, included or incorporated in this prospectus regarding our strategy, future operations, financial position, future revenues, projected costs, prospects, plans and objectives of management are forward-looking statements. We may, in some cases, use words such as "believe," "anticipate," "should," "intend," "plan," "will," "estimate," "project," "expect" and similar expressions, although not all forward-looking statements contain these identifying words. These statements are based on assumptions and assessments made by our management in light of its experience and its perception of historical trends, current conditions, expected future developments and other factors our management believes to be appropriate. These forward-looking statements are subject to a number of risks and uncertainties, including those risks described or incorporated by reference in this prospectus under "Risk Factors" above.

Forward-looking statements included or incorporated by reference in this prospectus include, for example, statements about: our plans to target our existing products or product variations for new markets and for new uses and applications; our plans and expectations with respect to growth in sales of our product lines and with respect to Bio-Tam 2.0 and Jet-Ag; our ability and plans to develop, register and commercialize additional new product candidates and bring new products to market across multiple categories faster and at a lower cost than other developers of pest management products, including research, development and field trial plans; our expectations regarding registering new products and new formulations and expanded use labels for existing products, including submitting new products to the EPA; our belief that challenges facing the use of conventional chemical pesticides will continue to grow; our beliefs regarding the growth of markets for, and unmet demand for, bio-based products; our beliefs regarding market adoption of our products and our ability to compete in our target markets; our intention to maintain existing, and develop new, supply, sales and distribution channels and extend market access; expectations regarding potential future payments under strategic collaboration and development agreements; our plans and expectations relating to our debt agreements; management's belief regarding our access to capital resources through equity offerings, debt financings, strategic collaborations or other means; our plans to grow our business while improving efficiency, including by focusing on a limited number of product candidates, taking measures to reduce expenses and expanding our sales and marketing team; our plans and expectations with respect to manufacturing and production; our plans to seek third-party collaborations to develop and commercialize more early stage product candidates; our intention to continue to devote significant resources toward our proprietary technology and research and development; our expectations that sales will be seasonal and the impact of continued drought and other weather-related conditions; our ability to protect our intellectual property in the United States and abroad; our beliefs regarding the effects of the outcome of certain legal matters; our anticipated impact of certain accounting pronouncements; our ability to use carryforwards; our expectations regarding market risk, including interest rate changes, foreign currency fluctuations and commodity price changes; our expectations with respect to future regulatory restrictions on competing products or product ingredients and our future expenditures, available cash and other financial and operating results.

Any such forward-looking statements are not guarantees of future performance and actual results, developments and business decisions may differ from those contemplated by such forward-looking statements. We disclaim any duty to

update any forward-looking statements. You should also carefully consider other information set forth in reports or other documents that we file with the SEC.

USE OF PROCEEDS

We estimate that our net proceeds from this offering will be approximately \$ million (or approximately \$ million if the underwriter exercises its over-allotment option in full), after deducting the underwriting discount and estimated offering expenses payable by us.

We intend to use the net proceeds from this offering for general corporate purposes, which may include operating expenses, working capital to improve and promote our commercially available products, advance product candidates, expand international presence and commercialization, general capital expenditures and potential costs associated with litigation, including a breach of contract claim brought by Piper Jaffray, Inc. alleging our failure to pay a \$2.0 million transaction fee.

The amounts actually expended for each purpose may vary significantly depending upon numerous factors, including progress with the development of our products and business, the establishment of collaborative arrangements with other companies, the availability of additional financing, our development of litigation strategy and other factors. Investors will be relying on the judgment of our management regarding the application of the proceeds of any sale of shares of our common stock.

As of the date of this prospectus, we cannot specify with certainty all of the particular uses of the proceeds from this offering. Accordingly, we will retain broad discretion over the use of such proceeds. Pending the use of the net proceeds from this offering as described above, we intend to invest the net proceeds in investment-grade, interest-bearing securities.

CAPITALIZATION

The	folloy	wing table	sets forth	our cash.	cash ec	nuivalents a	nd investments an	d capitalization	as of Dec	ember 31.	. 2017:

on an actual basis;

on a pro forma basis to give effect to:

the receipt of \$23.3 million in net proceeds from closings after December 31, 2017 under the October 2017 Convertible Note and the Purchase Agreement, net of estimated fees and expenses incurred in connection with the February 2018 Financing Transactions and not reflected in our financial results as of December 31, 2017;

the issuance of an aggregate of 44,000,001 shares of our common stock and warrants to purchase an aggregate of 41,333,333 shares of our common stock to purchasers under the Purchase Agreement, including the conversion of all \$4.0 million of principal outstanding under the October 2017 Convertible Note outstanding as of December 31, 2017;

the conversion of \$35.0 million of the aggregate principal amount of the Waddell Notes outstanding as of December 31, 2017 into an aggregate of 20,000,000 shares of our common stock and warrants to purchase 4,000,000 shares of our common stock:

the conversion of \$10.0 million of the aggregate principal amount of indebtedness outstanding under the October 2012 and April 2013 Promissory Notes outstanding as of December 31, 2017 to an aggregate of 5,714,285 shares of our common stock and warrants to purchase 1,142,856 shares of our common stock; and

the issuance of 800,000 shares of common stock and warrants to purchase 2,017,143 shares of common stock to National Securities Corporation in connection with its facilitation of the foregoing transactions;

in each case as if such transactions had occurred on December 31, 2017; and

on a pro forma as adjusted basis to give further effect to the sale of shares of common stock in this offering, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

You should read this data together with our audited financial statements and related notes, as well as the information under the caption "Management's Discussion and Analysis of Financial Condition and Results of Operations," in our Annual Report on Form 10-K for the fiscal year ended December 31, 2017 and incorporated by reference herein.

	December		
	Actual	Pro Forma(1)	Pro Forma as
			Adjusted
	(in thousan	are and	
Cash and cash equivalents(2)	\$786	\$24,065	\$
Debt, including current portion and debt due to related parties(2)	63,753	20,522	
Stockholders' deficit: Preferred stock, \$0.00001 par value per share; 20,000,000 shares authorized, no shares issued and outstanding, actual, pro forma and pro forma as adjusted Common stock, \$0.00001 par value per share: 250,000,000 shares authorized,	_	_	_
actual, pro forma and pro forma, as adjusted; 31,350,877 shares issued and outstanding at December 31, 2017, actual; 101,865,163 shares issued and outstanding at December 31, 2017, pro forma; shares issued and outstanding at December 31, 2017, pro forma as adjusted	_	1	
Additional paid-in capital Accumulated deficit Total stockholders' deficit Total capitalization	214,921 (265,572) (50,651) \$13,102		\$

of the February 2018 Financing Transactions as if these transactions had been consummated on December 31, 2017 by adjusting the financial information in the "Actual" column to give pro forma effect to agreements and events that are (i) directly attributable to the February 2018 Financing Transactions, (ii) factually supportable and (iii) expected to have a material impact on our capital structure. The unaudited pro forma information is based on various estimates and assumptions, including preliminary estimates of gain or loss on extinguishment of debt and (1) projected future expenses associated with the February 2018 Financing Transactions such as registration of the underlying common shares issued therein. Accordingly, our assessment of the accounting impacts of the February 2018 Financing Transactions are preliminary and subject to future adjustments, which may be material, and any accounting determinations reflected in this column have been made solely for the purpose of providing the unaudited pro forma financial information presented. The final accounting impacts of the February 2018 Financing Transactions will be reflected in our results for the quarter ended March 31, 2018, and after analyses are finalized and final procedures are performed, the determinations reflected in our results for the quarter ended March 31, 2018 may differ materially from those reflected in the unaudited pro forma financial information in this column. For our preliminary estimates of our cash and cash equivalents and the outstanding principal amounts under our (2) debt agreements as of March 31, 2018, please see "Prospectus Summary-Recent Developments-First Quarter 2018 Preliminary Financial Data."

The unaudited pro forma financial information in this column has been prepared on a basis to illustrate the effects

The outstanding share information in the table above excludes as of December 31, 2017:

3,121,107 shares of common stock issuable upon the exercise of stock options outstanding at a weighted average exercise price of \$5.45 per share, 822,227 shares of common stock issuable upon settlement of restricted stock units and 2,341,134 additional shares of common stock reserved for issuance under our stock option plan; and

4,231,288 shares of common stock issuable upon the exercise of warrants outstanding at a weighted exercise price of \$1.95 per share.

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DILUTION

If you invest in our common stock, your interest will be immediately diluted to the extent of the difference between the offering price per share of our common stock in this offering and the pro forma as adjusted net tangible book value per share of common stock after this offering.

As of December 31, 2017, we had a historical net tangible book value of approximately \$(50.7) million, or \$(1.62) per share. Our net tangible book value represents total tangible assets less total liabilities all divided by the number of shares of common stock outstanding on December 31, 2017. Our pro forma net tangible book value as of December 31, 2017, was \$17.6 million, or \$0.37 per share of our common stock. Pro forma net tangible book value and pro forma net tangible book value per share give effect to certain transactions completed in connection with our February 2018 Financing Transactions, as if such transactions had occurred on December 31, 2017, as discussed in the note to the table below.

After giving effect to the sale of shares of common stock in this offering at the public offering price of \$ per share, and after deducting the underwriting discount and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of December 31, 2017 would have been approximately \$ million, or approximately \$ per share. This represents an immediate increase in pro forma as adjusted net tangible book value per share of approximately \$ and an immediate dilution in pro forma as adjusted net tangible book value per share to purchasers of our common stock in this offering of approximately \$, as illustrated by the following table:

Public offering price per share of common stock		\$
Historical net tangible book value at December 31, 2017	\$(1.62))
Pro forma increase in net tangible book value per share	1.78	
Pro forma net tangible book value per share as of December 31, 2017(1)	0.16	
Increase in pro forma net tangible book value per share attributable to investors purchasing our common	\$	
stock in this offering	Ψ	
Pro forma as adjusted net tangible book value per share after giving effect to this offering		\$
Pro forma dilution per share to investors purchasing our common stock in this offering		\$

(1)Our unaudited, pro forma net tangible book value gives effect to certain transactions completed in connection with our February 2018 Financing Transactions, specifically: (a) the receipt of \$23.3 million in net proceeds from closings after December 31, 2017 under the October 2017 Convertible Note and the Purchase Agreement, net of estimated fees and expenses incurred in connection with the February 2018 Financing Transactions and not

reflected in our financial results as of December 31, 2017, (b) the issuance of an aggregate of 44,000,001 shares of our common stock and warrants to purchase an aggregate of 41,333,333 shares of our common stock to purchasers under the Purchase Agreement, including the conversion of all \$4.0 million of principal outstanding under the October 2017 Convertible Note outstanding as of December 31, 2017, (c) the conversion of \$35.0 million of the aggregate principal amount of the Waddell Notes outstanding as of December 31, 2017 into an aggregate of 20,000,000 shares of our common stock and warrants to purchase 4,000,000 shares of our common stock, (d) the conversion of \$10.0 million of the aggregate principal amount of indebtedness outstanding under the October 2012 and April 2013 Promissory Notes outstanding as of December 31, 2017 to an aggregate of 5,714,285 shares of our common stock and warrants to purchase 1,142,856 shares of our common stock, and (e) the issuance of 800,000 shares of common stock and warrants to purchase 2.017.143 shares of common stock to National Securities Corporation in connection with its facilitation of the foregoing transactions; in each case as if such transactions had occurred on December 31, 2017. The unaudited, pro forma net tangible book value is based on various estimates and assumptions, including preliminary estimates of gain or loss on extinguishment of debt and projected future expenses associated with the February 2018 Financing Transactions such as registration of the underlying common shares issued therein. Accordingly, our assessment of the accounting impacts of the February 2018 Financing Transactions are preliminary and subject to future adjustments, which may be material, and any accounting determinations reflected in the calculation of pro forma net tangible book value been made solely for the purpose of providing this information. The final accounting impacts of the February 2018 Financing Transactions will be reflected in our results for the quarter ended March 31, 2018, and after analyses are finalized and final procedures are performed, the determinations reflected in our results for the quarter ended March 31, 2018 may differ materially from those reflected in the calculation of pro forma net tangible book value.

If the underwriter exercises in full its option to purchase an additional shares of common stock at the public offering price of \$ per share, our pro forma as adjusted net tangible book value as of December 31, 2017, after giving effect to this offering, would have been approximately \$ per share, representing an increase in pro forma net tangible book value of approximately \$ per share to existing stockholders and immediate dilution in pro forma net tangible book value of approximately \$ per share to investors participating in this offering.

The above table is based on 31,350,887 shares outstanding as of December 31, 2017, and excludes as of such date:

3,121,107 shares of common stock issuable upon the exercise of stock options outstanding under our stock option plans at a weighted average exercise price of \$5.45 per share, 822,227 shares of common stock issuable upon settlement of restricted stock units and 2,341,134 additional shares of common stock reserved for issuance under our stock option plan; and

4,231,288 shares of common stock issuable upon the exercise of warrants outstanding at December 31, 2017 at a weighted exercise price of \$1.95 per share.

To the extent that outstanding options or warrants are exercised or restricted stock units are settled, you may experience further dilution.

PRICE RANGE OF COMMON STOCK

Our common stock has been traded on the Nasdaq Capital Market under the symbol "MBII" since our initial public offering in August 2013. The following table sets forth, for the periods indicated, the high and low sales prices for our common stock as reported by Nasdaq:

	Commo Price	n Stock
Year ended December 31, 2018	Low	High
First Quarter	\$0.99	\$2.42
Second Quarter (through April 16, 2018)	1.86	3.39
Year ended December 31, 2017		
First Quarter	\$1.66	\$2.45
Second Quarter	0.90	2.12
Third Quarter	0.85	1.36
Fourth Quarter	0.85	1.23
Year ended December 31, 2016	Low	High
First Quarter	\$0.62	\$1.65
Second Quarter	0.60	0.97
Third Quarter	0.71	1.92
Fourth Quarter	1.61	2.79

The closing sale price of our common stock as reported on the Nasdaq Capital Market on April 16, 2018 was \$1.945 per share. As of April 12, 2018, there were approximately 99 holders of record of the common stock. This does not include the number of persons whose stock is in nominee or "street name" accounts through brokers. We believe the market price of our common stock has been, and in certain cases may continue to be, subject to wide fluctuations as a result of our limited public float and in response to a number of events and factors, such as our recent financial restatement, the investigations and lawsuits arising out of related matters and the resulting disruption to our operations, quarterly variations in our operating results and those of our competitors or customers, announcements of technological innovations or new products, services or commercial relationships by us or our competitors, our ability to develop and market new products on a timely basis, media reports, publications and announcements about us, our competitors or the pest management industry, our entry into, modification of or termination of key license, research and development or collaborative agreements, new regulatory pronouncements and changes in regulatory guidelines or the status of our regulatory approvals, changes in our board of directors or management, and changes in financial estimates and recommendations by securities analysts. These fluctuations, as well as general and industry-specific economic and market conditions, may adversely affect the market price for our common stock.

UNDERWRITING

We have entered into an underwriting agreement with National Securities Corporation, the underwriter, pursuant to which it has agreed to purchase from us shares of our common stock to be sold in this offering, at the public offering price set forth on the cover page of this prospectus supplement, less the underwriting discount.

We have agreed to indemnify the underwriter and its officers, directors, employees and agents, and each person if any, who controls the underwriter within the meaning of Section 15 of the Securities Act, against certain liabilities, including civil liabilities under the Securities Act resulting from this offering and to contribute to payments the underwriter may be required to make in respect of such liabilities.

The underwriter is offering the shares subject to prior sale, when, as and if issued to and accepted by it, subject to approval of legal matters by its counsel, including the validity of the shares, and other conditions contained in the underwriting agreement, such as the receipt by the underwriter of officer's certificates and legal opinions. The underwriter reserves the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

The underwriter has advised us that it proposes to initially offer the shares of common stock to the public at \$ per share. After the initial offering of the shares, the underwriter may from time to time vary the offering price and other selling terms.

Over-allotment Option to Purchase Additional Shares

We have granted to the underwriter an option to purchase up to additional shares of common stock from us at the same price to the public, less the same underwriting discount, as set forth in the table on the cover page of this prospectus supplement. The underwriter may exercise this option any time during the 45-day period after the date of this prospectus supplement, but only to cover over-allotments, if any, including as described below.

Lock-Up

Each of our officers and directors have entered into a lock-up agreement with respect to shares of our common stock and other of our securities that they beneficially own, including securities that are convertible into shares of common stock and securities that are exchangeable or exercisable for shares of common stock. This means that, subject to certain exceptions, for a period of 90 days following the date of this prospectus supplement, such persons may not offer, sell, assign, transfer, pledge, contract to sell, or otherwise dispose of these securities without the prior written consent of National Securities Corporation. In addition, we have agreed, subject to certain exceptions, for a period of 90 days following the date of this prospectus supplement, not to offer, sell, assign, transfer, pledge, contract to sell, or otherwise dispose of shares of our common stock, including securities that are convertible into shares of common stock and securities that are exchangeable or exercisable for shares of common stock, without the prior written consent of National Securities Corporation.

Underwriting Discount and Expenses

The following table summarizes the per share underwriting discount to the public offering price of the shares offered pursuant to this prospectus supplement. These amounts are shown assuming both no exercise and full exercise of the over-allotment option. We have also agreed to pay up to \$40,000 of the out-of-pocket fees and expenses of the underwriter, which includes the fees and expenses of counsel to the underwriter. The fees and expenses of the underwriter that we have agreed to reimburse are not included in the underwriting discount set forth in the table below. The underwriting discount was determined through arms' length negotiations between us and the underwriter.

	Per Share	Total Without Exercise of Option to Purchase Additional Common Shares	With Exercise of Option to Purchase Additional Common Shares
Underwriting discount for common stock to be paid by	\$	\$	\$
us			

We estimate that the total expenses of the offering, excluding the underwriting discount, will be approximately \$ without the exercise of the over-allotment option and \$ assuming the full exercise of the over-allotment option. This includes \$40,000 of the out-of-pocket fees and expenses of the underwriter. These expenses are payable by us.

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After deducting fees due to the underwriter and our estimated offering expenses, we expect our net proceeds from this offering to be approximately \$.

Stabilization

To facilitate the offering, the underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the common stock during and after the offering. Specifically, the underwriters may over-allot or otherwise create a short position in the common stock for their own account by selling more shares of common stock than have been sold to them by us. The underwriters may elect to cover any such short position by purchasing shares of common stock in the open market or by exercising the over-allotment option granted to the underwriters. In addition, the underwriters may stabilize or maintain the price of the common stock by bidding for or purchasing shares of common stock in the open market and may impose penalty bids. If penalty bids are imposed, selling concessions allowed to broker-dealers participating in the offering are reclaimed if shares of common stock previously distributed in the offering are repurchased, whether in connection with stabilization transactions or otherwise. The effect of these transactions may be to stabilize or maintain the market price of the common stock at a level above that which might otherwise prevail in the open market. The imposition of a penalty bid may also affect the price of the common stock to the extent that it discourages resales of the common stock. The magnitude or effect of any stabilization or other transactions is uncertain. These transactions may be effected on the Nasdaq Capital Market, or otherwise and, if commenced, may be discontinued at any time. Neither we nor the underwriters make any representation or prediction as to the effect that the transactions described above may have on the price of our common stock.

Passive Market Making

In connection with this offering, the underwriters (and any dealers that are members of the selling group) may also engage in passive market making transactions in our common stock. Passive market making consists of displaying bids limited by the prices of independent market makers and effecting purchases limited by those prices in response to order flow. Rule 103 of Regulation M promulgated by the SEC limits the amount of net purchases that each passive market maker may make and the displayed size of each bid. Passive market making may stabilize the market price of our common stock at a level above that which might otherwise prevail in the open market and, if commenced, may be discontinued at any time.

Electronic Offer, Sale and Distribution of Shares

A prospectus supplement in electronic format may be made available on the website maintained by the underwriter and the underwriter may distribute prospectuses electronically. In those cases, prospective investors may view

offering terms and a prospectus online and place orders online or through their financial advisors. Other than the prospectus in electronic format, the information on this website is not part of this prospectus supplement, the accompanying prospectus or the registration statement of which this prospectus supplement and the accompanying prospectus form a part, has not been approved or endorsed by us or the underwriter, and should not be relied upon by investors.

Other Relationships with the Underwriter

From time to time in the ordinary course of business, the underwriter and its respective affiliates have performed, and may in the future perform, various commercial banking, financial advisory, investment banking and other financial services for us for which it received, or will receive customary fees and reimbursement of expenses.

The underwriter and its affiliates were issued an aggregate 800,000 shares of common stock and warrants to purchase 2,017,143 shares of common stock at an exercise price of \$1.00 per share, in connection with the underwriter's services as exclusive placement agent and financial advisor to the Company for the February 2018 Financing Transactions.

Offer Restrictions Outside the United States

Other than in the United States, no action has been taken by us or the underwriter 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 supplement in any jurisdiction in which such an offer or a solicitation is unlawful.

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LEGAL MATTERS

The validity of the securities being offered by this prospectus will be passed upon by Morrison & Foerster LLP of Palo Alto, California. National Securities Corporation is being represented in connection with this offering by Duane Morris LLP of Philadelphia, PA.

EXPERTS

The consolidated financial statements of Marrone Bio Innovations, Inc. appearing in Marrone Bio Innovations, Inc.'s Annual Report (Form 10-K) for the year ended December 31, 2017, have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon (which contains an explanatory paragraph describing conditions that raise substantial doubt about the Company's ability to continue as a going concern as described in Note 1 to the consolidated financial statements), included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm 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, of which this prospectus forms a part. The rules and regulations of the SEC allow us to omit from this prospectus certain information included in the registration statement. For further information about us and the securities we are offering under this prospectus, you should refer to the registration statement and the exhibits and schedules filed with the registration statement. With respect to the statements contained in this prospectus regarding the contents of any agreement or any other document, in each instance, the statement is qualified in all respects by the complete text of the agreement or document, a copy of which has been filed as an exhibit to the registration statement.

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings, including the registration statement and exhibits, are available to the public at the SEC's website at http://www.sec.gov. You may also read, without charge, and copy the documents we file, at the SEC's public reference rooms at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You can request copies of these documents by writing to the SEC and paying a fee for the copying cost. Please call the SEC at 1-800-SEC-0330 for further information on the public reference rooms.

We maintain an Internet site at www.marronebioinnovations.com. Webcasts of presentations we make at certain conferences may also be available on our website from time to time. We have not incorporated by reference into this prospectus the information on our website, and you should not consider any of the information posted on or hyper-linked to our website to be a part of this prospectus.

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INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" the information we file with the SEC, which means we can disclose important information to you by referring you to those documents. The information we incorporate by reference is an important part of this prospectus, and certain information that we will later file with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below as well as any future filings made with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this prospectus until we sell all of the securities under this prospectus, except that we do not incorporate any document or portion of a document that is "furnished" to the SEC, but not deemed "filed." The following documents filed with the SEC are incorporated by reference in this prospectus:

our Annual Report on Form 10-K for the fiscal year ended December 31, 2017 filed with the SEC on April 5, 2018;

our Current Reports on Form 8-K filed with the SEC on January 3, 2018, February 1, 2018, February 6, 2018, March 26, 2018, April 10, 2018 and April 16, 2018; and

The description of our capital stock contained in our Registration Statement on Form 8-A filed with the SEC on July 29, 2013, including any amendments or reports filed for the purpose of updating such description.

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

We will provide to you at no cost a copy of any and all of the information incorporated by reference into the registration statement of which this prospectus is a part. You may make a request for copies of this information in writing or by telephone. Requests should be directed to:

Marrone Bio Innovations, Inc.

1540 Drew Avenue

Davis, California 95618

Attn: Pamela G. Marrone, Ph.D., Chief Executive Officer

(530) 750-2800

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\$50,000,000

Common Stock

Preferred Stock

Debt Securities

Warrants

Rights

Units

INVESTING IN OUR SECURITIES INVOLVES A HIGH DEGREE OF RISK. YOU SHOULD CAREFULLY READ AND CONSIDER THE RISK FACTORS DESCRIBED IN THIS PROSPECTUS, ANY ACCOMPANYING PROSPECTUS SUPPLEMENT AND IN THE DOCUMENTS INCORPORATED BY REFERENCE INTO THIS PROSPECTUS. SEE "RISK FACTORS" BEGINNING ON PAGE 2.

From time to time, we may offer and sell, in one or more offerings, in amounts, at prices and on terms determined at the time of any such offering, common stock, preferred stock, debt securities, warrants, rights to purchase such securities, either individually or in units, with a total value of up to \$50,000,000.

Our common stock trades on the Nasdaq Capital Market under the symbol "MBII." On December 27, 2016, the last reported sale price of the common stock on the Nasdaq Capital Market was \$2.29 per share.

As of November 11, 2016, the aggregate market value of our outstanding common stock held by non-affiliates, or the public float, was approximately \$48.1 million based on 24,658,302 shares of outstanding stock, of which 18,852,942 are held by non-affiliates, and a per share price of \$2.55, which was the closing sale price of our common stock on November 11, 2016. Pursuant to General Instruction I.B.6 of Form S-3, in no event will we sell our common stock in a public primary offering with a value exceeding more than one-third of our public float in any 12-month period so long as our public float remains below \$75,000,000. We have not offered any securities pursuant to General Instruction I.B.6 of Form S-3 during the prior 12 calendar month period that ends on and includes the date of this prospectus. As of November 9, 2016, one-third of our public float is equal to approximately \$16 million.

We will provide specific terms of these securities in supplements to this prospectus. The prospectus supplement will also describe the specific manner in which we will offer the securities and may also supplement, update or amend information contained in this document. You should read this prospectus and any supplement carefully before you purchase any of our securities.

THIS PROSPECTUS MAY NOT BE USED TO OFFER AND SELL SECURITIES UNLESS ACCOMPANIED BY A PROSPECTUS SUPPLEMENT.

We may offer the securities in amounts, at prices and on terms determined at the time of offering. We may sell the securities directly to you, through agents we select or through underwriters and dealers we select. If we use agents, underwriters or dealers to sell the securities, we will name them and describe their compensation in a 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 is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is January 6, 2017

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No person has been authorized to give any information or make any representations in connection with this offering other than those contained or incorporated by reference in this prospectus and any accompanying prospectus supplement in connection with the offering described in this prospectus and any accompanying prospectus supplement, and, if given or made, such information or representations must not be relied upon as having been authorized by us. Neither this prospectus nor any prospectus supplement shall constitute an offer to sell or a solicitation of an offer to buy offered securities in any jurisdiction in which it is unlawful for such person to make such an offering or solicitation. Neither the delivery of this prospectus or any prospectus supplement nor any sale made hereunder shall under any circumstances imply that the information contained or incorporated by reference in this prospectus or in any prospectus supplement is correct as of any date subsequent to the date of this prospectus supplement or of any prospectus supplement.

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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 SEC, using a "shelf" registration process. Under this shelf registration process, we may, from time to time, issue and sell to the public any part of the securities described in this prospectus in one or more offerings up to a total dollar amount of \$50,000,000.

This prospectus provides you with a general description of the securities we may offer. Each time we sell the securities, we will provide a prospectus supplement containing specific information about the terms of that offering. The prospectus supplement may also add, update or change information in this prospectus or in documents incorporated by reference in this prospectus. To the extent that any statement that we make in a prospectus supplement is inconsistent with statements made in this prospectus or in documents incorporated by reference in this prospectus, the statements made or incorporated by reference in this prospectus will be deemed modified or superseded by those made in the prospectus supplement. You should carefully read both this prospectus and any prospectus supplement together with the additional information described under the heading "Where You Can Find More Information" before buying any securities offered in this offering.

THIS PROSPECTUS MAY NOT BE USED TO OFFER AND SELL SECURITIES UNLESS IT IS ACCOMPANIED BY A PROSPECTUS SUPPLEMENT.

For purposes of this prospectus, references to the terms "MBI," "the Company," "we," "us" and "our" refer to Marrone Bio Innovations, Inc., unless the context otherwise requires.

The registration statement containing this prospectus, including exhibits to the registration statement, provides additional information about us and the securities offered under this prospectus. The registration statement can be read at the SEC's website or at the SEC offices mentioned under the heading "Where You Can Find More Information."

ABOUT MBI

We make bio-based pest management and plant health products, targeting the major markets that use conventional chemical pesticides, including certain agricultural and water markets where our bio-based products are used as alternatives for, or mixed with, conventional chemical pesticides. We also target new markets for which (i) there are no available conventional chemical pesticides or (ii) the use of conventional chemical pesticides may not be desirable or permissible either because of health and environmental concerns (including for organically certified crops) or because the development of pest resistance has reduced the efficacy of conventional chemical pesticides. We deliver EPA-approved and registered biopesticide products and other bio-based products that address the global demand for effective, safe and environmentally responsible products.

We currently primarily sell our products to the crop protection market. Our commercially available crop protection product lines are Regalia, for plant disease control and plant health, Grandevo and Venerate, for insect and mite control and Majestene for nematode control. We sell our crop protection products to leading agrichemical distributors while also working directly with growers to increase existing and generate new product demand. In March 2016, we also entered into an agreement with Isagro USA to distribute Bio-Tam 2.0 for soil-borne disease control and grapevine

trunk disease control, which complements our existing products, particularly Regalia. In addition, we have developed a commercially available water treatment product, Zequanox, which selectively controls invasive mussels that cause significant infrastructure and ecological damage across a broad range of in-pipe and open-water applications, including hydroelectric and thermoelectric power generation, industrial applications and recreation.

Our corporate headquarters are located at 1540 Drew Avenue in Davis, California 95618. Our telephone number is (530) 750-2800 and our website address is www.marronebioinnovations.com. The information on or accessible

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through our website does not constitute part of this prospectus or any accompanying prospectus supplement and should not be relied upon in connection with making any investment in our securities. We make our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to these reports available free of charge on our website as soon as reasonably practicable after we file these reports with the Securities and Exchange Commission. Our Code of Business Conduct and Ethics can be found on our website.

Securities We Are Offering

We may offer shares of common stock, shares of preferred stock, debt securities, warrants, rights to purchase such securities, either individually or in units, with a total value of up to \$50,000,000 from time to time under this prospectus at prices and on terms to be determined by market conditions at the time of the offering. Our common stock currently is quoted on the Nasdaq Capital Market under the symbol "MBII." Shares of common stock that may be offered in this offering will, when issued and paid for, be fully paid and non-assessable.

We refer to our common stock, preferred stock, debt securities, warrants, rights and units in this prospectus as "securities." This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities, we will provide a prospectus supplement that will describe the specific amounts, prices and other important terms of the securities, as described below under "Plan of Distribution."

RISK FACTORS

Before you invest in our securities, in addition to the other information, documents or reports incorporated by reference in this prospectus and any prospectus supplement or other offering materials, you should carefully consider the risk factors in this section, the section entitled "Risk Factors" in any prospectus supplement as well as our most recent Annual Report on Form 10-K, and in our Quarterly Reports on Form 10-Q filed subsequent to the Annual Report on Form 10-K, which are incorporated by reference into this prospectus and any prospectus supplement in their entirety, as the same may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future. Each of the risks described in these sections and documents could materially and adversely affect our business, financial condition, results of operations and prospects, and could result in a partial or complete loss of your investment.

CAUTIONARY NOTE REGARDING FORWARD LOOKING INFORMATION

This prospectus and the documents we incorporate by reference in this prospectus contain forward-looking statements. All statements, other than statements of historical facts, included or incorporated in this prospectus regarding our strategy, future operations, financial position, future revenues, projected costs, prospects, plans and objectives of management are forward-looking statements. We may, in some cases, use words such as "believe," "anticipate," "should," "intend," "plan," "will," "estimate," "project," "expect" and similar expressions, although not all forward-looking statements contain these identifying words. These statements are based on assumptions and assessments made by our management in light of its experience and its perception of historical trends, current conditions, expected future developments and other factors our management believes to be appropriate. These forward-looking statements are subject to a number of risks and uncertainties, including those risks described or incorporated by reference in this prospectus under "Risk Factors" above.

Forward-looking statements included or incorporated by reference in this prospectus include, for example, statements about: our plans to target our existing products or product variations for new markets and for new uses and applications; our plans and expectations with respect to growth in sales of our product lines and with respect to

Bio-Tam 2.0; our ability and plans to develop, register and commercialize additional new product candidates and bring new products to market across multiple categories faster and at a lower cost than other developers of

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pest management products, including research, development and field trial plans; our expectations regarding registering new products and new formulations and expanded use labels for existing products, including submitting new products to the EPA; our belief that challenges facing the use of conventional chemical pesticides will continue to grow; our beliefs regarding the growth of markets for, and unmet demand for, bio-based products; our beliefs regarding market adoption of our products and our ability to compete in our target markets; our intention to maintain existing, and develop new, supply, sales and distribution channels and extend market access; expectations regarding potential future payments under strategic collaboration and development agreements; our plans and expectations relating to our debt agreements; our plans to grow our business while improving efficiency, including by focusing on a limited number of product candidates, taking measures to reduce expenses and expanding our sales and marketing team; our plans with respect to manufacturing; our plans to seek third-party collaborations to develop and commercialize more early stage product candidates; our intention to continue to devote significant resources toward our proprietary technology and research and development; our expectations that sales will be seasonal and the impact of continued drought and other weather-related conditions; our ability to protect our intellectual property in the United States and abroad; our beliefs regarding the effects of the outcome of certain legal matters; our anticipated impact of certain accounting pronouncements; our ability to use carryforwards; our expectations regarding market risk, including interest rate changes, foreign currency fluctuations and commodity price changes; and our future financial and operating results.

Any such forward-looking statements are not guarantees of future performance and actual results, developments and business decisions may differ from those contemplated by such forward-looking statements. We disclaim any duty to update any forward-looking statements. You should also carefully consider other information set forth in reports or other documents that we file with the Commission.

USE OF PROCEEDS

Unless otherwise indicated in a prospectus supplement, the net proceeds from the sale of securities offered by this prospectus will be used for general corporate purposes, which may include operating expenses, working capital to improve and promote our commercially available products, advance product candidates, expand international presence and commercialization, general capital expenditures and satisfaction of debt obligations.

The amounts actually expended for each purpose may vary significantly depending upon numerous factors, including the amount and timing of our future revenues and our future expenses. Pending any use, as described above, we may invest the net proceeds in a variety of capital preservation instruments, including short- and long-term interest-bearing investments, direct or guaranteed obligations of the U.S. government, certificates of deposit and money market funds. We cannot predict whether the proceeds invested will yield a favorable return for us.

DESCRIPTION OF CAPITAL STOCK

The following description of our common stock and preferred stock, together with the additional information we include in any applicable prospectus supplements, summarizes the material terms and provisions of the common stock and preferred stock that we may offer under this prospectus. It may not contain all the information that is important to you. For the complete terms of our common stock and preferred stock, please refer to our amended and restated certificate of incorporation and our amended and restated bylaws, which are incorporated by reference into the registration statement which includes this prospectus. The Delaware General Corporation Law ("DGCL") may also affect the terms of these securities. While the terms we have summarized below will apply generally to any future common stock and preferred stock that we may offer, we will describe the particular terms of these securities in more detail in the applicable prospectus supplement. If we so indicate in a prospectus supplement, the terms of any security

we offer under that prospectus supplement may differ from the terms we describe below.

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Our amended and restated certificate of incorporation provides for one class of common stock. In addition, our amended and restated certificate of incorporation authorizes shares of undesignated preferred stock, the rights, preferences and privileges of which may be designated from time to time by our board of directors.

Our authorized capital stock consists of 270,000,000 shares, all with a par value of \$0.00001 per share, of which:

250,000,000 shares are designated as common stock; and 20,000,000 shares are designated as preferred stock.

Common Stock

As of September 30, 2016 we had outstanding 24,658,302 shares of common stock, held by 70 stockholders of record. As of September 30, 2016 we also had outstanding options to acquire 3,056,185 shares of our common stock with a weighted average exercise price of \$6.00 per share as well as restricted stock units outstanding for the issuance of an aggregate of 415,161 shares upon settlement held by current and former employees, directors and consultants. In addition, as of September 30, 2016 there were warrants outstanding for the purchase of an aggregate of 4,026,788 shares of common stock with a weighted average exercise price of \$1.95 per share.

Voting Rights. Under our amended and restated certificate of incorporation, each share of common stock entitles the holder to one vote with respect to each matter presented to our stockholders on which the holders of common stock are entitled to vote. Subject to any rights that may be applicable to any then outstanding preferred stock, our common stock votes as a single class on all matters relating to the election and removal of directors on our board of directors and as provided by law. Holders of our common stock do not have cumulative voting rights. Except in respect of matters relating to the election and removal of directors on our board of directors and as otherwise provided in our amended and restated certificate of incorporation or required by law, all matters to be voted on by our stockholders must be approved by a majority of the shares present in person or by proxy at the meeting and entitled to vote on the subject matter. In the case of election of directors, all matters to be voted on by our stockholders must be approved by a plurality of the votes entitled to be cast by all shares of common stock.

Dividends. Subject to preferences that may apply to any shares of preferred stock outstanding at the time, the holders of our common stock will be entitled to share equally, identically and ratably in any dividends that our board of directors may determine to issue from time to time. We have never paid cash dividends on our common stock. We do not anticipate paying periodic cash dividends on our common stock for the foreseeable future. Any future determination about the payment of dividends will be made at the discretion of our board of directors and will depend upon our earnings, if any, capital requirements, operating and financial conditions and on such other factors as the board of directors deems relevant.

Liquidation Rights. In the event of any voluntary or involuntary liquidation, dissolution or winding up of our affairs, holders of our common stock would be entitled to share ratably in our assets that are legally available for distribution to stockholders after payment of our debts and other liabilities. If we have any preferred stock outstanding at such time, holders of the preferred stock may be entitled to distribution and/or liquidation preferences. In either such case, we must pay the applicable distribution to the holders of our preferred stock before we may pay distributions to the holders of our common stock.

Other Rights. Our stockholders have no preemptive, conversion or other rights to subscribe for additional shares. All outstanding shares are, and all shares offered by this prospectus will be, when sold, validly issued, fully paid and

nonassessable. The rights, preferences and privileges of the holders of our common stock will be subject to, and may be adversely affected by, the rights of the holders of shares of any series of our preferred stock that we may designate and issue in the future.

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Listing. Our common stock is listed on the Nasdaq Capital Market under the symbol "MBII."

Transfer Agent and Registrar. The transfer agent for our common stock is American Stock Transfer & Trust Company, LLC. Its address is 6201 15th Avenue, Brooklyn, NY 11219.

Preferred Stock

Under our amended and restated certificate of incorporation, we have authority, subject to any limitations prescribed by law and without further stockholder approval, to issue from time to time up to 20,000,000 shares of preferred stock, par value \$0.00001 per share, in one or more series. As of September 30, 2016, no shares of preferred stock were issued and outstanding.

Pursuant to our amended and restated certificate of incorporation, we are authorized to issue "blank check" preferred stock, which may be issued from time to time in one or more series upon authorization by our board of directors. Our board of directors, without further approval of the stockholders, is authorized to fix the designations, preferences and relative, participating, optional or other special rights, and qualifications, limitations or restrictions applicable to each series of the preferred stock. The issuance of preferred stock, while providing flexibility in connection with capital raising and other corporate purposes could, among other things, adversely affect the voting power or rights of the holders of our common stock and, under certain circumstances, make it more difficult for a third party to gain control of us, discourage bids for our common stock at a premium or otherwise adversely affect the market price of the common stock.

The preferred stock will have the terms described below unless otherwise provided in the prospectus supplement relating to a particular series of the preferred stock. You should read the prospectus supplement relating to the particular series of the preferred stock being offered for specific terms, including:

the designation and stated value per share of the preferred stock and the number of shares offered;

the amount of liquidation preference per share;

the price at which the preferred stock will be issued;

the dividend rate, or method of calculation of any dividend, the dates on which dividends will be payable, whether dividends will be cumulative or noncumulative and, if cumulative, the dates from which dividends will accumulate;

any redemption or sinking fund provisions;

if other than the currency of the United States, the currency or currencies, including composite currencies, in which the preferred stock is denominated and/or in which payments will or may be payable;

any conversion provisions; and

any other rights, preferences, privileges, qualifications, limitations and restrictions on the preferred stock. The preferred stock will, when issued, be duly authorized, fully paid and nonassessable. Unless otherwise specified in the prospectus supplement, each series of the preferred stock will rank equally as to dividends and liquidation rights in all respects with any other series of preferred stock. The rights of holders of shares of each series of preferred stock will be subordinate to those of our general creditors.

Rank. Unless otherwise specified in the prospectus supplement, the preferred stock will, with respect to dividend rights and rights upon our liquidation, dissolution or winding up of our affairs, rank:

senior to all classes or series of our common stock and to all equity securities ranking junior to such preferred stock with respect to dividend rights or rights upon our liquidation, dissolution or winding up of our affairs;

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on a parity with all equity securities issued by us, the terms of which specifically provide that such equity securities rank on a parity with the preferred stock with respect to dividend rights or rights upon our liquidation, dissolution or winding up of our affairs; and

junior to all equity securities issued by us, the terms of which specifically provide that such equity securities rank senior to the preferred stock with respect to dividend rights or rights upon our liquidation, dissolution or winding up of our affairs.

The term "equity securities" does not include convertible debt securities.

Dividends. Holders of the preferred stock of each series will be entitled to receive, when, as and if declared by our board of directors, cash dividends at such rates and on such dates described in the prospectus supplement. Different series of preferred stock may be entitled to dividends at different rates or based on different methods of calculation. The dividend rate may be fixed or variable or both. Dividends will be payable to the holders of record as they appear on our stock books on record dates fixed by our board of directors, as specified in the applicable prospectus supplement.

Dividends on any series of the preferred stock may be cumulative or noncumulative, as described in the applicable prospectus supplement. If our board of directors does not declare a dividend payable on a dividend payment date on any series of noncumulative preferred stock, then the holders of that noncumulative preferred stock will have no right to receive a dividend for that dividend payment date, and we will have no obligation to pay the dividend accrued for that period, whether or not dividends on that series are declared payable on any future dividend payment dates. Dividends on any series of cumulative preferred stock will accrue from the date we initially issue shares of such series or such other date specified in the applicable prospectus supplement.

Liquidation Preference. Upon any voluntary or involuntary liquidation, dissolution or winding up of our affairs, before we make any distribution or payment to the holders of any common stock or any other class or series of our capital stock ranking junior to the preferred stock in the distribution of assets upon any liquidation, dissolution or winding up of our affairs, the holders of each series of preferred stock shall be entitled to receive out of assets legally available for distribution to stockholders, liquidating distributions in the amount of the liquidation preference per share set forth in the applicable prospectus supplement, plus any accrued and unpaid dividends thereon. Such dividends will not include any accumulation in respect of unpaid noncumulative dividends for prior dividend periods. Unless otherwise specified in the prospectus supplement, after payment of the full amount of their liquidating distributions, the holders of preferred stock will have no right or claim to any of our remaining assets. Upon any such voluntary or involuntary liquidation, dissolution or winding up, if our available assets are insufficient to pay the amount of the liquidating distributions on all outstanding preferred stock and the corresponding amounts payable on all other classes or series of our capital stock ranking on parity with the preferred stock and all other such classes or series of shares of capital stock ranking on parity with the preferred stock in the distribution of assets, then the holders of the preferred stock and all other such classes or series of capital stock and all other such classes or series of capital stock will share ratably in any such distribution of assets in proportion to the full liquidating distributions to which they would otherwise be entitled.

Redemption. If so provided in the applicable prospectus supplement, the preferred stock will be subject to mandatory redemption or redemption at our option, as a whole or in part, in each case upon the terms, at the times and at the redemption prices set forth in such prospectus supplement.

Voting Rights. Except as otherwise required by law, or as otherwise fixed by resolution or resolutions of the board of directors with respect to one or more series of preferred stock and indicated in the applicable prospective supplement,

the entire voting power and all voting rights shall be vested exclusively in the common stock.

Conversion Rights. The terms and conditions, if any, upon which any series of preferred stock is convertible into common stock will be set forth in the applicable prospectus supplement relating thereto. Such terms will include

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the number of shares of common stock into which the shares of preferred stock are convertible, the conversion price, rate or manner of calculation thereof, the conversion period, provisions as to whether conversion will be at our option or at the option of the holders of the preferred stock, the events requiring an adjustment of the conversion price and provisions affecting conversion in the event of the redemption.

Transfer Agent and Registrar. Any transfer agent and registrar for the preferred stock will be set forth in the applicable prospectus supplement.

Certain Effects of Authorized but Unissued Stock

We have shares of common stock and preferred stock available for future issuance without stockholder approval. We may issue these additional shares for a variety of corporate purposes, including future public or private offerings to raise additional capital or to facilitate corporate acquisitions or for payment as a dividend on our capital stock. The existence of unissued and unreserved preferred stock may enable our board of directors to issue shares of preferred stock with terms that could render more difficult or discourage a third-party attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise, thereby protecting the continuity of our management. In addition, if we issue preferred stock, the issuance could adversely affect the voting power of holders of common stock and the likelihood that holders of common stock will receive dividend payments or payments upon liquidation.

ADDITIONAL INFORMATION CONCERNING OUR CAPITAL STOCK

Anti-Takeover Effects of Provisions of Our Charter Documents

Our amended and restated certificate of incorporation provides for our board of directors to be divided into three classes with staggered three-year terms. Only one class of directors will be elected at each annual meeting of our stockholders, with the other classes continuing for the remainder of their respective three-year terms. Because our stockholders do not have cumulative voting rights, our stockholders holding a majority of the shares of common stock outstanding will be able to elect all of our directors. Our amended and restated certificate of incorporation and amended and restated bylaws provide that all stockholder actions must be effected at a duly called meeting of stockholders and not by a consent in writing, and that only our board of directors, chairman of the board, chief executive officer or president (in the absence of a chief executive officer) may call a special meeting of stockholders.

Our amended and restated certificate of incorporation and amended and restated bylaws require a 66 2/3% stockholder vote for the removal of a director without cause or the rescission, alteration, amendment or repeal of the bylaws by stockholders, and our amended and restated bylaws require an 80% stockholder vote to amend the provisions of our bylaws relating to the election and classification of directors. The combination of the classification of our board of directors, the lack of cumulative voting and the 66 2/3% and 80% stockholder voting requirements will make it more difficult for our existing stockholders to replace our board of directors as well as for another party to obtain control of us by replacing our board of directors. Since our board of directors has the power to retain and discharge our officers, these provisions could also make it more difficult for existing stockholders or another party to effect a change in management. In addition, the authorization of undesignated preferred stock makes it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change our control.

Our amended and restated bylaws establish an advance notice procedure for stockholder proposals to be brought before an annual stockholders meeting, including proposed nominations of persons for election to our board of directors. At an annual stockholders meeting, stockholders may only consider proposals or nominations specified in

the notice of meeting or otherwise properly brought before the meeting by our board of directors. Stockholders may also consider a proposal or nomination by a person who was a stockholder of record on the record date for the meeting, who is entitled to vote at the meeting and who has given to the Secretary of the Company timely

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written notice, in proper form, of his or her intention to bring that business before the annual stockholders meeting. The amended and restated bylaws do not give our board of directors the power to approve or disapprove stockholder nominations of candidates or proposals regarding other business to be conducted at a special or annual meeting of the stockholders. However our amended and restated bylaws may have the effect of precluding the conduct of business at a meeting if the proper procedures are not followed.

Our amended and restated bylaws also provide that only our board of directors, the chairperson of the board or the President may call a special meeting of stockholders. Because our stockholders do not have the right to call a special meeting, a stockholder could not force stockholder consideration of a proposal over the opposition of our board of directors by calling a special meeting of stockholders prior to such time as a majority of our board of directors, the chairperson of the board or the President believed the matter should be considered or until the next annual meeting provided that the requestor met the notice requirements. The restriction on the ability of stockholders to call a special meeting means that a proposal to replace the board also could be delayed until the next annual stockholders meeting.

These provisions may have the effect of deterring hostile takeovers or delaying changes in our control or management. These provisions are intended to enhance the likelihood of continued stability in the composition of our board of directors and its policies and to discourage certain types of transactions that may involve an actual or threatened acquisition of us. These provisions are designed to reduce our vulnerability to an unsolicited acquisition proposal. The provisions also are intended to discourage certain tactics that may be used in proxy fights. However, such provisions could have the effect of discouraging others from making tender offers for our shares and, as a consequence, they also may inhibit fluctuations in the market price of our stock that could result from actual or rumored takeover attempts.

Anti-Takeover Effects of Provisions of Delaware Law

We are subject to Section 203 of the DGCL, which prohibits a Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years after the date that such stockholder became an interested stockholder, with the following exceptions:

before such date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder; upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction began, excluding for purposes of determining the voting stock outstanding (but not the outstanding voting stock owned by the interested stockholder) those shares owned (i) by persons who are directors and also officers and (ii) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or on or after such date, the business combination is approved by the board of directors and authorized at an annual or special meeting of the stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder.

In general, Section 203 defines business combination to include the following:

any merger or consolidation involving the corporation and the interested stockholder;

any sale, transfer, pledge or other disposition of 10% or more of the assets of the corporation involving the interested stockholder;

subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;

any transaction involving the corporation that has the effect of increasing the proportionate share of the stock or any class or series of the corporation beneficially owned by the interested stockholder; or

the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits by or through the corporation.

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In general, Section 203 defines an "interested stockholder" as an entity or person who, together with the person's affiliates and associates, beneficially owns, or within three years prior to the time of determination of interested stockholder status did own, 15% or more of the outstanding voting stock of the corporation.

Limitation of Liability and Indemnification

We have adopted provisions in our certificate of incorporation that limit or eliminate the liability of our directors for monetary damages for breach of their fiduciary duties, except for liability that cannot be eliminated under the DGCL. Section 102(b)(7) of the DGCL, provides that a corporation may, in its original certificate of incorporation or an amendment thereto, eliminate or limit the personal liability of a director for violations of the director's fiduciary duty, except (1) for any breach of the director's duty of loyalty to the corporation or its stockholders, (2) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (3) pursuant to Section 174 of the DGCL, which provides for liability of directors for unlawful payments of dividends or unlawful stock purchases or redemptions or (4) for any transaction from which a director derived an improper personal benefit. Accordingly, our directors will not be personally liable for monetary damages for breach of their fiduciary duties as directors, except with respect to the following:

any breach of their duty of loyalty to us or our stockholders;

acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law; unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the DGCL; or

any transaction from which the director derived an improper personal benefit.

This limitation of liability does not apply to liabilities arising under the federal securities laws and does not affect the availability of equitable remedies such as injunctive relief or rescission. If Delaware law is amended to authorize the further elimination or limiting of director liability, then the liability of our directors will be eliminated or limited to the fullest extent permitted by Delaware law as so amended.

Section 145 of the DGCL provides that a corporation may indemnify any person, including an officer or director, who is, or is threatened to be made, party to any threatened, pending or completed legal action, suit or proceeding, whether civil, criminal, administrative or investigative, other than an action by or in the right of such corporation, by reason of the fact that such person was an officer, director, employee or agent of such corporation or is or was serving at the request of such corporation as an officer, director, employee or agent of another corporation or enterprise. The indemnity may include expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding, provided such officer, director, employee or agent acted in good faith and in a manner he reasonably believed to be in, or not opposed to, the corporation's best interest and, for criminal proceedings, had no reasonable cause to believe that his conduct was unlawful. A Delaware corporation may indemnify any officer or director in an action by or in the right of the corporation under the same conditions, except that no indemnification is permitted without judicial approval if the officer or director is adjudged to be liable to the corporation. Where an officer or director is successful on the merits or otherwise in the defense of any action referred to above, the corporation must indemnify him against the expenses that such officer or director actually and reasonably incurred.

Our certificate of incorporation and our bylaws provide that we shall indemnify our directors and executive officers and shall indemnify our other officers and employees and other agents to the fullest extent permitted by law. We believe that indemnification under our bylaws covers at least negligence and gross negligence on the part of

indemnified parties. Our bylaws also permit us to secure insurance on behalf of any officer, director, employee or other agent for any liability arising out of his or her actions in this capacity, regardless of whether our bylaws would permit indemnification.

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In addition, we have entered and intend to continue to enter into separate indemnification agreements with certain of our directors and executive officers that are, in some cases, broader than the specific indemnification provisions provided by Delaware law and our charter documents, and may provide additional procedural protection. These agreements will require us, among other things, to:

indemnify officers and directors against certain liabilities that may arise because of their status as officers and directors:

advance expenses, as incurred, to officers and directors in connection with a legal proceeding subject to limited exceptions; and

cover officers and directors under any general or directors' and officers' liability insurance policy maintained by us.

We believe that these provisions and agreements are necessary to attract and retain qualified persons as directors and executive officers. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling our company pursuant to the foregoing provisions, the opinion of the Securities and Exchange Commission is that such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

In addition, we maintain standard policies of insurance under which coverage is provided to our directors and officers against loss arising from claims made by reason of breach of duty or other wrongful act, and to us with respect to payments which may be made by us to such directors and officers pursuant to the above indemnification provisions or otherwise as a matter of law. We also make available standard life insurance and accidental death and disability insurance policies to our employees.

DESCRIPTION OF DEBT SECURITIES

The following description, together with the additional information we include in any applicable prospectus supplements, summarizes the material terms and provisions of the debt securities that we may offer under this prospectus. While the terms we have summarized below will apply generally to any future debt securities we may offer under this prospectus, we will describe the particular terms of any debt securities that we may offer in more detail in the applicable prospectus supplement. The terms of any debt securities we offer under a prospectus supplement may differ from the terms we describe below.

The following summary description, together with the additional information we may include in any applicable prospectus supplements does not purport to be complete and is subject to, and qualified in its entirety by reference to, all the provisions of the indenture, any indenture supplement and the terms of the debt securities, including, in each case, the definitions therein of certain terms. We will file each of these documents, as applicable, with the SEC and incorporate them by reference as an exhibit to the registration statement of which this prospectus is a part on or before the time we issue a series of debt securities. See "Where You Can Find More Information" and "Incorporation of Certain Documents by Reference" below for information on how to obtain a copy of a document when it is filed. The specific terms of the debt securities as described in a prospectus supplement, information incorporated by reference, or free writing prospectus will supplement and, if applicable, may modify or replace the general terms described in this section.

The indentures will be qualified under the Trust Indenture Act of 1939, as amended. We use the term "debenture trustee" to refer to either the trustee under the senior indenture or the trustee under the subordinated indenture, as

applicable.

The following summaries of material provisions of the senior debt securities, the subordinated debt securities and the indentures are subject to, and qualified in their entirety by reference to, all the provisions of the indenture applicable to a particular series of debt securities. We urge you to read the applicable prospectus supplements related to the debt securities that we sell under this prospectus, as well as the indenture that would contain the terms of the debt securities. Except as we may otherwise indicate, the terms of the senior indenture and the subordinated indenture would be identical.

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General

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the title: the principal amount being offered, and if a series, the total amount authorized and the total amount outstanding; any limit on the amount that may be issued; whether or not we will issue the series of debt securities in global form, the terms and who the depositary will be; the maturity date; whether and under what circumstances, if any, we will pay additional amounts on any debt securities held by a person who is not a U.S. person for tax purposes, and whether we can redeem the debt securities if we have to pay such additional amounts;

the annual interest rate, which may be fixed or variable, or the method for determining the rate and the date interest will begin to accrue, the dates interest will be payable and the regular record dates for

whether or not the debt securities will be secured or unsecured, and the terms of any secured debt;

the terms of the subordination of any series of subordinated debt;

interest payment dates or the method for determining such dates;

the place where payments will be payable;

restrictions on transfer, sale or other assignment, if any;

our right, if any, to defer payment of interest and the maximum length of any such deferral period;

whether the indenture will restrict our ability and/or the ability of our subsidiaries to:

the date, if any, after which, and the price at which, we may, at our option, redeem the series of debt securities pursuant to any optional or provisional redemption provisions and the terms of those redemptions provisions;

the date, if any, on which, and the price at which we are obligated, pursuant to any mandatory sinking fund or analogous fund provisions or otherwise, to redeem, or at the holder's option to purchase, the series of debt securities and the currency or currency unit in which the debt securities are payable;

incur additional indebtedness;
issue additional securities;
create liens;
pay dividends and make distributions in respect of our capital stock and the capital stock of our subsidiaries;
redeem capital stock;
place restrictions on our subsidiaries' ability to pay dividends, make distributions or transfer assets;
make investments or other restricted payments;
sell or otherwise dispose of assets;
enter into sale-leaseback transactions;
engage in transactions with stockholders and affiliates;
issue or sell stock of our subsidiaries; or

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effect a consolidation or merger;

whether the indenture will require us to maintain any interest coverage, fixed charge, cash flow-based, asset-based or other financial ratios;

a discussion of any material or special U.S. federal income tax considerations applicable to the debt securities:

information describing any book-entry features;

provisions for a sinking fund purchase or other analogous fund, if any;

whether the debt securities are to be offered at a price such that they will be deemed to be offered at an "original issue discount" as defined in paragraph (a) of Section 1273 of the Internal Revenue Code;

the denominations in which we will issue the series of debt securities, if other than denominations of \$1,000 and any integral multiple thereof; and

any other specific terms, preferences, rights or limitations of, or restrictions on, the debt securities, including any additional events of default or covenants provided with respect to the debt securities, and any terms that may be required by us or advisable under applicable laws or regulations.

Conversion or Exchange Rights

We will set forth in the prospectus supplement the terms on which a series of debt securities may be convertible into or exchangeable for our common stock or our other securities. We will include provisions as to whether conversion or exchange is mandatory, at the option of the holder or at our option. We may include provisions pursuant to which the number of shares of our common stock or our other securities that the holders of the series of debt securities receive would be subject to adjustment.

Consolidation, Merger or Sale

Any successor to or acquiror of the indentures must assume all of our obligations under the indentures or the debt securities, as appropriate. If the debt securities are convertible for our other securities or securities of other entities, the person with whom we consolidate or merge or to whom we sell all of our property must make provisions for the conversion of the debt securities into securities that the holders of the debt securities would have received if they had converted the debt securities before the consolidation, merger or sale.

Events of Default Under the Indenture

Unless otherwise provided in any applicable prospectus supplement, documents incorporated by reference or free writing prospectus, the following will be events of default under the indenture with respect to each series of debt securities issued thereunder:

- (a) if we fail to pay interest when due and payable and our failure continues for 30 days, or within such other time period as may be specified in the applicable indenture, and the time for payment has not been extended or deferred;
- (b) if we fail to pay the principal, premium or sinking fund payment, if any, when due and payable and the time for payment has not been extended or delayed;
- (c) if specified events of bankruptcy, insolvency or reorganization occur; and
- (d) if we fail to observe or perform any other covenant contained in the debt securities or the indentures, other than a covenant specifically relating to another series of debt securities, and our failure continues for 60 days, or within such other time period as may be specified in the applicable indenture, after we receive notice from the debenture trustee or holders of at least a majority in principal amount of the

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outstanding debt securities of an affected series, or such other percentage as may be specified in the applicable indenture, in aggregate principal amount of the outstanding debt securities of the applicable series. If an event of default with respect to debt securities of any series occurs and is continuing, other than an event of default specified in the last bullet point above, the debenture trustee or the holders of at least 25%, or such other percentage as may be specified in the applicable indenture, in aggregate principal amount of the outstanding debt securities of that series, by notice to us in writing, and to the debenture trustee if notice is given by such holders, may declare the unpaid principal of, premium, if any, and accrued interest, if any, due and payable immediately. If an event of default specified in the last bullet point above occurs with respect to us, the principal amount of and accrued interest, if any, of each issue of debt securities then outstanding shall be due and payable without any notice or other action on the part of the debenture trustee or any holder.

The holders of a majority in principal amount of the outstanding debt securities of an affected series may waive any default or event of default with respect to the series and its consequences, except defaults or events of default regarding payment of principal, premium, if any, or interest, unless we have cured the default or event of default in accordance with the indenture. Any waiver shall cure the default or event of default.

Subject to the terms of the indentures, if an event of default under an indenture shall occur and be continuing, the debenture trustee will be under no obligation to exercise any of its rights or powers under such indenture at the request or direction of any of the holders of the applicable series of debt securities, unless such holders have offered the debenture trustee reasonable indemnity. 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 debenture trustee, or exercising any trust or power conferred on the debenture trustee, with respect to the debt securities of that series, provided that:

the direction so given by the holder is not in conflict with any law or the applicable indenture; and

subject to its duties under the Trust Indenture Act of 1939, the debenture trustee need not take any action that might involve it in personal liability or might be unduly prejudicial to the holders not involved in the proceeding.

A holder of the debt securities of any series will only have the right to institute a proceeding under the indentures or to appoint a receiver or trustee, or to seek other remedies if:

the holder has given written notice to the debenture trustee of a continuing event of default with respect to that series;

the holders of at least 25% (or, in the case of a default of the type described under subsection (d), above, a majority in principal amount of the outstanding debt securities of an affected series), or such other percentage as may be specified in the applicable indenture, in aggregate principal amount of the outstanding debt securities of that series have made written request, and such holders have offered reasonable indemnity to the debenture trustee to institute the proceeding as trustee; and

the debenture trustee does not institute the proceeding, and does not receive from the holders of a majority in aggregate principal amount of the outstanding debt securities of that series other conflicting directions within 60 days, or within such other time period as may be specified in the applicable indenture, after the notice, request and offer of indemnity.

These limitations do not apply to a suit instituted by a holder of debt securities if we default in the payment of the principal, premium, if any, or interest on, the debt securities.

We will periodically file statements with the debenture trustee regarding our compliance with specified covenants in the indentures.

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Modification of Indenture; Waiver

We and the debenture trustee may change an indenture without the consent of any holders with respect to specific matters:

to evidence the succession of another corporation to us and the assumption by any such successor of our covenants in such indenture and in the debt securities issued thereunder:

to add to our covenants or to surrender any right or power conferred on us pursuant to the indenture;

to establish the form and terms of debt securities issued thereunder;

to evidence and provide for a successor trustee under such indenture with respect to one or more series of debt securities issued thereunder or to provide for or facilitate the administration of the trusts under such indenture by more than one trustee;

to cure any ambiguity, to correct or supplement any provision in the indenture that may be defective or inconsistent with any other provision of the indenture or to make any other provisions with respect to matters or questions arising under such indenture; provided that no such action adversely affects the interests of the holders of any series of debt securities issued thereunder in any material respect;

to add to, delete from or revise the conditions, limitations and restrictions on the authorized amount, terms or purposes of issue, authentication and delivery of securities under the indenture;

to add any additional events of default with respect to all or any series of debt securities;

to supplement any of the provisions of the indenture as may be necessary to permit or facilitate the defeasance and discharge of any series of debt securities, provided that such action does not adversely affect the interests of any holder of an outstanding debt security of such series or any other security in any material respect;

to make provisions with respect to the conversion or exchange rights of holders of debt securities of any series;

to pledge to the trustee as security for the debt securities of any series any property or assets;

to add guarantees in respect of the debt securities of one or more series;

to change or eliminate any of the provisions of the indenture, provided that any such change or elimination becomes effective only when there is no security of any series outstanding created prior to the execution of such supplemental indenture which is entitled to the benefit of such provision;

to provide for certificated securities in addition to or in place of global securities;

to qualify such indenture under the Trust Indenture Act of 1939, as amended;

with respect to the debt securities of any series, to conform the text of the indenture or the debt securities of such series to any provision of the description thereof in our offering memorandum or prospectus relating to the initial offering of such debt securities, to the extent that such provision, in our good faith judgment, was intended to be a verbatim recitation of a provision of the indenture or such securities; or

to make any other change that does not adversely affect the rights of holders of any series of debt securities issued thereunder in any material respect.

In addition, under the indentures, the rights of holders of a series of debt securities may be changed by us and the debenture trustee with the written consent of the holders of at least a majority in aggregate principal amount of

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the outstanding debt securities of each series that is affected. However, we and the debenture trustee may only make the following changes with the consent of each holder of any outstanding debt securities affected:

extending the fixed maturity of the series of debt securities; or

reducing the principal amount, reducing the rate of or extending the time of payment of interest, or reducing any premium payable upon the redemption of any debt securities; or

reducing the percentage of debt securities, the holders of which are required to consent to any amendment, supplement, modification or waiver; or

make any change that adversely affects the right to convert or exchange any security into or for common stock or other securities, cash or other property in accordance with the terms of the applicable debt security.

Each indenture provides that we can elect to be discharged from our obligations with respect to one or more series of debt securities, except for specified obligations, including obligations to:

register the transfer or exchange of debt securities of the series;

replace stolen, lost or mutilated debt securities of the series;

maintain paying agencies;

hold monies for payment in trust;

recover excess money held by the debenture trustee;

compensate and indemnify the debenture trustee; and

appoint any successor trustee.

In order to exercise our rights to be discharged, we must deposit with the debenture trustee money or government obligations sufficient to pay all the principal of, any premium, if any, and interest on, the debt securities of the series on the dates payments are due.

Form, Exchange and Transfer

We will issue the debt securities of each series only in fully registered form without coupons and, unless we otherwise specify in the applicable prospectus supplement, in denominations of \$1,000 and any integral multiple thereof. The indentures provide that we may issue debt securities of a series in temporary or permanent global form and as book-entry securities that will be deposited with, or on behalf of, the American Stock Transfer & Trust Company, LLC or another depositary named by us and identified in a prospectus supplement with respect to that series. See "Legal Ownership of Securities" for a further description of the terms relating to any book-entry securities.

At the option of the holder, subject to the terms of the indentures and the limitations applicable to global securities described in the applicable prospectus supplement, the holder of the debt securities of any series can exchange the debt securities for other debt securities of the same series, in any authorized denomination and of like tenor and aggregate principal amount.

Subject to the terms of the indentures and the limitations applicable to global securities set forth in the applicable prospectus supplement, holders of the debt securities may present the debt securities for exchange or for registration of transfer, duly endorsed or with the form of transfer endorsed thereon duly executed if so required by us or the security registrar, at the office of the security registrar or at the office of any transfer agent designated by us for this purpose. Unless otherwise provided in the debt securities that the holder presents for transfer or exchange, we will make no service charge for any registration of transfer or exchange, but we may require payment of any taxes or other governmental charges.

We will name in the applicable prospectus supplement the security registrar, and any transfer agent in addition to the security registrar, that we initially designate for any debt securities. We may at any time designate additional

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transfer agents or rescind the designation of any transfer agent or approve a change in the office through which any transfer agent acts, except that we will be required to maintain a transfer agent in each place of payment for the debt securities of each series.

If we elect to redeem the debt securities of any series, we will not be required to:

issue, register the transfer of, or exchange any debt securities of that series during a period beginning at the opening of business 15 days, or within such other time period as may be specified in the applicable indenture, before the day of mailing of a notice of redemption of any debt securities that may be selected for redemption and ending at the close of business on the day of the mailing; or

register the transfer of or exchange any debt securities so selected for redemption, in whole or in part, except the unredeemed portion of any debt securities we are redeeming in part.

Repurchases on the Open Market

We, or an affiliate of ours, may at any time or from time to time repurchase any debt security in the open market or otherwise. Such debt securities may, at our option (or our affiliate's option), be held, resold or surrendered to the trustee for cancellation.

Information Concerning the Debenture Trustee

The debenture trustee, other than during the occurrence and continuance of an event of default under an indenture, undertakes to perform only those duties as are specifically set forth in the applicable indenture. Upon an event of default under an indenture, the debenture trustee must use the same degree of care as a prudent person would exercise or use in the conduct of his or her own affairs. Subject to this provision, the debenture trustee is under no obligation to exercise any of the powers given him or her by the indentures at the request of any holder of debt securities unless he or she is offered reasonable security and indemnity against the costs, expenses and liabilities that he or she might incur.

Payment and Paying Agents

Unless we otherwise indicate in the applicable prospectus supplement, we will make payment of the interest on any debt securities on any interest payment date to the person in whose name the debt securities, or one or more predecessor securities, are registered at the close of business on the regular record date for the interest.

We will pay principal of and any premium and interest on the debt securities of a particular series at the office of the paying agents designated by us, except that unless we otherwise indicate in the applicable prospectus supplement, we will make interest payments by check that we will mail to the holder or by wire transfer to certain holders. Unless we otherwise indicate in a prospectus supplement, we will designate the corporate trust office of the debenture trustee in the City of New York as our sole paying agent for payments with respect to debt securities of each series. We will name in the applicable prospectus supplement any other paying agents that we initially designate for the debt securities of a particular series. We will maintain a paying agent in each place of payment for the debt securities of a particular series.

All money we pay to a paying agent or the debenture trustee for the payment of the principal of or any premium or interest on any debt securities that remains unclaimed at the end of two years after such principal, premium or interest has become due and payable will be repaid to us, and the holder of the debt security thereafter may look only to us for payment thereof.

Governing Law

The indentures and the debt securities will be governed by and construed in accordance with the laws of the State of New York, except to the extent that the Trust Indenture Act of 1939 is applicable.

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Subordination of Subordinated Debt Securities

The subordinated debt securities will be unsecured and will be subordinate and junior in priority of payment to certain of our other indebtedness to the extent described in a prospectus supplement. The subordinated indenture does not limit the amount of subordinated debt securities that we may issue. It also does not limit us from issuing any other secured or unsecured debt.

DESCRIPTION OF WARRANTS

The following description, together with the additional information we may include in any applicable prospectus supplements, summarizes the material terms and provisions of the warrants that we may offer under this prospectus and the related warrant agreements and warrant certificates. While the terms summarized below will apply generally to any warrants that we may offer, we will describe the particular terms of any series of warrants in more detail in the applicable prospectus supplement. The terms of any warrants offered under that prospectus supplement may differ from the terms described below.

The following summary description, together with the additional information we may include in any applicable prospectus supplements does not purport to be complete and is subject to, and qualified in its entirety by reference to, the form of warrant agreement and form of warrant certificate relating to each series of warrants that will be incorporated by reference as an exhibit to the registration statement that includes this prospectus or as an exhibit to a current report on Form 8-K if we offer warrants.

General

We will describe in the applicable prospectus supplement the terms of the series of warrants, including:

the offering price and aggregate number of warrants offered;

the currency for which the warrants may be purchased;

if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security or each principal amount of such security;

if applicable, the date on and after which the warrants and the related securities will be separately transferable;

in the case of warrants to purchase common stock, the number of shares of common stock purchasable upon the exercise of one warrant and the price at which these shares may be purchased upon such exercise;

the effect of any merger, consolidation, sale or other disposition of our business on the warrant agreements and the warrants;

the terms of any rights to redeem or call the warrants;

any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants;

the dates on which the right to exercise the warrants will commence and expire;

the manner in which the warrant agreements and warrants may be modified;

federal income tax consequences of holding or exercising the warrants;

the terms of the securities issuable upon exercise of the warrants; and

any other specific terms, preferences, rights or limitations of or restrictions on the warrants.

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Before exercising their warrants, holders of warrants will not have any of the rights of holders of the securities purchasable upon such exercise, including the right to receive dividends, if any, or, payments upon our liquidation, dissolution or winding up or to exercise voting rights, if any.

Exercise of Warrants

Each warrant will entitle the holder to purchase the securities that we specify in the applicable prospectus supplement at the exercise price that we describe in the applicable prospectus supplement. Unless we otherwise specify in the applicable prospectus supplement, holders of the warrants may exercise the warrants at any time up to 5:00 P.M. Eastern Time on the expiration date that we set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

Holders of the warrants may exercise the warrants by delivering the warrant certificate representing the warrants to be exercised together with specified information, and paying the required amount to the warrant agent in immediately available funds, as provided in the applicable prospectus supplement. We will set forth on the reverse side of the warrant certificate and in the applicable prospectus supplement the information that the holder of the warrant will be required to deliver to the warrant agent.

Upon receipt of the required payment and the warrant certificate properly completed and duly executed at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus supplement, we will issue and deliver the securities purchasable upon such exercise. If fewer than all of the warrants represented by the warrant certificate are exercised, then we will issue a new warrant certificate for the remaining amount of warrants. If we so indicate in the applicable prospectus supplement, holders of the warrants may surrender securities as all or part of the exercise price for warrants.

Enforceability of Rights by Holders of Warrants

Any warrant agent will act solely as our agent under the applicable warrant agreement and will not assume any obligation or relationship of agency or trust with any holder of any warrant. A single bank or trust company may act as warrant agent for more than one issue of warrants. A warrant agent will have no duty or responsibility in case of any default by us under the applicable warrant agreement or warrant, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a warrant may, without the consent of the related warrant agent or the holder of any other warrant, enforce by appropriate legal action its right to exercise, and receive the securities purchasable upon exercise of, its warrants.

DESCRIPTION OF RIGHTS

We may issue rights to purchase our debt securities, common stock, preferred stock or other securities. These rights may be issued independently or together with any other security offered hereby and may or may not be transferable by the stockholder receiving the rights in such offering. In connection with any offering of such 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.

Each series of rights will be issued under a separate rights agreement which we will enter into with a bank or trust company, as rights agent, all which will be set forth in the relevant offering material. The rights agent will act solely as our agent in connection with the certificates relating to the rights and will not assume any obligation or relationship of agency or trust with any holders of rights certificates or beneficial owners of rights.

The following description is a summary of selected provisions relating to rights that we may offer. The summary is not complete. When rights are offered in the future, a prospectus supplement, information incorporated by reference or a free writing prospectus, as applicable, will explain the particular terms of those securities and the

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extent to which these general provisions may apply. The specific terms of the rights as described in a prospectus supplement, information incorporated by reference, or free writing prospectus will supplement and, if applicable, may modify or replace the general terms described in this section.

This summary and any description of rights in the applicable prospectus supplement, information incorporated by reference or free writing prospectus is subject to and is qualified in its entirety by reference to the rights agreement and the rights certificates. We will file each of these documents, as applicable, with the SEC and incorporate them by reference as an exhibit to the registration statement of which this prospectus is a part on or before the time we issue a series of rights. See "Where You Can Find More Information" and "Incorporation of Certain Documents by Reference" below for information on how to obtain a copy of a document when it is filed.

The applicable prospectus supplement, information incorporated by reference or free writing prospectus may describe:

in the case of a distribution of rights to our stockholders, the date of determining the stockholders entitled to the rights distribution;

in the case of a distribution of rights to our stockholders, the number of rights issued or to be issued to each stockholder:

the exercise price payable for the underlying debt securities, common stock, preferred stock or other securities upon the exercise of the rights;

the number and terms of the underlying debt securities, common stock, preferred stock or other securities which may be purchased per each right;

the extent to which the rights are transferable;

the date on which the holder's ability to exercise the rights shall commence, and the date on which the rights shall expire;

the extent to which the rights may include an over-subscription privilege with respect to unsubscribed securities:

if applicable, the material terms of any standby underwriting or purchase arrangement entered into by us in connection with the offering of such rights; and

any other terms of the rights, including, but not limited to, the terms, procedures, conditions and limitations relating to the exchange and exercise of the rights.

The provisions described in this section, as well as those described under "Description of Debt Securities" and "Description of Capital Stock" above, will apply, as applicable, to any rights we offer.

DESCRIPTION OF UNITS

The following description, together with the additional information we may include in any applicable prospectus supplements, summarizes the material terms and provisions of the units that we may offer under this prospectus. While the terms we have summarized below will apply generally to any units that we may offer under this prospectus, we will describe the particular terms of any series of units in more detail in the applicable prospectus supplement. The terms of any units offered under a prospectus supplement may differ from the terms described below.

The following summary description, together with the additional information we may include in any applicable prospectus supplements does not purport to be complete and is subject to, and qualified in its entirety by reference to, the form of unit agreement and form of unit certificate relating to each series of units that will be incorporated by reference as an exhibit to the registration statement that includes this prospectus or as an exhibit to a current report on

Form 8-K if we offer units.

General

We may issue units comprised of common stock, preferred stock, debt securities, debt obligations of third parties, including U.S. treasury securities, warrants or any combination thereof. Each unit will be issued so that the

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holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued 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.

We will describe in the applicable prospectus supplement the terms of the series of units, including:

the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;

any provisions of the governing unit agreement that differ from those described below; and

any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units.

The provisions described in this section, as well as those described under "Description of Capital Stock," "Description of Debt Securities" and "Description of Warrants" will apply to each unit and to any common stock, preferred stock, debt security or warrants included in each unit, respectively.

Issuance in Series

We may issue units in such amounts and in such numerous distinct series as we determine.

Enforceability of Rights by Holders of Units

Any unit agent will act solely as our agent under the applicable unit agreement and will not assume any obligation or relationship of agency or trust with any holder of any unit. A single bank or trust company may act as unit agent for more than one series of units. A unit agent will have no duty or responsibility in case of any default by us under the applicable unit agreement or unit, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a unit may, without the consent of the related unit agent or the holder of any other unit, enforce by appropriate legal action its rights as holder under any security included in the unit.

Title

We, any unit agents and any of their agents may treat the registered holder of any unit certificate as an absolute owner of the units evidenced by that certificate for any purpose and as the person entitled to exercise the rights attaching to the units so requested, despite any notice to the contrary. See "Legal Ownership of Securities" below.

LEGAL OWNERSHIP OF SECURITIES

We can issue securities in registered form or in the form of one or more global securities. We describe global securities in greater detail below. We refer to those persons who have securities registered in their own names on the books that we or any applicable trustee, depositary or warrant agent maintain for this purpose as the "holders" of those securities. These persons are the legal holders of the securities. We refer to those persons who, indirectly through

others, own beneficial interests in securities that are not registered in their own names, as "indirect holders" of those securities. As we discuss below, indirect holders are not legal holders, and investors in securities issued in book-entry form or in street name will be indirect holders.

Book-Entry Holders

We may issue securities in book-entry form only, as we will specify in the applicable prospectus supplement. This means securities may be represented by one or more global securities registered in the name of a financial

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institution that holds them as depositary on behalf of other financial institutions that participate in the depositary's book-entry system. These participating institutions, which are referred to as participants, in turn, hold beneficial interests in the securities on behalf of themselves or their customers.

Only the person in whose name a security is registered is recognized as the holder of that security. Securities issued in global form will be registered in the name of the depositary or its participants. Consequently, for securities issued in global form, we will recognize only the depositary as the holder of the securities, and we will make all payments on the securities to the depositary. The depositary passes along the payments it receives to its participants, which in turn pass the payments along to their customers who are the beneficial owners. The depositary and its participants do so under agreements they have made with one another or with their customers; they are not obligated to do so under the terms of the securities.

As a result, investors in a book-entry security will not own securities directly. Instead, they will own beneficial interests in a global security, through a bank, broker or other financial institution that participates in the depositary's book-entry system or holds an interest through a participant. As long as the securities are issued in global form, investors will be indirect holders, and not holders, of the securities.

Street Name Holders

We may terminate a global security or issue securities in non-global form. In these cases, investors may choose to hold their securities in their own names or in "street name." Securities held by an investor in street name would be registered in the name of a bank, broker or other financial institution that the investor chooses, and the investor would hold only a beneficial interest in those securities through an account he or she maintains at that institution.

For securities held in street name, we will recognize only the intermediary banks, brokers and other financial institutions in whose names the securities are registered as the holders of those securities, and we will make all payments on those securities to them. These institutions pass along the payments they receive to their customers who are the beneficial owners, but only because they agree to do so in their customer agreements or because they are legally required to do so. Investors who hold securities in street name will be indirect holders, not holders, of those securities.

Legal Holders

Our obligations, as well as the obligations of any applicable trustee and of any third parties employed by us or a trustee, run only to the legal holders of the securities. We do not have obligations to investors who hold beneficial interests in global securities, in street name or by any other indirect means. This will be the case whether an investor chooses to be an indirect holder of a security or has no choice because we are issuing the securities only in global form.

For example, once we make a payment or give a notice to the holder, we have no further responsibility for the payment or notice even if that holder is required, under agreements with depositary participants or customers or by law, to pass it along to the indirect holders but does not do so. Similarly, we may want to obtain the approval of the holders to amend an indenture, to relieve us of the consequences of a default or of our obligation to comply with a particular provision of the indenture or for other purposes. In such an event, we would seek approval only from the holders, and not the indirect holders, of the securities. Whether and how the holders contact the indirect holders is up to the holders.

Special Considerations for Indirect Holders

If you hold securities through a bank, broker or other financial institution, either in book-entry form or in street name, you should check with your own institution to find out:

how it handles securities payments and notices;

whether it imposes fees or charges;

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how it would handle a request for the holders' consent, if ever required;

whether and how you can instruct it to send you securities registered in your own name so you can be a holder, if that is permitted in the future;

how it would exercise rights under the securities if there were a default or other event triggering the need for holders to act to protect their interests; and

if the securities are in book-entry form, how the depositary's rules and procedures will affect these matters.

Global Securities

A global security is a security that represents one or any other number of individual securities held by a depositary. Generally, all securities represented by the same global securities will have the same terms.

Each security issued in book-entry form will be represented by a global security that we deposit with and register in the name of a financial institution or its nominee that we select. The financial institution that we select for this purpose is called the depositary. Unless we specify otherwise in the applicable prospectus supplement, American Stock Transfer and Trust Company, LLC, New York, New York, will be the depositary for all securities issued in book-entry form.

A global security may not be transferred to or registered in the name of anyone other than the depositary, its nominee or a successor depositary, unless special termination situations arise. We describe those situations below under "Special Situations When a Global Security Will Be Terminated." As a result of these arrangements, the depositary, or its nominee, will be the sole registered owner and holder of all securities represented by a global security, and investors will be permitted to own only beneficial interests in a global security. Beneficial interests must be held by means of an account with a broker, bank or other financial institution that in turn has an account with the depositary or with another institution that does. Thus, an investor whose security is represented by a global security will not be a holder of the security, but only an indirect holder of a beneficial interest in the global security.

If the prospectus supplement for a particular security indicates that the security will be issued in global form only, then the security will be represented by a global security at all times unless and until the global security is terminated. If termination occurs, we may issue the securities through another book-entry clearing system or decide that the securities may no longer be held through any book-entry clearing system.

Special Considerations for Global Securities

As an indirect holder, an investor's rights relating to a global security will be governed by the account rules of the investor's financial institution and of the depositary, as well as general laws relating to securities transfers. We do not recognize an indirect holder as a holder of securities and instead deal only with the depositary that holds the global security.

If securities are issued only in the form of a global security, an investor should be aware of the following:

An investor cannot cause the securities to be registered in his or her name, and cannot obtain non-global certificates for his or her interest in the securities, except in the special situations we describe below;

An investor will be an indirect holder and must look to his or her own bank or broker for payments on the securities and protection of his or her legal rights relating to the securities, as we describe above;

An investor may not be able to sell interests in the securities to some insurance companies and to other institutions that are required by law to own their securities in non-book-entry form;

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An investor may not be able to pledge his or her interest in a global security in circumstances where certificates representing the securities must be delivered to the lender or other beneficiary of the pledge in order for the pledge to be effective;

The depositary's policies, which may change from time to time, will govern payments, transfers, exchanges and other matters relating to an investor's interest in a global security. We and any applicable trustee have no responsibility for any aspect of the depositary's actions or for its records of ownership interests in a global security. We and the trustee also do not supervise the depositary in any way;

The depositary may, and we understand that AST will, require that those who purchase and sell interests in a global security within its book-entry system use immediately available funds, and your broker or bank may require you to do so as well; and

Financial institutions that participate in the depositary's book-entry system, and through which an investor holds its interest in a global security, may also have their own policies affecting payments, notices and other matters relating to the securities.

There may be more than one financial intermediary in the chain of ownership for an investor. We do not monitor and are not responsible for the actions of any of those intermediaries.

Special Situations When a Global Security Will Be Terminated

In a few special situations described below, the global security will terminate and interests in it will be exchanged for physical certificates representing those interests. After that exchange, the choice of whether to hold securities directly or in street name will be up to the investor. Investors must consult their own banks or brokers to find out how to have their interests in securities transferred to their own name, so that they will be direct holders. We have described the rights of holders and street name investors above.

The global security will terminate when the following special situations occur:

if the depositary notifies us that it is unwilling, unable or no longer qualified to continue as depositary for that global security and we do not appoint another institution to act as depositary within 90 days;

if we notify any applicable trustee that we wish to terminate that global security; or

if an event of default has occurred with regard to securities represented by that global security and has not been cured or waived.

The prospectus supplement may also list additional situations for terminating a global security that would apply only to the particular series of securities covered by the prospectus supplement. When a global security terminates, the depositary, and not we or any applicable trustee, is responsible for deciding the names of the institutions that will be

the initial direct holders.

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PLAN OF DISTRIBUTION

We may sell the securities being offered by this prospectus separately or together through any of the following methods:

to or through one or more underwriters or dealers in a public offering and sale by them;	
directly to investors;	
through agents;	
through block trades in which the broker or dealer engaged to handle the block trade will attempt sell the securities as agent, but may position and resell a portion of the block as principal to facilit the transaction;	
through any combination if these methods of sale; or	
in any manner, as provided in the applicable prospectus supplement.	

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We may distribute securities from time to time in one or more transactions:

at a fixed price or prices, which may be changed;

at market prices prevailing at the times of sale;

at prices related to such prevailing market prices; or

at negotiated prices.

We will describe the method of distribution of the securities in the applicable prospectus supplement. We may also determine the price or other terms of the securities offered under this prospectus by use of an electronic auction. We will describe how any auction will determine the price or any other terms, how potential investors may participate in the auction and the nature of the obligations of the underwriter, dealer or agent in the applicable prospectus supplement.

Unless otherwise specified in the applicable prospectus supplement, each class or series of securities will be a new issue with no established trading market, other than our common stock, which is traded on the Nasdaq Capital Market. We may elect to list any other class or series of securities on any exchange, but we are not obligated to do so. It is possible that one or more underwriters may make a market in a class or series of securities, but the underwriters will not be obligated to do so and may discontinue any market making at any time without notice. We cannot give any assurance as to the liquidity of the trading market for any of the securities.

Underwriters, dealers or agents may receive compensation in the form of discounts, concessions or commissions from us or our purchasers (as their agents in connection with the sale of the securities). In addition, underwriters may sell the securities to or through dealers, and those dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters and/or commissions from the purchasers for whom they act as agent. These underwriters, dealers or agents may be considered to be underwriters under the Securities Act. As a result, discounts, commissions, or profits on resale received by the underwriters, dealers or agents may be treated as underwriting discounts and commissions. The prospectus supplement will identify any such underwriter, dealer or agent, and describe any compensation received by them from us. Only underwriters named in the prospectus supplement are underwriters of the securities offered by the prospectus supplement. Any initial public offering price and any discounts or concessions allowed or reallowed or paid to dealers may be changed from time to time.

We may sell the securities directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of securities and we will describe any commissions we will pay the agent in the prospectus supplement. Unless the prospectus supplement states otherwise, our agent will act on a best-efforts basis for the period of its appointment.

We may authorize agents or underwriters to solicit offers by certain types of institutional investors to purchase securities from us at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. We will describe the conditions to these contracts and the commissions we must pay for solicitation of these contracts in the prospectus supplement.

Underwriters, dealers and agents may be entitled to indemnification by us against certain civil liabilities, including liabilities under the Securities Act, or to contribution with respect to payments made by the underwriters, dealers or agents, under agreements between us and the underwriters, dealers and agents.

Any person participating in the distribution of common stock registered under the registration statement that includes this prospectus will be subject to applicable provisions of the Exchange Act, and the applicable SEC rules and regulations, including, among others, Regulation M, which may limit the timing of purchases and sales of any of our common stock by any such person. Furthermore, Regulation M may restrict the ability of any person engaged in the distribution of our common stock to engage in market-making activities with respect to our

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common stock. These restrictions may affect the marketability of our common stock and the ability of any person or entity to engage in market-making activities with respect to our common stock.

We may grant underwriters who participate in the distribution of the securities an option to purchase additional securities to cover overallotments, if any, in connection with the distribution. Any underwriter may engage in overallotment, stabilizing transactions, short-covering transactions and penalty bids in accordance with Regulation M that stabilize, maintain or otherwise affect the price of the offered securities. Overallotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum. Short covering transactions involve purchases of the common stock in the open market after the distribution is completed to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the common stock originally sold by the dealer is purchased in a covering transaction to cover short positions. Those activities may cause the price of the common stock to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of the activities at any time. If any such activities will occur, they will be described in the applicable prospectus supplement.

Underwriters or agents and their associates may be customers of, engage in transactions with or perform services for us in the ordinary course of business and any such relationships will be described in the applicable prospectus supplement.

If more than 10% of the net proceeds of any offering of securities made under this prospectus will be received by the Financial Industry Regulatory Authority ("FINRA") members participating in the offering or affiliates or associated persons of such FINRA members, the offering will be conducted in accordance with FINRA Conduct Rule 5110(h).

To the extent required, this prospectus may be amended or supplemented from time to time to describe a specific plan of distribution.

LEGAL MATTERS

The validity of the securities being offered by this prospectus will be passed upon by Morrison & Foerster LLP of Palo Alto, CA. Additional legal matters may be passed upon for us or any underwriters, dealers or agents, by counsel that we will name in an applicable prospectus supplement.

EXPERTS

The consolidated financial statements of Marrone Bio Innovations, Inc. appearing in Marrone Bio Innovations, Inc.'s Annual Report (Form 10-K) for the year ended December 31, 2015, have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon (which contains an explanatory paragraph describing conditions that raise substantial doubt about the Company's ability to continue as a going concern as described in Note 1 to the consolidated financial statements), included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We are a reporting company and file annual, quarterly and current reports, proxy statements and other information with the Securities and Exchange Commission, or the SEC. You may read and copy these reports, proxy statements and other information at the SEC's public reference rooms at 100 F Street, N.E., Room 1580, Washington, D.C. 20549.

You can request copies of these documents by writing to the SEC and paying a fee for the copying cost. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the public reference rooms. Our SEC filings are also available at the SEC's website at www.sec.gov and our website at www.durect.com. We have not incorporated by reference into this prospectus the information contained on our

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website and you should not consider it to be part of this prospectus. In addition, you can read and copy our SEC filings at the office of the National Association of Securities Dealers, Inc. at 1735 K Street, Washington, D.C. 20006.

We have filed a registration statement on Form S-3 with the SEC relating to the securities covered by this prospectus. This prospectus is a part of the registration statement and does not contain all of the information in the registration statement. You may review a copy of the registration statement at the SEC's public reference room in Washington, D.C., as well as through the SEC's Internet site at www.sec.gov.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" the information we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus. In addition, information we file with the SEC in the future will automatically update and supersede information contained in this prospectus and any accompanying prospectus supplement.

This prospectus incorporates by reference the documents set forth below that we have previously filed with the SEC:

our Annual Report on Form 10-K for the year ended December 31, 2015 filed with the SEC on March 30, 2016;

our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2016, June 30, 2016 and September 30, 2016 and filed with the SEC on May 16, 2016, August 15, 2016 and November 14, 2016, respectively; and

our Current Reports on Form 8-K filed with the SEC on January 5, 2016, January 13, 2016, February 24, 2016, March 24, 2016, April 12, 2016, April 15, 2016, May 6, 2016, May 31, 2016, June 2, 2016, June 23, 2016, July 12, 2016 and October 4, 2016.

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

We will provide to you at no cost a copy of any and all of the information incorporated by reference into the registration statement of which this prospectus is a part. You may make a request for copies of this information in writing or by telephone. Requests should be directed to:

Marrone Bio Innovations, Inc.

1540 Drew Avenue

Davis, California 95618

Attn: Pamela G. Marrone, Ph.D., President and Chief Executive Officer

(530) 750-2800

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Shares of Common Stock

PROSPECTUS SUPPLEMENT



National Securities Corporation

, 2018