

PROSPECTUS SUPPLEMENT

(To Prospectus dated September 7, 2016)



**16,666,668 Shares of Common Stock
Warrants to purchase up to 16,666,668 shares of common stock**

Pursuant to this prospectus supplement and the accompanying prospectus, we are offering 16,666,668 shares of our common stock, par value \$0.001 per share, (the “Common Stock”), together with two series of warrants to purchase an aggregate of 16,666,668 shares of our Common Stock (the “Warrants”). This prospectus supplement also relates to the shares of Common Stock issuable upon exercise of the two series of Warrants, which we refer to as the Series 1 Warrants and the Series 2 Warrants. A Series 1 Warrant to purchase one-half of a share of our Common Stock will be issued for every one share sold in this offering, and a Series 2 Warrant to purchase one-half of a share of our Common Stock will be issued for every one share sold in this offering. The shares of Common Stock and accompanying Warrants are immediately separable and will be issued separately, but will be purchased together in this offering.

Each Series 1 Warrant will have an exercise price of \$0.75 per share of Common Stock, is immediately exercisable, and will expire on the earlier of (1) the eighteen month anniversary of the date of issuance and (2) twenty one trading days following our release of top-line data related to our Phase 2 double blind, placebo controlled clinical trial of AG013, which we expect to occur in early 2020. Each Series 2 Warrant will have an exercise price of \$0.90 per share of Common Stock, is immediately exercisable and will expire five years following the date of issuance.

Our common stock is listed on the NYSE American under the symbol “OGEN.” The last reported sale price of our common stock on the NYSE American on March 18, 2019 was \$0.96 per share. We have applied to list the shares being sold in this offering on the NYSE American. There can be no assurances that the NYSE American will grant the application. There is no established public trading market for the warrants, and we do not expect a market to develop. In addition, we do not intend to list the warrants on the NYSE American, any other national securities exchange or any other nationally recognized trading system.

Investing in our securities involves a high degree of risk. Before buying any securities, you should carefully read the discussion of material risks of investing in our common stock under the heading “[Risk Factors](#)” beginning on page S-11 of this prospectus supplement and the documents incorporated by reference herein and the accompanying prospectus.

Neither the Securities and Exchange Commission nor any other regulatory body has approved or disapproved of these securities or determined if this prospectus supplement or the prospectus to which it relates is truthful or complete. Any representation to the contrary is a criminal offense.

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| | Per Share and Accompanying Warrants | Total |
|--|--|--------------|
| Public offering price ⁽¹⁾ | \$ 0.7500 | \$12,500,001 |
| Underwriting discounts and commissions ⁽²⁾⁽³⁾ | \$ 0.0563 | \$ 937,500 |
| Proceeds, before expenses, to us ⁽⁴⁾ | \$ 0.6938 | \$11,562,501 |

- (1) The public offering price and underwriting discount corresponds to (i) a public offering price per share of common stock of \$0.6845, (ii) a public offering price per Series 1 Warrant of \$0.00925, and (iii) a public offering price per Series 2 Warrant of \$0.00925.
- (2) In addition, we have agreed to reimburse the underwriter for certain of its expenses. See “Underwriting” for additional information.
- (3) We have granted a 30-day option to the underwriter to purchase up to 2,500,000 additional shares of common stock and/or Series 1 Warrants to purchase up to 1,250,000 shares of common stock, and Series 2 Warrants to purchase up to 1,250,000 shares of common stock and (up to 15% of the number of shares of common stock and warrants sold in the primary offering).
- (4) Excludes the proceeds, if any, from the cash exercise of the warrants issued pursuant to this offering.

We have granted the underwriter an option for a period of 30 days from the date of this prospectus supplement to purchase up to 2,500,000 additional shares of common stock from us and/or Series 1 Warrants to purchase up to 1,250,000 shares of our common stock and Series 2 Warrants to purchase up to 1,250,000 shares of our common stock at the public offering price of \$0.74 per share of our common stock and \$0.01 per warrant for each Series 1 Warrant and Series 2 Warrant, less underwriting discounts and commissions. If the underwriter exercises this option in full, the total underwriting discounts and commissions will be \$1,078,125 and total proceeds, before expenses, to us will be \$13,296,876.

We expect that delivery of the shares of our Common Stock being offered pursuant to this prospectus supplement and the accompanying prospectus will be made to purchasers through the facilities of The Depository Trust Company on or about March 25, 2019.

H.C. Wainwright & Co.

The date of this prospectus supplement is March 21, 2019

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ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying prospectus form part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or the “SEC,” using a “shelf” registration process. This document contains two parts. The first part consists of this prospectus supplement, which provides you with specific information about this offering. The second part, the accompanying prospectus, provides more general information, some of which may not apply to this offering. Generally, when we refer only to the “prospectus,” we are referring to both parts combined. This prospectus supplement, and the information incorporated herein by reference, may add, update or change information in the accompanying prospectus. You should read the entire prospectus supplement as well as the accompanying prospectus and the documents incorporated by reference herein that are described under the headings “Where You Can Find More Information” and “Incorporation of Certain Documents by Reference.” If there is any inconsistency between the information in this prospectus supplement and the accompanying prospectus, you should rely on the information in this prospectus supplement.

You should rely only on the information contained in this prospectus supplement and the accompanying prospectus, including the information incorporated by reference into this prospectus supplement and the accompanying prospectus, and any free writing prospectus that we have authorized for use in connection with this offering. We have not authorized anyone to provide you with information that is different.

The information contained in this prospectus supplement and the accompanying prospectus, including the information incorporated by reference into this prospectus supplement and the accompanying prospectus, and any free writing prospectus that we have authorized for use in connection with this offering is accurate only as of the respective dates thereof, regardless of the time of delivery of this prospectus supplement, the accompanying prospectus or free writing prospectus, if any, or of any sale of our securities. It is important for you to read and consider all information contained in this prospectus supplement and the accompanying prospectus, including the information incorporated by reference into this prospectus supplement and the accompanying prospectus, and any free writing prospectus that we have authorized for use in connection with this offering in making your investment decision. You should also read and consider the information in the documents to which we have referred you in the sections entitled “Where You Can Find More Information” and “Incorporation of Certain Documents by Reference” in this prospectus supplement.

We are offering to sell, and seeking offers to buy, our securities only in jurisdictions where offers and sales are permitted. The distribution of this prospectus supplement and the accompanying prospectus and the offering of securities in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus supplement and the accompanying prospectus must inform themselves about, and observe any restrictions relating to, the offering of our securities and the distribution of this prospectus supplement and the accompanying prospectus outside the United States. This prospectus supplement and the accompanying prospectus do not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities offered by this prospectus supplement and the accompanying prospectus by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

The industry and market data and other statistical information contained in this prospectus supplement, the accompanying prospectus and the documents we incorporate by reference are based on management’s estimates, independent publications, government publications, reports by market research firms or other published independent sources, and, in each case, are believed by management to be reasonable estimates. Although we believe these sources are reliable, we have not independently verified the information. None of the independent industry publications used in this prospectus supplement, the accompanying prospectus or the documents we incorporate by reference were prepared on our or our affiliates’ behalf and none of the sources cited by us consented to the inclusion of any data from its reports, nor have we sought their consent.

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 agreements, 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.

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References to, “we,” “us,” “our company,” “Oragenics,” the “Company,” and similar terms refer to Oragenics, Inc., a Florida corporation, unless the context otherwise requires.

All share amounts in this prospectus supplement have been adjusted to reflect a 1-for-10 reverse stock split that was effected on January 19, 2018.

CAUTIONARY STATEMENT CONCERNING FORWARD-LOOKING STATEMENTS

Certain statements in this prospectus supplement, the accompanying prospectus and documents incorporated by reference herein that look forward in time or express management’s expectations or beliefs with respect to the occurrence of future events are forward-looking statements as defined under Section 21E of the Securities Exchange Act of 1934, as amended, and are subject to the safe harbor created therein for forward-looking statements. Such statements include, but are not limited to, statements concerning our anticipated operating results, research and development, clinical trials, regulatory proceedings, and financial resources, and can be identified by use of words such as, for example, “anticipate,” “estimate,” “expect,” “project,” “intend,” “plan,” “believe” and “would,” “should,” “could” or “may.” All statements, other than statements of historical facts, included herein that address activities, events, or developments that the Company expects or anticipates will or may occur in the future, are forward-looking statements.

We caution investors that actual results or business conditions may differ materially from those projected or suggested in forward-looking statements as a result of various factors including, but not limited to, the following risks and the other factors described in the Risk Factors section of our annual report on Form 10-K and in our quarterly reports on Form 10-Q incorporated by reference. These factors include:

- We have incurred significant operating losses since our inception and cannot assure you that we will generate revenues or achieve profitability.
- We will need to raise additional capital to fully implement our business strategy and we may not be able to do so.
- Our inability to achieve success with our lead lantibiotic and oral mucositis candidates.
- The success, timing and expenses of our collaboration efforts with Intrexon and expected clinical trials.
- Our inability to achieve success in our clinical trials of our oral mucositis product candidates.
- Our inability to achieve success in our identification of lantibiotic homologs or the manufacture and nonclinical testing of our lantibiotic product candidates.
- We are subject to extensive and costly regulation by the Food and Drug Administration, which must approve our product candidates in development and could restrict or delay the future commercialization of certain of our product candidates.
- We may be unable to achieve commercial viability and acceptance of our proposed product candidates.
- Our ability to successfully complete preclinical and clinical development of, and obtain regulatory approval of our product candidates and commercialize any approved products on our expected timeframes or at all.
- The safety, efficacy and benefits of our product candidates.
- The content and timing of submissions to and decisions made by the FDA and other regulatory agencies.
- The effects of government regulation and regulatory developments, and our ability and the ability of the third parties with whom we engage to comply with applicable regulatory requirements.
- The capacities and performance of our suppliers and manufacturers and other third parties over whom we have limited control.

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- Our ability to maintain our listing on the NYSE American.
- We may be unable to improve upon, protect and/or enforce our intellectual property.
- We may be unable to enter into strategic collaborations or partnerships for the development, commercialization, manufacturing and distribution of our proposed product candidates or maintain strategic collaborations or partnerships.
- We may be adversely impacted by any significant broad-based financial crises and its impact on consumers, retailers and equity and debt markets as well as our inability to obtain required additional funding to conduct our business.
- We are subject to significant competition.
- As a public company, we must implement additional and expensive finance and accounting systems, procedures and controls as we grow our business and organization to satisfy reporting requirements, which add to our costs and require additional management time and resources.

We cannot assure you that we have identified all the factors that create uncertainties. Moreover, new risks emerge from time to time and it is not possible for our management to predict all risks, nor can we assess the impact of all risks on our business or the extent to which any risk, or combination of risks, may cause actual results to differ from those contained in any forward-looking statements. Except as required by law, we undertake no obligation to publicly release the result of any revision of these forward-looking statements to reflect events or circumstances after the date of this prospectus or the respective dates of documents incorporated by reference herein or therein that include forward-looking statements.

This prospectus supplement also contains estimates, projections and other information concerning our industry, the market and our business. Information that is based on estimates, forecasts, projections or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances reflected in this information. We obtained the industry, market and competitive position data in this prospectus from our own internal estimates and research as well as from industry and general publications and research surveys and studies conducted by third parties.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights selected information contained elsewhere or incorporated by reference in this prospectus supplement and the accompanying prospectus. This summary may not contain all of the information that may be important to you. You should read this prospectus supplement, the accompanying prospectus, the information incorporated by reference in each, and any related free writing prospectus before making an investment decision. You should pay special attention to the “Risk Factors” section beginning on page S-11 of this prospectus supplement and “Risk Factors” set forth in our most recent annual report on Form 10-K for the year ended December 31, 2017, in our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2018, June 30, 2018, and September 30, 2018 respectively and in the other documents which are incorporated by reference in this prospectus supplement and the accompanying prospectus in their entirety to determine whether an investment in our common stock is appropriate for you.

Overview

We are focused on becoming a leader in developing novel antibiotics against infectious disease and on developing effective treatments for oral mucositis.

Our Oral Mucositis Product Candidate-Clinical

In June of 2015, we entered into a worldwide Exclusive Channel Collaboration Agreement (“Oral Mucositis ECC”) with Intrexon Corporation (“Intrexon”) and Intrexon Actobiotics NV, a wholly-owned subsidiary of Intrexon, pursuant to which we obtained certain exclusive rights to AG013 as a potential treatment of oral mucositis, or OM for cancer patients, which we intend to continue to develop. AG013, is an oral rinsing solution designed to deliver human Trefoil Factor 1 (hTFF1) to protect and regenerate damaged mucosal lining of the oral cavity.

OM results in a painful inflammation and mucosal ulceration in the lining of the oral cavity, throat and esophagus and is one of the most commonly reported adverse events associated with cancer chemotherapy. Approximately 770,000 patients annually in the US are at an increased risk of developing OM according to cancer statistics provided by the Center for Disease Control (CDC) in 2017. OM has a negative effect on patient well-being and if severe, negatively affects adherence to a patient’s cancer treatment regimen. At present, we are not aware of any drug that is approved to prevent the condition broadly and current therapies are primarily palliative in nature, only addressing symptom relief but not treating the underlying causes of the condition.

In a Phase 1b clinical trial in 25 cancer patients with OM, AG013 was safe and well tolerated. Data published in the journal Cancer showed a 35% reduction of the duration of ulcerative OM in the AG013-treated patients versus the placebo-treated patients. Furthermore, close to 30% of the patients treated with AG013 were full responders while all placebo-treated patients developed ulcerative OM. Additionally, in a Phase 1 pharmacokinetic (PK) study in 10 healthy volunteers, AG013 bacteria adhered to the buccal mucosa and actively secrete protein locally, resulting in homogeneous exposure of the entire mucosal surface up to 24 hours after administration of the rinse. During the first quarter of 2016, we conducted a confirmatory animal study on AG013. AG013 has been granted Orphan Drug status in the European Union. In November of 2016, the United States Food and Drug Administration (the “FDA”) granted Fast Track designation for AG013, and we believe it may be eligible for Biologic License Application exclusivity as well.

We have developed a Phase 2 protocol for AG013 with the FDA under the fast track designation. The study is a double blind, placebo controlled, evaluation of daily AG013, administered three times a day, oral rinse for the duration of the cancer treatment. The study is expected to enroll between 160-180 evaluable patients receiving chemoradiation for treatment of head and neck cancer for 7 to 9 weeks. The primary endpoint is a reduction, compared to the placebo, in the number of days of severe oral mucositis. In addition, a number of secondary endpoints are being evaluated. In August of 2016, we received feedback from the FDA in response to our Type C meeting and the pursuit of a Phase 2 trial on AG013 for the treatment of oral mucositis in head and neck cancer patients. We filed an Investigational New Drug (“IND”) update in March 2017 and we initiated the Phase 2 study with AG013 in the United States in 2017 with the expectation that we would expand the trial into Europe. To date, we have successfully expanded the clinical trial into Belgium, United Kingdom and Germany. The Phase 2 trial is a double-blind, placebo-controlled, 2-arm, multi-center trial in which approximately 200 patients will be randomized in a 1:1 ratio to receive either a placebo or AG013. The clinical trial will be conducted at approximately 55 clinical sites across the United States and Europe. The purpose of the Phase 2 study (NCT03234465) is to evaluate the

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efficacy, safety and tolerability of topically administered AG013 compared to placebo for reducing the incidence and severity of OM in patients undergoing traditional chemoradiation for the treatment of head and neck cancer. Key efficacy measures include collection of data regarding the duration, time to development, and overall incidence of OM (World Health Organization scale used) during the active treatment phase, beginning from the start of chemoradiation therapy until 2 weeks following its completion.

We completed enrollment of the interim analysis cohort, which included 24 randomized patients in our Phase 2 clinical trial of AG013 for the treatment of OM. Nineteen of those patients were included in the unblinded safety evaluation, of which 10 received AG013. We recently announced positive results from our interim safety analysis, which was requested by the FDA on patients from our Phase 2 clinical trial of AG013 for the treatment of OM. The study provided information that, we believe, likely indicates that the overall incidence of severe OM is less than would be anticipated in the general population.

Safety was evaluated on the basis of treatment-emergent adverse events, vital signs, weight, physical examinations, clinical laboratory assessments and the presence of AG013 in whole blood. Tolerability measures (taste, consistency and smell) were collected from the patient diaries. In addition, the reasons for study treatment discontinuation were also summarized. Following review of the data by an independent Data Safety Monitoring Board (DSMB), it was concluded that the clinical trial can proceed with no changes to the study. The data analysis indicated that the distribution of adverse events were similar between AG013 and placebo. The serious adverse events reported were consistent with those commonly reported in a head and neck cancer population receiving traditional chemoradiation therapy treatments and included fevers, neutropenia, anemia, nausea and vomiting, infections and oral (mouth and throat) pain. There were no reports of bacteremia or sepsis. Of patients that discontinued participation in the clinical study, 4 patients experienced adverse events, including 3 patients who developed nausea and vomiting, 2 patients that were non-compliant with the study procedures and 3 patients developed severe OM.

Given the clearance by the DSMB, we are proceeding with patient enrollment for our AG013 clinical trial, including the addition of clinical sites in the U.S. and Europe. We anticipate reporting top-line results of the completed Phase 2 trial in early 2020.

Our Antibiotic Product Candidate-Preclinical

Members of our scientific team discovered that a certain bacterial strain produces MU1140, a molecule belonging to the novel class of antibiotics known as lantibiotics. Lantibiotics, such as MU1140, are highly modified peptide antibiotics made by a small group of Gram positive bacterial species. Approximately 60 lantibiotics have been discovered, to date. We believe lantibiotics are generally recognized by the scientific community to be potent antibiotic agents.

In nonclinical testing, MU1140 has shown activity against all Gram positive bacteria against which it has been tested, including those responsible for a number of healthcare associated infections, or HAIs. A high percentage of hospital-acquired infections are caused by highly resistant bacteria such as methicillin-resistant *Staphylococcus aureus* (MRSA) or multidrug-resistant Gram-negative bacteria. We believe the need for novel antibiotics is increasing as a result of the growing resistance of target pathogens to existing FDA approved antibiotics on the market.

Lantibiotics have been difficult to investigate for their clinical usefulness as therapeutic agents in the treatment of infectious diseases due to a general inability to produce or synthesize sufficient quantities of pure amounts of these molecules. Traditional fermentation methods can only produce minute amounts of the lantibiotic.

In June 2012, we entered into the Lantibiotic Exclusive Channel Collaboration agreement (“Lantibiotic ECC”) with Intrexon for the development and commercialization of the native strain of MU1140 and related homologs using Intrexon’s advanced transgene and cell engineering platforms. Through our work with Intrexon, we have been able to produce a significant increase in the fermentation titer of MU1140 compared to standard fermentation methods and have discovered a new purification process for MU1140. Our work with Intrexon generated a substantial number of homologs of MU1140, and we are continuing our research and development and collaboration efforts with Intrexon to develop potential derivatives of the MU1140 molecule using genetically modified bacteria.

In our pre-clinical studies to support a potential IND filing with the FDA, we tested a total of six homologs of MU1140 for certain compound characteristics, including but not limited to: drug activity (based on minimum inhibitory concentration or “MIC”) equal or better than “standard of care” drugs against certain drug-resistant

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bacteria, safety, toxicity, stability, and manufacturability. An animal study specifically evaluated homolog efficacy in relation to survival, measurable amounts of *Clostridium difficile* (“*C. diff*”) colony forming units, and toxin levels. Three homologs demonstrated promising results with one homolog, OG253 achieving a 100% survival rate throughout the entire study in contrast to an approximately 30% survival rate for the vancomycin positive control.

Based on these early results, we selected a lead candidate, OG253, for which we had a pre IND meeting with the FDA in November of 2015 regarding the pursuit of an IND for OG253. Following additional research and development on second generation lantibiotics, in August of 2016, we opted to select a second generation lantibiotic, OG716, for treatment of *C. diff* as our new lead candidate. OG716 is a new, orally-active homolog, that has exhibited positive results in an animal model for potential treatment of *C. diff*. Generated from our MU1140 platform, this new lantibiotic showed promising efficacy in reducing clinically relevant *C. diff* infections as measured by increased animal survival and decreased relapse as well as reduced production of toxins A & B and *C. diff* spores when compared to a vancomycin positive control.

The timing of the filing of an IND regarding OG716 is subject to our having sufficient available capital given all of our anticipated needs and expected requirements in connection with our ongoing research and development initiatives. We currently expect the IND for a first-in-human clinical study of OG716 to be filed with the FDA based on our ability to complete the requisite preclinical studies, contingent on sufficient funding.

Other Product Candidates and Technologies.

In addition to our lantibiotics and oral mucositis product candidates, we also have other candidates and technologies in the oral care and weight loss areas. We do not intend to continue to develop these potential product candidates and technologies without partnering with a third party. We out-licensed the continued research and development of our weight loss product candidate in December 2013 to, LPThera LLC, and LPThera LLC continues to work to develop a product for commercial use. Our oral care product candidate SMaRT Replacement Therapy is positioned for out-licensing opportunities.

Recent Developments

Preliminary December 31, 2018 Financial Results. A brief summary of certain of our consolidated preliminary unaudited financial results for the fiscal year ended December 31, 2018 is set forth below. This summary is not meant to be a comprehensive statement of our consolidated financial results for this period. The following financial data for the fiscal year ended December 31, 2018 is preliminary and based upon our estimates, and actual results may differ from these estimates following the completion of our financial audit.

For the year ended December 31, 2018, our net cash used in operating activities is expected to be approximately \$9,079,817, as compared to \$6,363,853 for the year ended December 31, 2017. As of December 31, 2018, our cash and cash equivalents balance is expected to be approximately \$20,208,301 and the principal and interest outstanding under our credit facilities is expected to be approximately \$0.

You should read this data together with our financial statements and related notes incorporated by reference in this prospectus supplement, as well as “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in our Quarterly Report on Form 10-Q for the quarter ended September 30, 2018. The preliminary financial data included in this prospectus supplement has been prepared by, and is the responsibility of, our management. Mayer Hoffman McCann P.C. has not audited, reviewed, compiled or performed any procedures with respect to the accompanying preliminary financial data. Accordingly, Mayer Hoffman McCann P.C. does not express an opinion or any other form of assurance with respect thereto.

Clearance For Patient Enrollment In Europe. On October 17, 2018, we announced we had received clearance to enroll patients residing in Belgium from the Belgian Health Authority, The Federal Agency for Medicines and Health Product into our Phase 2 clinical trial of AG013. In addition, we announced on November 15, 2018 that we received approval to begin enrolling patients from the Medicines and Healthcare products Regulatory Agency (MHRA) in the United Kingdom and the Paul Erlich Institute in Germany. Enrolling patients outside of the United States provides an expansive patient base from which to draw for our trial of AG013, allowing us to more rapidly reach our goal of enrolling between 160-180 evaluable patients,

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Completed Underwritten Public Offering. On July 17, 2018, we announced the closing of an underwritten public offering of units for gross proceeds of approximately \$13.8 million, which includes the full exercise of the underwriter's over-allotment option to purchase additional shares and warrants, prior to deducting underwriting discounts and commissions and offering expenses payable by us (the "Public Offering"). The Public Offering was comprised of Class A Units, priced at a public offering price of \$1.00 per unit, with each unit consisting of one share of common stock and a seven-year warrant to purchase one share of common stock with an exercise price of \$1.00 per share (each, a "Warrant" and collectively, the "Warrants"), and Class B Units, priced at a public offering price of \$1.00 per unit, with each unit comprised of one share of series D preferred stock (the "Series D Preferred Stock"), which is convertible into one share of common stock, and a Warrant. The conversion price of the Series D Preferred Stock issued in the transaction as well as the exercise price of the Warrants are fixed and do not contain any variable pricing features or any price based anti-dilutive features. The Series D Preferred Stock issued in this transaction includes a beneficial ownership blocker but has no dividend rights (except to the extent that dividends are also paid on the common stock), liquidation preference or other preferences over common stock, and, with certain exceptions, has no voting rights. The securities comprising the units were immediately separable and have been issued separately. A total of 4,436,000 shares of common stock, 9,364,000 shares of Series D Preferred Stock convertible into 9,364,000 shares of common stock, and total warrants to purchase 13,800,000 shares of common stock were issued in the public offering inclusive of the underwriters exercise of their over-allotment option to purchase 1,800,000 shares of common stock and warrants to purchase 1,800,000 shares of common stock at the public offering price per share less the underwriting discounts and commissions. The net proceeds to the Company from the public offering, after deducting Underwriter fees and expenses and the Company's public offering expenses, and excluding the proceeds, if any, from the exercise of the Warrants issued in the public offering, was approximately \$12.4 million.

Full Conversion of Series D Preferred. 1,496,000 shares of Series D Preferred Stock issued in the Company's Public Offering were outstanding at September 30, 2018. As of October 3, 2018, all remaining shares of the Company's Series D Preferred stock have been voluntarily converted by the holders to the Company's common stock and no shares of Series D Preferred stock remain outstanding. The Company received no additional proceeds from the conversions of Series D Preferred by the holders thereof.

Warrant Exercises. In the Company's Public Offering, the Company issued 13,800,000 warrants to acquire the Company's common stock at an exercise price of \$1.00 per share (the "Public Offering Warrants"). As of November 13, 2018, 9,505,500 shares of Company common stock have been issued as a result of the voluntary exercise of such Public Offering Warrants by the holders thereof. The warrant exercises resulted in gross proceeds to the Company of \$9,505,500.

Amended our Articles of Incorporation On June 22, 2018, our shareholders approved an amendment to our Amended and Restated Articles of Incorporation to increase the number of authorized shares of our common stock from 45,000,000 shares to 200,000,000 and such amendment became effective on June 25, 2018. The purpose of the increase in the number of authorized shares of our common stock is to provide flexibility in connection with our future financing efforts.

Amended our 2012 Equity Incentive Plan. On June 22, 2018, our shareholders approved an amendment to our 2012 Equity Incentive Plan (the "Plan") to increase the number of authorized shares of our common stock from 750,000 shares to 2,250,000. The purpose of the increase in the number of authorized shares available under the Plan was to provide flexibility in connection with making awards, which is vital to our ability to attract and retain outstanding and highly skilled individuals in the extremely competitive labor markets in which we must compete.

We Reported Positive Interim Safety Analysis Results From our Phase 2 Clinical Trial of AG013 for Oral Mucositis. On May 30, 2018 we announced positive results from our interim safety analysis as requested by FDA on patients from its Phase 2 clinical trial of AG013 for the treatment of OM. Following review of the interim data by an independent Data Safety Monitoring Board (DSMB), it was concluded that the clinical trial can proceed with no changes to the study. The study also provided information that, we believe, likely indicates that the overall incidence of severe OM is less than would be anticipated in the general population. In addition, the DSMB concluded that the overall profile of adverse events were similar between AG013 and placebo and the serious adverse events reported were consistent with those commonly seen in a head and neck cancer population receiving traditional chemoradiation.

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Completed Registered Direct Offering and Private Placement. On April 6, 2018, we entered into a securities purchase agreement with certain investors pursuant to which we agreed to issue and sell, in a registered offering by the us directly to the investors, an aggregate of 900,000 shares of our common stock, par value \$0.001 per share, at an offering price of \$2.00 per share. In a concurrent private placement, we agreed to issue to the investors who participated in the registered offering, warrants exercisable for one share of common stock for each share purchased in the registered offering for an aggregate of warrants to purchase 900,000 shares of common stock at an exercise price of \$2.00 per share. Each warrant is exercisable beginning on the six-month anniversary of the date of its issuance and will expire five years from the date of issuance.

Consummated a Reverse Stock Split. On January 19, 2018 we effected a one for ten reverse stock split of our authorized and outstanding common stock, by filing Articles of Amendment to our Articles of Incorporation. As a result of the reverse stock split (i) proportionate adjustments have been made to the per share exercise price and/or the number of shares issuable upon the exercise or vesting of all stock options and warrants issued by us and outstanding immediately prior to the effective time, which resulted in a proportionate decrease in the number of shares of our common stock reserved for issuance upon exercise or vesting of such stock options and warrants, and, in the case of stock options and warrants, a proportionate increase in the exercise price of all such stock options and warrants; (ii) proportionate adjustments have been made to the conversion price applicable to outstanding shares of Series A and Series B Convertible Preferred Stock; (iii) the number of shares authorized for future grant under our equity incentive/compensation plans immediately prior to the effective time was also reduced proportionately; and (iv) the number of authorized shares of common stock was reduced from 450,000,000 shares to 45,000,000 shares. However, such authorized shares were subsequently increased by the amendment to our Article of Incorporation dated June 22, 2018 referenced above.

Corporate and Other Information

We were incorporated in November 1996 and commenced operations in 1999. We consummated our initial public offering in June 2003. We have devoted substantially all of our available resources to our discovery efforts comprising research and development, clinical trials for our product candidates, protection of our intellectual property and the general and administrative support of these operations. We have generated limited revenues from grants and from our former consumer ProBiora3 product business, and have principally funded our operations through the sale of debt and equity securities, including the exercise of warrants issued in connection with financing transactions. In June of 2016, we completed the sale of our consumer probiotics business to ProBiora Health, LLC and as a result, we will no longer generate revenue from sales of consumer probiotic products. Our net revenues were \$0 and \$464,048, for the years ended December 31, 2017 and 2016, respectively.

As of September 30, 2018, we had an accumulated deficit of \$108,617,988 and as of December 31, 2017 we had an accumulated deficit of \$101,400,797 and we have yet to achieve profitability. We incurred net losses of \$7,158,521 and \$5,270,792 for the nine months ended September 30, 2018 and 2017, respectively and we incurred net losses of \$6,731,525 and \$7,013,304 for the years ended December 31, 2017 and 2016, respectively. We expect to incur significant and increasing operating losses for the foreseeable future as we seek to advance our product candidates through nonclinical testing and clinical trials to ultimately obtain regulatory approval and eventual commercialization. We need to raise additional capital. Adequate additional funding may not be available to us on acceptable terms, or at all. We expect that research and development expenses will increase along with general and administrative costs, as we seek to grow and continue to operate our business. There can be no assurance that additional capital will be available to us on acceptable terms, if at all. The report of our independent registered public accounting firm with respect to our financial statements appearing in our Form 10-K contains an explanatory paragraph stating that our operating losses and negative cash flows from operations and our need to raise additional financing and/or financial support prior to July 2018 in order to continue to fund our operations, raise substantial doubt about our ability to continue as a going concern. We believe our working capital at September 30, 2018, will be sufficient to meet our business objectives, as presently structured, through the fourth quarter of 2019. As such, there is substantial doubt that we can continue as a going concern beyond that date.

Our executive office is located at, 4902 Eisenhower Boulevard, Suite 125 Tampa, Florida, 33634 and our research facilities are located at 13700 Progress Boulevard, Alachua, Florida 32615. Our telephone number is (813) 286-7900 and our website is <http://www.oragenics.com>. Information on, or that can be accessed through, our website is not part of this prospectus supplement or the accompanying prospectus and should not be relied on in connection with this offering.

THE OFFERING

The following summary contains basic information about our Common Stock and the offering and is not intended to be complete. It does not contain all the information that may be important to you. For a more complete understanding of our Common Stock, you should read the section of the accompanying prospectus entitled "Description of Capital Stock."

| | |
|--|---|
| Common stock offered by us: | 16,666,668 shares |
| Shares of Common Stock outstanding before this offering: | 29,445,635 shares (as more fully described in the notes following this table). |
| Shares of Common Stock outstanding immediately after this offering: | 46,112,303 shares |
| Warrants we are offering: | <p>We are offering two series of warrants to purchase shares of Common Stock. Each share of Common Stock is being sold together with a Series 1 Warrant to purchase one-half of a share of our Common Stock at an initial exercise price of \$0.75 per share of Common Stock, and a Series 2 Warrant to purchase one-half of a share of Common Stock at an initial exercise price of \$0.90 per share.</p> <p>Each Series 1 Warrant will have an exercise price of \$0.75 per share of Common Stock, is immediately exercisable, and will expire on the earlier of (1) the eighteen month anniversary of the date of issuance and (2) twenty one trading days following our release of top-line data related to our Phase 2 double blind, placebo controlled clinical trial of AG013, which we expect to occur in early 2020. Each Series 2 Warrant will have an exercise price of \$0.90 per share of Common Stock, is immediately exercisable and will expire five years following the date of issuance.</p> <p>The shares of Common Stock and accompanying Warrants are immediately separable and will be issued separately, but will be purchased together in this offering.</p> <p>This prospectus supplement also relates to the offering of the shares of Common Stock issuable upon exercise of the two series of warrants. The warrants and shares of Common Stock underlying the warrants have been registered under our registration statement on Form S-3 of which this prospectus supplement and the accompanying prospectus form a part. There is currently no market for the warrants and none is expected to develop after this offering. We do not intend to list the warrants on the NYSE American, any other national securities exchange or other nationally recognized trading system. See "Description of Securities We are Offering" for additional information.</p> |
| Underwriter's option to purchase additional shares and/or warrants: | 2,500,000 shares and/or Series 1 Warrants to purchase 1,250,000 shares and Series 2 Warrants to purchase 1,250,000 shares. |

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Insider Purchases

The underwriter has agreed to sell 75,000 shares of common stock (and the accompanying warrants) to Dr. Frederick Telling, a director and chairman of our board, and 50,000 shares of common stock (and the accompanying warrants) to Dr. Alan Joslyn, our Chief Executive Officer and President, at the public offering price set forth on the cover page of this prospectus.

Use of proceeds:

We estimate that our net proceeds from this offering will be approximately \$11,310,687 after deducting the underwriting discounts and commissions and estimated offering expenses payable by us and excluding any proceeds we may receive upon exercise of the warrants. We intend to use the net proceeds from this offering primarily to continue funding development of AG013, our ongoing Phase II clinical trial for the treatment of Oral Mucositis, our pre-clinical development of our lantibiotics program and for general corporate purposes, including research and development activities, capital expenditures and working capital.

See the section titled “Use of Proceeds” in this prospectus supplement.

Risk factors:

Investing in our securities involves a high degree of risk and purchasers of our securities may lose their entire investment. See “Risk Factors” below and in our most recent Annual Report on Form 10-K, which is incorporated by reference and the other information included elsewhere in this prospectus supplement and the accompanying prospectus for a discussion of factors you should carefully consider before deciding to invest in our securities.

Trading:

Our shares of Common Stock currently trade on NYSE American under the symbol “OGEN”.

The number of shares of our Common Stock shown above to be outstanding immediately before and after this offering is based on 29,445,635 shares outstanding as of March 19, 2019, and excludes, as of such date:

- 1,812,133 shares of our Common Stock subject to outstanding options having a weighted average exercise price of \$1.88 per share;
- 197,117 shares of our Common Stock reserved for future issuance pursuant to our existing Stock Incentive Plan;
- 7,371,925 shares of our Common Stock issuable upon exercise of warrants outstanding, having a weighted average exercise price of \$1.74 per share;
- 941,701 shares of our Common Stock issuable upon conversion of convertible Series A Preferred stock outstanding; and
- 1,320,002 shares of our Common Stock issuable upon conversion of convertible Series B Preferred stock outstanding.

Except as otherwise indicated, all information included or incorporated by reference in this prospectus supplement assumes the following:

- no exercise of the outstanding options and warrants described above or the two series of warrants offered hereby; and
- no exercise of the underwriter’s option to purchase additional shares and/or warrants.

RISK FACTORS

Before purchasing our common stock you should carefully consider the risk factors set forth below and under the heading “Risk Factors” included in our most recent Annual Report on Form 10-K, as revised or supplemented by our subsequent Quarterly Reports on Form 10-Q, each of which are on file with the SEC and are incorporated herein by reference, as well as all other information contained in this prospectus supplement and the accompanying prospectus and incorporated by reference and any free writing prospectus that we have authorized for use in connection with this offering. The risks and uncertainties described below and in our most recent Annual Report on Form 10-K, as revised or supplemented by our subsequent Quarterly Reports on Form 10-Q, are not the only risks and uncertainties we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business operations. If any of the risks described below or in our most recent Annual Report on Form 10-K, as revised or supplemented by our subsequent Quarterly Reports on Form 10-Q, actually occur, our business, financial condition and results of operations could suffer. As a result, the trading price of our stock could decline, perhaps significantly, and you could lose all or part of your investment. The risks discussed below and in our most recent Annual Report on Form 10-K, as revised or supplemented by our subsequent Quarterly Reports on Form 10-Q, also include forward-looking statements and our actual results may differ substantially from those discussed in these forward-looking statements. See the section entitled “Forward-Looking Information.”

Risks Related To Our Financial Condition and Need For Additional Capital

We have incurred significant losses since our inception and expect to continue to experience losses for the foreseeable future.

We have incurred significant net losses and negative cash flow in each year since our inception, including net losses of approximately \$7.2 million and \$5.3 million for the nine months ended September 30, 2018 and 2017, respectively and net losses of approximately \$6.7 million and \$7.0 million for the years ended December 31, 2017, and 2016, respectively. As of September 30, 2018, our accumulated deficit was approximately \$108.6 million. We have devoted a significant amount of our financial resources to research and development, including our nonclinical development activities and clinical trials. We expect that the costs associated with our exclusive channel partnerships with Intrexon in the area of lantibiotics (“Lantibiotics Program”) and with Intrexon’s subsidiary ActoBio Therapeutics, Inc. in the area of Oral Mucositis (“Oral Mucositis Program”) and the development and commercialization of our product candidates under the Lantibiotics Program (which includes MU1140 homologs) using Intrexon’s advanced transgene and cell engineering platforms will continue to increase the level of our overall expenses significantly going forward. As a result, we expect to continue to incur substantial net losses and negative cash flow for the foreseeable future. These losses and negative cash flows have had, and will continue to have, an adverse effect on our shareholders’ equity and working capital. Because of the numerous risks and uncertainties associated with product development and commercialization, we are unable to accurately predict the timing or amount of substantial expenses or when, or if, we will be able to generate the revenue necessary to achieve or maintain profitability.

We will need to raise additional capital in the future to complete the development and commercialization of our product candidates and operate our business.

Developing and commercializing biopharmaceutical products, including conducting nonclinical studies and clinical trials and establishing manufacturing capabilities, is expensive. We anticipate that our cash resources as of September 30, 2018 will be sufficient to fund our operations as presently structured through the fourth quarter of 2019. However, changes may occur that would consume our existing capital prior to that time, including the scope and progress of our efforts to develop and commercialize our product candidates. Our actual costs may ultimately vary from our current expectations, which could materially impact our use of capital and our forecast of the period of time through which our financial resources will be adequate to support our operations. Our current cash, cash equivalents and short-term investments are not sufficient to fully implement our business strategy and sustain our operations over a longer period of time. Accordingly, we will need to seek additional sources of financing and such additional financing may not be available on favorable terms, if at all. Until we can generate a sufficient amount of product revenue, if ever, we expect to finance future cash needs through public or private equity offerings, debt financings or

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corporate collaboration and licensing arrangements. If we do not succeed in raising additional funds on acceptable terms, we may be unable to complete existing nonclinical and planned clinical trials or obtain approval of our product candidates from the FDA and other regulatory authorities. We expect capital outlays and operating expenditures to increase over the next several years as we expand our infrastructure, and research and development activities. Specifically, we need to raise additional capital to, among other things:

- conduct phase 2 clinical trial on our AG013 product candidate;
- expand our clinical laboratory operations;
- fund our clinical validation study activities;
- expand our research and development activities; and
- finance our capital expenditures and general and administrative expenses.

Our present and future funding requirements will depend on many factors, including:

- the level of research and development investment required to develop our current and future product candidates;
- costs of filing, prosecuting, defending and enforcing patent claims and other intellectual property rights;
- our need or decision to acquire or license complementary technologies or acquire complementary businesses;
- changes in test development plans needed to address any difficulties in product candidate selection for commercialization;
- competing technological and market developments;
- our interaction and relationship with the FDA, or other, regulatory agencies; and
- changes in regulatory policies or laws that affect our operations.

Additional capital may not be available on satisfactory terms, or at all. Furthermore, if we raise additional funds by issuing equity securities, dilution to our existing stockholders could result. Any equity securities issued also may provide for rights, preferences or privileges senior to those of holders of our common stock. If we raise additional funds by issuing debt securities, these debt securities would have rights, preferences and privileges senior to those of holders of our common stock, and the terms of the debt securities issued could impose significant restrictions on our operations. If we raise additional funds through collaborations and licensing arrangements, we might be required to relinquish significant rights to our technologies or our products under development, or grant licenses on terms that are not favorable to us, which could lower the economic value of those programs to us. If adequate funds are not available, we may have to scale back our operations or limit our research and development activities, which may cause us to grow at a slower pace, or not at all, and our business could be adversely affected.

In addition, we could be forced to discontinue product development of one or more of our product candidates, and/or forego licensing attractive business opportunities.

Our auditor has expressed substantial doubt about our ability to continue as a going concern and absent additional financing we may be unable to remain a going concern.

In light of our recurring losses, accumulated deficit and negative cash flow as described in our notes to our audited financial statements, the report of our independent registered public accounting firm on our financial statements for the year ended December 31, 2017 contains an explanatory paragraph raising substantial doubt about our ability to continue as a going concern. Our financial statements do not include any adjustments that may be necessary in the event we are unable to continue as a going concern. If we are unable to establish to the satisfaction of our independent registered public accounting firm that the net proceeds from our financing efforts will be sufficient to allow for the removal of this going concern qualification, we may need to significantly modify our operational plans for us to continue as a going concern. We believe we can continue our current level of operations with the cash we have on hand without additional financing through the fourth quarter of 2019. Absent sufficient additional financing, we may be unable to remain a going concern.

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Risks Relating to this Offering

The market price of our common stock has been, and may continue to be volatile and fluctuate significantly, which could result in substantial losses for investors.

The trading price for our common stock has been, and we expect it to continue to be, volatile. The price at which our common stock trades depends upon a number of factors, including our historical and anticipated operating results, our financial situation, announcements by us or our competitors, our ability or inability to raise the additional capital we may need and the terms on which we raise it, and general market and economic conditions. Some of these factors are beyond our control. Broad market fluctuations may lower the market price of our common stock and affect the volume of trading in our stock, regardless of our financial condition, results of operations, business or prospects. After giving retroactive effect of the reverse stock split, the closing price of our common stock as reported on the NYSE American had a high price of \$8.50 and a low price of \$2.10 in the 52-week period ended December 31, 2017 and a high price of \$3.57 and a low price of \$0.38 in the 52-week period ended December 31, 2018. Among the factors that may cause the market price of our common stock to fluctuate are the risks described in this “Risk Factors” section and other factors, including:

- results of preclinical and clinical studies of our product candidates or those of our competitors;
- regulatory or legal developments in the U.S. and other countries, especially changes in laws and regulations applicable to our product candidates;
- actions taken by regulatory agencies with respect to our product candidates, clinical studies, manufacturing process or sales and marketing terms;
- introductions and announcements of new products by us or our competitors, and the timing of these introductions or announcements;
- announcements by us or our competitors of significant acquisitions or other strategic transactions or capital commitments;
- fluctuations in our quarterly operating results or the operating results of our competitors;
- variance in our financial performance from the expectations of investors;
- changes in the estimation of the future size and growth rate of our markets;
- changes in accounting principles or changes in interpretations of existing principles, which could affect our financial results;
- failure of our products to achieve or maintain market acceptance or commercial success;
- conditions and trends in the markets we serve;
- changes in general economic, industry and market conditions;
- changes in legislation or regulatory policies, practices or actions;
- the commencement or outcome of litigation involving our company, our general industry or both;
- recruitment or departure of key personnel;
- changes in our capital structure, such as future issuances of securities or the incurrence of additional debt;
- actual or expected sales of our common stock by our stockholders;

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- acquisitions and financings; and
- the trading volume of our common stock.

In addition, the stock markets, in general, NYSE American and the market for biotech companies in particular, may experience a loss of investor confidence. Such loss of investor confidence may result in extreme price and volume fluctuations in our common stock that are unrelated or disproportionate to the operating performance of our business, financial condition or results of operations. These broad market and industry factors may materially harm the market price of our common stock and expose us to securities class action litigation. Such litigation, even if unsuccessful, could be costly to defend and divert management's attention and resources, which could further materially harm our financial condition and results of operations.

The substantial number of shares of our common stock issuable upon exercise of the two series of warrants being offered in this offering could cause the price of our common stock to decline.

In this offering we are selling two series of warrants, including a Series 1 Warrant to purchase one-half of a share of our common stock and a Series 2 Warrant to purchase one-half of a share of our common stock. The two series of warrants issued will be exercisable for an aggregate of 16,666,668 shares of our common stock (assuming no exercise of the underwriters option to purchase additional warrants), or approximately 56.6% of our outstanding common stock as of March 19, 2019. This sale and any future sales of a substantial number of shares of our common stock in the public market, or the perception that such sales may occur, and the possible issuance of shares of our common stock upon exercise of the two series of warrants being offered could adversely affect the price of our common stock. We cannot predict the effect, if any, that market sales of those shares of common stock or the availability of those shares of common stock for sale will have on the market price of our common stock.

There is no public market for the warrants to purchase common stock being offered in this offering.

There is no established public trading market for the two series of warrants being offered in this offering, and we do not expect a market to develop. In addition, we do not intend to apply to list the warrants on the NYSE American, any other national securities exchange or other nationally recognized trading system, including the NYSE American. Without an active market, the liquidity of the warrants will be limited.

Holders of our warrants will have no rights as a common stockholder until such holders exercise their warrants and acquire our common stock.

Until holders of warrants acquire shares of our common stock upon exercise of the warrants, holders of warrants will have no rights with respect to the shares of our common stock underlying such warrants. Upon exercise of the warrants, the holders thereof will be entitled to exercise the rights of a common stockholder only as to matters for which the record date occurs after the exercise date.

The two series of warrants included in this offering may not have any value.

Each Series 1 Warrant has an exercise price of \$0.75 per share and will expire on the earlier of (1) the eighteen-month anniversary of the date of issuance and (2) twenty-one trading days following our release of top-line data related to our Phase 2 double blind, placebo controlled clinical trial of AG013, which we expect to occur in early 2020. Each Series 2 Warrant has an exercise price of \$0.90 per share and will expire five years following the date of issuance.

In the event our common stock price does not exceed the per share exercise price of the Series 1 Warrants or the Series 2 Warrants during the period when such warrants are exercisable, such warrants will not have any value.

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If you purchase shares of our common stock sold in this offering, you will experience immediate and substantial dilution in the net tangible book value of your shares. In addition, we may issue additional securities in the future, which may result in additional dilution to investors.

The offering price per share of common stock in this offering is more than the net tangible book value per share of our outstanding common stock. As a result, investors purchasing shares of common stock in this offering will pay a price per share that exceeds the value of our tangible assets after subtracting liabilities. Investors will incur immediate dilution of \$0.03 per share, based on the public offering price of \$0.75 per share and the net tangible book value as of September 30, 2018. For a more detailed discussion of the foregoing, see the section entitled “Dilution” below. To the extent outstanding stock options, warrants are exercised, or convertible preferred stock converted, there will be further dilution to new investors. In addition, to the extent we need to raise additional capital in the future and we issue additional equity or convertible debt securities, our then existing shareholders may experience dilution and the new securities may have rights senior to those of our common stock offered in this offering.

Our management team may invest or spend the proceeds of this offering in ways with which you may not agree or in ways which may not yield a significant return.

Our management will have broad discretion over the use of proceeds from this offering. We intend to use the net proceeds from this offering to fund our AG013 research and clinical trials for working capital and general corporate purposes. Our management will have considerable discretion in the application of the net proceeds, and you will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being used appropriately. The net proceeds may be used for corporate purposes that do not increase our operating results or enhance the value of our common stock.

Future sales of our common stock in the public market could cause our stock price to fall.

The market price of our common stock could decline as a result of sales of substantial amounts of our common stock in the public market, or the perception that these sales could occur. In addition, these factors could make it more difficult for us to raise funds through future offerings of common stock. We have recently issued a significant number of shares of common stock and the number of outstanding shares has increased from 2,738,283 shares as of December 31, 2012 to 29,445,635 as of March 19, 2019. As of March 19, 2019, there were 29,445,635 shares of our common stock outstanding. In addition, there were 16,017,113.941 shares of our Preferred stock outstanding which are convertible into 2,261,703 shares of our common stock and warrants to purchase an additional 7,371,925 shares of our common stock issuable upon exercise of warrants to investors. There were also 1,812,133 shares issuable upon exercise of options outstanding and an additional 197,117 shares available for option grants under our 2012 Equity Incentive Plan.

The issuance of shares of our common stock under our 2012 Equity Incentive Plan is covered by Form S-8 registration statements we filed with the Securities and Exchange Commission, or SEC, and upon exercise of the options, such shares may be resold into the market. We have also issued shares of common stock and warrants in connection with previous private placements. Such shares are available for resale as well as certain of the shares of common stock issuable upon exercise of the warrants. We have also issued shares of our common stock in the private placement and financing transaction, which are deemed to be “restricted securities,” as that term is defined in Rule 144 promulgated under the Securities Act of 1933, as amended, or Securities Act, and such shares may be resold pursuant to the provisions of Rule 144. For example, on June 30, 2016 we issued 9,045,679 restricted shares of our common stock to three accredited investors (Intrexon, the KFLP and our Chairman Dr. Telling) in a private placement. The resale of shares acquired from us in private transactions could cause our stock price to decline significantly. In addition, the conversion of outstanding shares of Series A and Series B convertible preferred stock issued in 2017 private placements into common stock and the subsequent sale of shares of common stock could also cause our stock price to decline significantly.

In addition, from time to time, certain of our shareholders may be eligible to sell all or some of their restricted shares of common stock by means of ordinary brokerage transactions in the open market pursuant to Rule 144, subject to certain limitations. In general, pursuant to Rule 144, after satisfying a six-month holding period: (i) affiliated shareholders, or shareholders whose shares are aggregated, may, under certain circumstances, sell within any three-month period a number of securities which does not exceed the greater of 1% of the then-outstanding shares of common stock or the average weekly trading volume of the class during the four calendar weeks prior to such sale and (ii) non-affiliated shareholders may sell without such limitations, in each case provided we are current in our public reporting obligations. Rule 144 also permits the sale of securities by non-affiliates that have satisfied a one-year holding period without any limitation or restriction.

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We are unable to estimate the number of shares that may be sold because this will depend on the market price for our common stock, the personal or business circumstances of sellers and other factors.

We cannot assure you that we will continue to be listed on the NYSE American.

Our common stock commenced trading on the NYSE American (formerly the NYSE MKT) on April 10, 2013, and we are subject to certain NYSE American continued listing requirements and standards. We may also incur costs that we have not previously incurred for expenses for compliance with the rules and requirements of the NYSE American. We cannot provide any assurance that we will be able to continue to satisfy the requirements of the NYSE American's continued listing standards.

A delisting of our common stock from the NYSE American could negatively affect the price and liquidity of our common stock and could impair our ability to raise capital in the future.

If our common stock is not listed on a national securities exchange, U.S. holders of warrants may not be able to exercise their warrants without compliance with applicable state securities laws and the value of your warrants may be significantly reduced.

If our common stock is delisted from the NYSE America and is not eligible to be listed on another national securities exchange, the exercise of the warrants by U.S. holders may not be exempt from state securities laws. As a result, depending on the state of residence of a holder of the warrants, a U.S. holder may not be able to exercise its warrants unless we comply with any state securities law requirements necessary to permit such exercise or an exemption applies. Although we plan to use our reasonable efforts to assure that U.S. holders will be able to exercise their warrants under applicable state securities laws if no exemption exists, there is no assurance that we will be able to do so. As a result, in the event that our common stock is delisted from the NYSE American and is not eligible to be listed on another securities exchange, your ability to exercise your warrants may be limited. The value of the warrants may be significantly reduced if U.S. holders are not able to exercise their warrants under applicable state securities laws.

Risks Related to Our Preferred Stock

Our Series C preferred stock has a preference senior to all other classes of stock in distribution and liquidation and our Series A and Series B preferred stock, if not converted into common stock, will also have a distribution and liquidation preference senior to our common stock in liquidation which could negatively affect the value of our common stock and impair our ability to raise additional capital.

On November 8, 2017 we issued to Intrexon Corporation ("Intrexon") approximately \$3.4 million of equity in the form of 100 shares of Series C, Non-Voting, Non-Convertible Preferred Stock (the "Series C Preferred Stock"). The shares of Series C are entitled to PIK dividends thereon at the annual rate of twelve percent (12%) (the "Initial Rate") of its Stated Value, payable by issuing additional shares of Series C Preferred Stock within thirty days after the end of each calendar year pro-rata for partial years. The Initial Rate is subject to increase to twenty percent (20%) automatically after May 10, 2019. Upon Liquidation of the Company, whether voluntary or involuntary, each holder of shares of Series C Preferred Stock is entitled to receive, in preference to the holders of Common Stock, Series A Preferred Stock, Series B Preferred Stock and to all other equity securities issued by the Company from time to time (the "Junior Securities"), an amount of cash equal to the product of the number of shares of Series C Non-Convertible Preferred Stock then held by such holder, multiplied by the Stated Value per share of Series C Non-Convertible Preferred Stock plus any accrued but unpaid dividends (the "Series C Liquidation Amount") and no distributions or payments shall be made in respect of any Junior Securities unless all Series C Liquidation Amounts, if any, are first paid in full. The "Stated Value" shall mean \$33,847.9874 per share.

On November 8, 2017, we issued \$3.3 million of Series B Non-Voting, Convertible Preferred Stock (the "Series B Preferred Stock") pursuant to which upon Liquidation each holder of shares of Series B Preferred Stock shall be entitled to receive, after payment to the Series C Preferred Stock, but on par with Series A Convertible Preferred Stock and in preference to the holders of Common Stock, an amount of cash equal to the greater of (i) the product of

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the number of shares of Series B Preferred Stock then held by such holder, multiplied by the Series B Original Issue Price; and (ii) the amount that would be payable to such holder in the Liquidation in respect of Common Stock issuable upon conversion of such shares of Series B Preferred Stock if all outstanding shares of Series B Preferred Stock were converted into Common Stock immediately prior to the Liquidation.

In May and July of 2017, we issued an aggregate of \$3.0 million of Series A Non-Voting, Convertible Preferred Stock (the "Series A Preferred Stock") pursuant to which upon Liquidation each holder of shares of Series A Preferred Stock shall be entitled to receive, after payment to the Series C Preferred Stock, but on par with Series B Convertible Preferred Stock and in preference to the holders of Common Stock, an amount of cash equal to the greater of (i) the product of the number of shares of Series A Preferred Stock then held by such holder, multiplied by the Series B Original Issue Price; and (ii) the amount that would be payable to such holder in the Liquidation in respect of Common Stock issuable upon conversion of such shares of Series A Preferred Stock if all outstanding shares of Series A Preferred Stock were converted into Common Stock immediately prior to the Liquidation.

As such, our Series C preferred stock is senior to all other classes of stock in distribution and liquidation and our Series A and Series B preferred stock, if not converted into common stock, will also be senior to our common stock in distribution and liquidation, which could negatively affect the value of our common stock and impair our ability to raise additional capital.

The conversion of our Series A Preferred Stock, Series B Preferred Stock and Series D Preferred Stock and the exercise of currently outstanding warrants could result in significant dilution to the holders of our common stock.

The holders of our Series A Preferred Stock, Series B Preferred Stock and Series D Preferred Stock may convert their shares of preferred stock into shares of common stock. As of September 30, 2018, on a post reverse split basis, we had outstanding: (i) 9,417,000 shares of Series A Preferred Stock outstanding, which are convertible into 941,701 shares of common stock and (ii) 6,600,000 shares of Series B Preferred Stock, which are convertible into 1,320,002 shares of common stock. We also issued a total of 9,364,000 shares of Series D Preferred Stock in our underwritten public offering which closed on July 17, 2018. As of September 30, 2018, 7,868,000 shares of Series D Preferred Stock have been converted into shares of Common Stock.

In addition to our outstanding shares of preferred stock, as of September 30, 2018, there were outstanding warrants to purchase 16,877,425 shares of our common stock inclusive of warrants to purchase 13,800,000 shares of common stock issued in connection our underwritten public offering which closed on July 17, 2018. The conversion of our Series A Preferred Stock, Series B Preferred Stock and Series D Preferred Stock, as well as the exercise of our outstanding warrants could result in significant dilution to existing common shareholders, adversely affect the market price of our common stock and impair our ability to raise capital through the sale of additional equity securities.

CAPITALIZATION

The following table sets forth our cash and capitalization as of September 30, 2018:

- on an actual basis; and
- on an as adjusted basis to give effect to our sale in this offering of 16,666,668 shares of common stock and two series of warrants to purchase shares of common stock at \$0.75 per share and \$0.90 per share for each Series 1 Warrant and Series 2 Warrant and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

You should read this table in conjunction with “Use of Proceeds” as well as our “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements, including the related notes, incorporated by reference into this prospectus supplement and the accompanying prospectus.

| | As of September 30, 2018 | | |
|---|--------------------------|------------|--------------------------|
| | Actual | Pro Forma | Pro Forma As Adjusted |
| Cash and cash equivalents | \$ 13,811,418 | 11,310,687 | 25,122,105 |
| Shareholders’ equity | 13,978,675 | 11,310,687 | 25,289,362 |
| Preferred stock, no par value; 50,000,000 shares authorized; 9,417,000 Series A shares, 6,600,000 Series B shares 101.733 Series C shares and, 1,496,000 Series D shares issued and outstanding, | 6,813,369 | — | 6,813,369 |
| Common stock, \$0.001 par value, 200,000,000 shares authorized; 18,419,135 shares issued and outstanding, | 18,419 | 16,667 | 35,086 |
| Additional paid-in capital | 115,764,875 | 11,294,020 | 127,058,895 |
| Accumulated deficit | (108,617,988) | — | (108,617,988) |
| Total liabilities and shareholders’ equity | 15,535,636 | 11,310,687 | 26,846,323 |

The number of shares of our Common Stock shown above to be outstanding immediately before and after this offering is based on 18,419,135 shares outstanding as of September 30, 2018 and excludes, as of such date:

- 1,812,133 shares of our Common Stock subject to outstanding options having a weighted average exercise price of \$1.88 per share;
- 197,117 shares of our Common Stock reserved for future issuance pursuant to our existing Stock Incentive Plan;
- 16,877,425 shares of our Common Stock issuable upon exercise of warrants outstanding, having a weighted average exercise price of \$1.32 per share, of which, 9,505,500 shares of common stock were issued upon the exercise of warrants in October of 2018 generating proceeds of \$9,505,500;
- 941,701 shares of our Common Stock issuable upon conversion of convertible Series A Preferred stock outstanding;
- 1,320,002 shares of our Common Stock issuable upon conversion of convertible Series B Preferred stock outstanding; and
- 1,496,000 shares of our Common Stock issuable upon conversion of convertible Series D Preferred stock outstanding.

Except as otherwise indicated, all information included or incorporated by reference in this prospectus supplement assumes the following:

- no exercise of the outstanding options and warrants described above or the two series of warrants offered hereby; and
- no exercise of the underwriter’s option to purchase additional shares and/or warrants.

USE OF PROCEEDS

We estimate that the net proceeds from this offering will be approximately \$11,310,687 after deducting our estimated offering expenses payable by us and excluding any proceeds we may receive upon exercise of the warrants.

We currently intend to use the net proceeds from this offering for working capital and general corporate purposes, including research and development, clinical trials (including to continue funding development of AG013, our ongoing Phase 2 clinical trial for the treatment of Oral Mucositis, and our pre-clinical development of our antibiotics program) and general and administrative expenses. As a result, our management will retain broad discretion in the allocation and use of the net proceeds of this offering, and investors will be relying on the judgment of our management with regard to the use of these net proceeds. Pending application of the net proceeds for the purposes as described above, we expect to invest the net proceeds in short-term, interest-bearing securities, investment grade securities, certificates of deposit or direct or guaranteed obligations of the U.S. government.

PRICE RANGE OF COMMON STOCK

Our common stock is quoted on the NYSE American under the ticker symbol “OGEN”. The following table sets forth the high and low bid quotations of our common stock reflected on the NYSE American, but as adjusted to reflect applicable reverse stock splits. These quotations represent inter-dealer prices, without retail mark-up, markdown, or commission, and may not represent actual transactions. The last price of our common stock as reported on the NYSE American on March 18, 2019 was \$0.96 per share. As of March 18, 2019, there were approximately 28 stockholders of record of our common stock. This number does not include beneficial owners from whom shares are held by nominees in street name such as banks and brokerage firms.

| Period | 2019 | | 2018 | | 2017 | |
|----------------|--------|--------|--------|--------|--------|--------|
| | High | Low | High | Low | High | Low |
| First quarter | \$1.05 | \$0.82 | \$3.17 | \$1.60 | \$8.50 | \$4.20 |
| Second quarter | — | — | \$1.90 | \$1.16 | \$5.80 | \$3.10 |
| Third quarter | — | — | \$1.42 | \$0.38 | \$6.80 | \$2.80 |
| Fourth quarter | — | — | \$3.57 | \$0.78 | \$4.70 | \$2.10 |

DIVIDEND POLICY

To date, we have neither declared nor paid any dividends on our common stock nor do we anticipate that such dividends will be paid in the foreseeable future. Rather, we intend to retain any earnings to finance the growth and development of our business. Any payment of cash dividends on our common stock in the future will be dependent, among other things, upon our earnings, financial condition, capital requirements and other factors which the board of directors deems relevant. In addition, restrictive covenants contained in any financing agreements entered into in the future may preclude us from paying any dividends.

We issued 100 shares of Series C, Non-Voting, Non-Convertible, Preferred Stock (“Series C Preferred Stock”) with a stated value of \$33,847 per share to Intrexon in exchange for obligations we owed to Intrexon. These shares have an accruing dividend of 12% per year payable in additional shares of Series C Preferred stock. The accruing dividend increases to 20% per year after May 10, 2019. In January of 2018 we paid a dividend on our Series C Non-Voting, Non-Convertible Preferred Stock to Intrexon of 1.733 shares for the portion of the 2017 fiscal year the Series C Non-Voting, Non-Convertible Preferred Stock was outstanding. In January of 2019 we paid a dividend on our Series C Non-Voting, Non-Convertible Preferred Stock to Intrexon of 12.208 shares for the full fiscal year of the 2018.

DESCRIPTION OF SECURITIES WE ARE OFFERING

In this offering, we are offering 16,666,668 shares of common stock and two series of warrants to purchase up to 16,666,668 shares of common stock. This prospectus supplement also relates to the offering of shares of our common stock upon the exercise, if any, of the warrants issued in this offering.

Common Stock

The material terms and provisions of our common stock and each other class of our securities which qualifies or limits our common stock are described under the caption “Common Stock” beginning on page 8 of the accompanying prospectus and under the caption “Description of Our Capital Stock” begin on page S-21 of this prospectus supplement.

Warrants

The material terms and provisions of the warrants to purchase 16,666,668 shares of common stock being offered pursuant to this prospectus supplement and the accompanying prospectus are summarized below. The warrants will be issued in two series, which we refer to as Series 1 Warrants and Series 2 Warrants, as individual warrant agreements to the investors. Unless otherwise specified, the terms of the Series 1 Warrants and Series 2 Warrants are the same, to the extent such terms are described herein. This summary is subject to and qualified in its entirety by the forms of warrant, which will be provided to each investor in this offering and will be filed on a Current Report on Form 8-K in connection with this offering.

The Series 1 Warrants to be issued pursuant to this prospectus supplement will each have an exercise price of \$0.75 per share. The Series 2 Warrants to be issued pursuant to this prospectus supplement will each have an exercise price of \$0.90 per share.

Each Series 1 Warrant is immediately exercisable and will expire on the earlier of (1) the eighteen anniversary of the date of issuance and (2) twenty one trading days following our release of top-line data related to our Phase 2 double blind, placebo controlled clinical trial of AG013, which we expect to occur in early 2020. Each Series 2 Warrant is immediately exercisable and will expire five years following the date of issuance

The warrants may not be exercised by the holder to the extent that the holder, together with its affiliates, would beneficially own, after such exercise more than 4.99% (or, at the election of investor prior to issuance of any warrants, 9.99%) of the shares of our common stock then outstanding (subject to the right of the holder to increase or decrease such beneficial ownership limitation upon notice to us, provided that such limitation cannot exceed 9.99%) and provided that any increase in the beneficial ownership limitation shall not be effective until 61 days after such notice is delivered.

The warrants are exercisable for cash or, solely in the absence of an effective registration statement or prospectus registering the issuance or resale of the shares of our common stock upon exercise of the warrants, by cashless exercise. This registration statement registers the shares of our common stock upon exercise of the warrants.

The exercise price of the warrants is subject to adjustment in the case of stock dividends or other distributions on shares of common stock or any other equity or equity equivalent securities payable in shares of common stock, stock splits, stock combinations, reclassifications or similar events affecting our common stock, and also, subject to limitations, upon any distribution of assets, including cash, stock or other property to our stockholders.

Prior to the exercise, holders of the warrants will not have any of the rights of holders of the common stock purchasable upon exercise, including voting rights; however, the holders of the warrants will have certain rights to participate in distributions or dividends paid on our common stock to the extent set forth in the warrants.

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In the event we consummate a merger or consolidation with or into another person or other reorganization event in which our common stock is converted or exchanged for securities, cash or other property, or we sell, lease, license, assign, transfer, convey or otherwise dispose of all or substantially all of our assets or we or another person acquire 50% or more of our outstanding shares of common stock (a “fundamental transaction”), then following such event, the holders of the warrants will be entitled to receive upon exercise of the warrants the same kind and amount of securities, cash or property which the holders would have received had they exercised the warrants immediately prior to such fundamental transaction. Any successor to us or surviving entity is required to assume the obligations under the warrants. Notwithstanding the foregoing, in the event of a fundamental transaction, the holders will have the option, which may be exercised within 30 days after the consummation of the fundamental transaction, to require the company or the successor entity purchase the warrant from the holder by paying to the holder the same type or form of consideration (and in the same proportion), at the Black Scholes value of the unexercised portion of the warrant, that is being offered and paid to the holders of common stock of the company in connection with the fundamental transaction, whether that consideration be in the form of cash, stock or any combination thereof, or whether the holders of common stock are given the choice to receive from among alternative forms of consideration in connection with the fundamental transaction.

The number of shares of our common stock exercisable, the exercise price or the exercise period of the warrants may not be amended without the written consent of the holder of such warrant.

We do not plan on applying to list the warrants on the NYSE American, any other national securities exchange or any other nationally recognized trading system.

DESCRIPTION OF CAPITAL STOCK

The following descriptions are summaries of the material terms that are included in our amended and restated articles of incorporation (as amended) and our bylaws (as amended) as well as the specific agreements such descriptions relate to. This summary is qualified in its entirety by the specific terms and provisions contained in our restated articles of incorporation, bylaws and the specific agreements described herein, copies of which we have filed as exhibits to the registration statement of which this prospectus is a part, and by the provisions of applicable law.

Overview

Authorized Capital Stock

Our authorized capital stock consists of 200,000,000 shares of common stock, par value \$0.001, and 50,000,000 shares of preferred stock, without par value. As of March 19, 2019, there were 29,445,635 shares of our common stock issued and outstanding and 16,017,113.94 shares of our preferred stock issued and outstanding.

Reverse Stock Split

Our shareholders and Board of Directors approved a one-for-ten reverse stock split which took effect on January 19, 2018. As a result of the reverse stock split every ten shares of our Common Stock were automatically combined and converted into one issued and outstanding share of our Common Stock, with no change in the par value per share. All share amounts, per share amounts and share prices in this prospectus supplement have been adjusted to reflect the reverse stock split.

Common Stock

Voting

The holders of our common stock are entitled to one vote for each share held of record on all matters submitted to a vote of the shareholders. Approval of an amendment of our articles of incorporation, a merger, a share exchange, a sale of all our property or dissolution must be approved by a majority of all votes entitled to be cast. Such votes may be cast in person or by proxy as provided in Article I Section 8 of our bylaws.

Dividends

Our Board of Directors, subject to any restrictions contained in (i) the Florida Business Corporation Act, or FBCA; or (ii) our amended and restated articles of incorporation, as amended, or Articles of Incorporation, may make dividends upon our securities. Distributions may be paid in cash, in property, or in our securities.

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We have not declared or paid any dividends on our common stock. We presently intend to retain our future earnings, if any, to fund the development and growth of our business and, therefore, do not have plans to pay any dividends in the foreseeable future.

Other Rights

Upon our liquidation, dissolution or winding-up, after payment in full of our liabilities and the amounts required to be paid to holders of any outstanding shares of preferred stock, if any, all holders of our common stock, along with the holders of our Series A Convertible Preferred Stock and Series B Convertible Preferred Stock on an “as if” converted basis, will be entitled to receive a pro rata distribution of all of our assets and funds legally available for distribution.

No shares of our common stock are subject to redemption or have preemptive rights to purchase additional shares of our common stock or any of our other securities.

Fully Paid and Nonassessable

All of our outstanding shares of common stock are, and the shares of common stock to be issued in this offering will be, fully paid and nonassessable.

Preferred Stock

Our Board of Directors has the authority, without action by our shareholders, to designate and issue up to 50,000,000 shares of preferred stock in one or more series or classes and to designate the rights, preferences and privileges of each series or class, which may be greater than the rights of our common stock. These rights, preferences and privileges could include dividend rights, conversion rights, voting rights, redemption rights, liquidation preferences, the number of shares constituting any class or series and the designation of the class or series. Terms selected by our board of directors in the future could decrease the amount of earnings and assets available for distribution to holders of shares of common stock or adversely affect the rights and powers, including voting rights, of the holders of shares of common stock without any further vote or action by the stockholders. As a result, the rights of holders of our common stock will be subject to, and may be adversely affected by, the rights of the holders of the Series A Convertible Preferred Stock, Series B Convertible Preferred Stock, Series C Non-Convertible Preferred Stock and Series D Convertible Stock or any other preferred stock that may be issued by us in the future, which could have the effect of decreasing the market price of our common stock. As of March 19, 2019 we have 16,017,113.941 shares of preferred stock issued and outstanding.

Series A Convertible Preferred Stock

On July 25, 2017, we issued 12,000,000 shares of convertible preferred stock, designated as the Series A Convertible Preferred Stock pursuant to the certificate of designation and rights filed by us with the Secretary of State of the State of Florida, with an aggregate original purchase price and initial liquidation preference of \$3.0 million. Each share of Series A Convertible Preferred Stock was issued for an amount equal to \$0.25 per share, which we refer to as the original purchase price. On March 9, 2018, an investor converted a portion of its Series A Preferred to common stock and, as a result of the conversion, 9,417,000 shares of Series A Preferred remain outstanding.

The following description is a summary of the material provisions of the Series A Convertible Preferred Stock and the certificate of designation and rights and does not purport to be complete. This summary is subject to and is qualified by reference to all the provisions of the Series A Convertible Preferred Stock and certificate of designation and rights of Series A Convertible Preferred Stock, including the definitions of certain terms used in the certificate of designation and rights. We urge you to read this document because it, and not this description, defines the rights of a holder of the Series A Convertible Preferred Stock. A copy of the form of certificate of designation and rights that we filed with the Secretary of State of the State of Florida effective May 10, 2017 as amended and restated effective November 8, 2017 has been incorporated by reference as an exhibit to the registration statement of which this prospectus forms a part.

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No Mandatory Redemption Date or Sinking Fund

The shares of Series A Convertible Preferred Stock do not have a mandatory redemption date and are not subject to any sinking fund. The shares of Series A Convertible Preferred Stock will remain outstanding indefinitely unless we elect to redeem them under the circumstances described below in “Redemption” or we otherwise repurchase them or they are converted into shares of our common stock as described below under “Conversion Rights.”

Dividends

The shares of Series A Convertible Preferred Stock are entitled to participate in all dividends declared and paid on shares of company common stock on an “as if” converted basis.

Liquidation Preference

Upon any liquidation, dissolution or winding-up of the Company, whether voluntary or involuntary that is not a Fundamental Transaction (as defined in the certificate of designation), the holders of Series A Convertible Preferred Stock shall be entitled to receive out of the assets, the greater of (i) the product of the number of shares of Series A Preferred Stock then held by such holder, multiplied by the original issue price; and (ii) the amount that would be payable to such holder in the liquidation in respect of Common Stock issuable upon conversion of such shares of Series A Preferred Stock if all outstanding shares of Series A Preferred Stock were converted into Common Stock immediately prior to the Liquidation.

Ranking

The Series A Convertible Preferred Stock ranks (i) on par with the Common Stock and Series B Convertible Preferred Stock and junior to Series C Non-Convertible Preferred Stock as to dividend rights and (ii) on par with Series B Convertible Preferred Stock, junior to Series C Non-Convertible Preferred Stock and senior to Common Stock as to rights upon liquidation, dissolution or winding up of the Company, whether voluntarily or involuntarily.

See “Voting Rights—Matters Requiring Approval of Holders of Series A Convertible Preferred Stock” for a description of the types of issuances of equity securities and other securities of our company requiring approval of holders of a majority of shares of Series A Convertible Preferred Stock then outstanding, voting together as a class.

Redemption

To the extent we have funds legally available therefor, at any time after the fifth anniversary of the original issue date of the Series A Convertible Preferred Stock, we have the right to redeem all or any portion of the outstanding shares of Series A Convertible Preferred Stock at the original issue price by providing at least seventy five (75) days written notice of such redemption to all holders of the then outstanding shares of Series A Convertible Preferred Stock.

Conversion Rights

The holders of shares of Series A Convertible Preferred Stock will, at any time, be entitled to convert some or all of their Series A Convertible Preferred Stock into the number of shares of our common stock obtained by dividing the original purchase price of the shares to be converted by the aggregate Series A conversion price (which originally equaled the original purchase price, but is subject to adjustment), which amount we refer to as the conversion price.

The conversion price will be adjustable upon the occurrence of certain events and transactions to prevent dilution as described under “Adjustments to Conversion Price to Prevent Dilution.” Any shares of our common stock issued upon conversion of the shares of Series A Convertible Preferred Stock shall be validly issued, fully paid

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and non-assessable. The Company shall either pay cash in lieu of fractional shares or round up to the next whole share. The initial conversion price was \$0.25 but was adjusted to \$2.50 as a result of the Company's reverse split of 1 for 10 on January 19, 2018. On March 9, 2018, an investor holding Series A Preferred, provided a notice of conversion of a portion of its Series A Preferred Stock into common stock based on the post-split adjusted conversion price.

Adjustments to Conversion Price to Prevent Dilution

The Series A Convertible Preferred Stock is subject to provisions that protect the holders against dilution by adjustment of the conversion price and/or number of shares of common stock issuable upon conversion in certain events such as a subdivision, combination or reclassification of our outstanding common stock.

Voting Rights—Matters Requiring Approval of Holders of Series A Convertible Preferred Stock

Except as otherwise required by law, the Series A Convertible Preferred Stock shall have no voting rights. However, as long as any shares of Series A Convertible Preferred Stock are outstanding, we shall not, without the affirmative vote of the holders of a majority of the then outstanding shares of the Series A Convertible Preferred Stock, (a) alter or change adversely the powers, preferences or rights given to the Series A Convertible Preferred Stock or alter or amend the certificate of designation, (b) amend its articles of incorporation or other charter documents in any manner that adversely affects any rights of the holders of Series A Convertible Preferred Stock, (c) increase the number of authorized shares of Series A Convertible Preferred Stock, or (d) enter into any agreement with respect to any of the foregoing.

Registration Rights

The holders of the Series A Convertible Preferred Stock were granted certain demand registration rights and piggyback registration rights with respect to the shares of our Common Stock issuable upon conversion of the Series A Preferred Stock and exercise of their associated warrants, subject to customary cutbacks, blackout periods and other exceptions.

Series B Convertible Preferred Stock

On November 8, 2017, we issued 6,600,000 shares of convertible preferred stock, designated as the Series B Convertible Preferred Stock pursuant to the certificate of designation and rights filed by us with the Secretary of State of the State of Florida, with an aggregate original purchase price and initial liquidation preference of \$3.3 million. Each share of Series B Convertible Preferred Stock was issued for an amount equal to \$0.50 per share, which we refer to as the original purchase price.

The following description is a summary of the material provisions of the Series B Convertible Preferred Stock and the certificate of designation and rights and does not purport to be complete. This summary is subject to and is qualified by reference to all the provisions of the Series B Convertible Preferred Stock and certificate of designation and rights of Series B Convertible Preferred Stock, including the definitions of certain terms used in the certificate of designation and rights. We urge you to read this document because it, and not this description, defines the rights of a holder of the Series B Convertible Preferred Stock. A copy of the form of certificate of designation and rights that we filed with the Secretary of State of the State of Florida effective November 8, 2017 has been incorporated by reference as an exhibit to the registration statement of which this prospectus forms a part.

No Mandatory Redemption Date or Sinking Fund

The shares of Series B Convertible Preferred Stock do not have a mandatory redemption date and are not subject to any sinking fund. The shares of Series B Convertible Preferred Stock will remain outstanding indefinitely unless we elect to redeem them under the circumstances described below in "Redemption" or we otherwise repurchase them or they are converted into shares of our common stock as described below under "Conversion Rights."

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Dividends

The shares of Series B Convertible Preferred Stock are entitled to participate in all dividends declared and paid on shares of company common stock on an “as if” converted basis.

Liquidation Preference

Upon any liquidation, dissolution or winding-up of the Company (any such event, a “Liquidation”), whether voluntary or involuntary, each holder of shares of Series B Convertible Preferred Stock shall be entitled to receive, after payment to the Series C Non-Convertible Preferred Stock as provided in the Certificate of Designation of Series C Non-Convertible Preferred Stock, but on par with Series A Convertible Preferred Stock and in preference to the holders of Common Stock, an amount of cash equal to the greater of (i) the product of the number of shares of Series B Convertible Preferred Stock then held by such holder, multiplied by the original issue price; and (ii) the amount that would be payable to such holder in the Liquidation in respect of Common Stock issuable upon conversion of such shares of Series B Convertible Preferred Stock if all outstanding shares of Series B Convertible Preferred Stock were converted into Common Stock immediately prior to the Liquidation (disregarding for this purpose any and all limitations of any kind on such conversion).

Ranking

The Series B Convertible Preferred Stock ranks (i) on par with the Common Stock and Series A Convertible Preferred Stock and junior to Series C Non-Convertible Preferred Stock as to dividend rights and (ii) junior to Series C Non-Convertible Preferred Stock, on par with Series A Convertible Preferred Stock and senior to the Common Stock as to distributions of assets upon liquidation, dissolution or winding up of the Corporation, whether voluntarily or involuntarily.

See “Voting Rights—Matters Requiring Approval of Holders of Series B Convertible Preferred Stock” for a description of the types of issuances of equity securities and other securities of our company requiring approval of holders of a majority of shares of Series B Convertible Preferred Stock then outstanding, voting together as a class.

Redemption

To the extent we have funds legally available therefor, at any time after the fifth anniversary of the original issue date of the Series B Convertible Preferred Stock, we have the right to redeem all or any portion of the outstanding shares of Series B Convertible Preferred Stock at the original issue price by providing at least seventy five (75) days written notice of such redemption to all holders of the then outstanding shares of Series B Convertible Preferred Stock.

Conversion Rights

The holders of shares of Series B Convertible Preferred Stock will, at any time, be entitled to convert some or all of their Series B Convertible Preferred Stock into the number of shares of our common stock obtained by dividing the original purchase price of the shares to be converted by the aggregate Series B conversion price (which originally equaled the original purchase price, but is subject to adjustment), which amount we refer to as the conversion price and then multiplying such product by two (2).

The conversion price will be adjustable upon the occurrence of certain events and transactions to prevent dilution as described under “Adjustments to Conversion Price to Prevent Dilution.” Any shares of our common stock issued upon conversion of the shares of Series B Convertible Preferred Stock shall be validly issued, fully paid and non-assessable. The Company shall either pay cash in lieu of fractional shares or round up to the next whole share. The initial conversion price was \$0.50 but was adjusted to \$5.00 as a result of the Company’s reverse split of 1 for 10 on January 19, 2018. No shares of Series B Preferred Stock have been converted as of the date of this Prospectus Supplement.

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Adjustments to Conversion Price to Prevent Dilution

The Series B Convertible Preferred Stock is subject to provisions that protect the holders against dilution by adjustment of the conversion price and/or number of shares of common stock issuable upon conversion in certain events such as a subdivision, combination or reclassification of our outstanding common stock.

Voting Rights—Matters Requiring Approval of Holders of Series B Convertible Preferred Stock

Except as otherwise required by law, the Series B Convertible Preferred Stock shall have no voting rights. However, as long as any shares of Series B Convertible Preferred Stock are outstanding, we shall not, without the affirmative vote of the holders of a majority of the then outstanding shares of the Series B Convertible Preferred Stock, (a) amend, alter, repeal, restate or supplement (in each case, whether by reclassification, merger, consolidation, reorganization or otherwise) the certificate of designation in any manner that would adversely affect the holders of the Series B Convertible Preferred Stock, (b) authorize or agree to authorize any increase in the number of shares of Series B Convertible Preferred Stock or issue any additional shares of Series B Convertible Preferred Stock, (c) amend, alter or repeal any provision of the Certificate of Incorporation or Bylaws of the Company which would adversely affect any right, preference, privilege or voting power of the Series B Convertible Preferred Stock or the holders thereof or (d) agree to take any of the foregoing actions.

Registration Rights

The holders of the Series B Convertible Preferred Stock were granted certain demand registration rights and piggyback registration rights with respect to the shares of our Common Stock issuable upon conversion of the Series B Preferred Stock and exercise of their associated warrants, subject to customary cutbacks, blackout periods and other exceptions.

Series C Non-Voting, Non-Convertible Preferred Stock

On November 8, 2017, we issued 100 shares of non-convertible preferred stock, designated as the Series C Non-Voting, Non-Convertible Preferred Stock pursuant to the certificate of designation and rights filed by us with the Secretary of State of the State of Florida, with a stated value and liquidation preference equal to \$33,847.9874 per share, which we refer to as the Stated Value. The shares of Series C Non-Voting, Non-Convertible Preferred Stock are entitled to payment-in-kind (“PIK”) dividends thereon at the annual rate of twelve percent (12%) (the “Initial Rate”) of its Stated Value, payable by issuing additional shares of Series C Non-Voting, Non-Convertible Preferred Stock within thirty days after the end of each calendar year, pro-rata for partial years. On January 25, 2018, we paid a dividend on our Series C Preferred Stock to Intrexon of 1.733 shares for the portion of the 2017 fiscal year the Series C Preferred was outstanding.

The following description is a summary of the material provisions of the Series C Non-Voting, Non-Convertible Preferred Stock and the certificate of designation and rights and does not purport to be complete. This summary is subject to and is qualified by reference to all the provisions of the Series C Non-Voting, Non-Convertible Preferred Stock and certificate of designation and rights of Series C Non-Voting, Non-Convertible Preferred Stock, including the definitions of certain terms used in the certificate of designation and rights. We urge you to read this document because it, and not this description, defines the rights of a holder of the Series C Non-Voting, Non-Convertible Preferred Stock. A copy of the form of certificate of designation and rights that we filed with the Secretary of State of the State of Florida effective November 8, 2017 has been incorporated by reference as an exhibit to the registration statement of which this prospectus forms a part.

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No Mandatory Redemption Date or Sinking Fund

The shares of Series C Non-Voting, Non-Convertible Preferred Stock do not have a mandatory redemption date and are not subject to any sinking fund. The shares of Series C Non-Voting, Non-Convertible Preferred Stock will remain outstanding indefinitely unless we elect to redeem them under the circumstances described below in “Redemption” or we otherwise repurchase them.

Dividends

The shares of Series C Non-Voting, Non-Convertible Preferred Stock are entitled to receive dividends thereon at the annual rate of twelve percent (12%) (the “Initial Rate”) of its Stated Value, payable by issuing additional shares of Series C Non-Voting, Non-Convertible Preferred Stock within thirty days after the end of each calendar year pro-rata for partial years. The Initial Rate shall be subject to increase to twenty percent (20%) automatically after May 10, 2019. In January of 2018 we paid a dividend on our Series C Non-Voting, Non-Convertible Preferred Stock to Intrexon of 1.733 shares for the portion of the 2017 fiscal year the Series C Non-Voting, Non-Convertible Preferred Stock was outstanding. In January of 2019 we paid a dividend on our Series C Non-Voting, Non-Convertible Preferred Stock to Intrexon of 12.208 shares for the full fiscal year of the 2018.

Liquidation Preference

Upon any liquidation, dissolution or winding-up of the Company (any such event, a “Liquidation”), whether voluntary or involuntary, each holder of shares of Series C Non-Voting, Non-Convertible Preferred Stock shall be entitled to receive, in preference to the holders of Common Stock, Series A Convertible Preferred Stock, Series B Convertible Preferred Stock and to all other equity securities issued by the Corporation from time to time (the “Junior Securities”), an amount of cash equal to the product of (i) the sum of (a) the number of shares of Series C Non-Voting, Non-Convertible Preferred Stock then held by such holder plus (b) the number of shares of Series C Non-Voting, Non-Convertible Preferred Stock issuable to such holder in connection with any accrued but unpaid dividends, multiplied by (ii) the Stated Value per share of Series C Non-Voting, Non-Convertible Preferred Stock (the “Series C Liquidation Amount”) and no distributions or payments shall be made in respect of any Junior Securities unless all Series C Liquidation Amounts, if any, are first paid in full.

Ranking

The Series C Non-Voting, Non-Convertible Preferred Stock ranks (i) senior to the Junior Securities as to dividend rights and (ii) senior to the Junior Securities as to rights upon liquidation, dissolution or winding up of the Corporation, whether voluntarily or involuntarily.

See “Voting Rights—Matters Requiring Approval of Holders of Series C Non-Convertible Preferred Stock” for a description of the types of issuances of equity securities and other securities of our company requiring approval of holders of a majority of shares of Series C Non-Voting, Non-Convertible Preferred Stock then outstanding, voting together as a class.

Redemption

To the extent we have funds legally available therefor, at any time after November 8, 2017, we have the right to redeem all or any portion of the outstanding shares of Series C Non-Voting, Non-Convertible Preferred Stock at the Stated Value by providing at least thirty (30) days written notice of such redemption to all holders of the then outstanding shares of Series C Non-Voting, Non-Convertible Preferred Stock.

No Conversion Rights

The shares of Series C Non-Voting, Non-Convertible Preferred Stock do not have any conversion rights and are not convertible into or exchangeable for any other property or securities of the Company.

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Voting Rights—Matters Requiring Approval of Holders of Series C Non-Voting, Non-Convertible Preferred Stock

Except as otherwise required by law, the Series C Non-Voting, Non-Convertible Preferred Stock shall have no voting rights. However, as long as any shares of Series C Non-Voting, Non-Convertible Preferred Stock are outstanding, we shall not, without the affirmative vote of the holders of a majority of the then outstanding shares of the Series C Non-Voting, Non-Convertible Preferred Stock, (a) amend, alter, repeal, restate or supplement (in each case, whether by reclassification, merger, consolidation, reorganization or otherwise) the certificate of designation in any manner that would adversely affect the holders of the Series C Non-Voting, Non-Convertible Preferred Stock, (b) authorize or agree to authorize any increase in the number of shares of Series C Non-Voting, Non-Convertible Preferred Stock or issue any additional shares of Series C Non-Voting, Non-Convertible Preferred Stock, (c) amend, alter or repeal any provision of the Certificate of Incorporation or Bylaws of the Company which would adversely affect any right, preference, or privilege of the Series C Non-Voting, Non-Convertible Preferred Stock or the holders thereof or (d) agree to take any of the foregoing actions.

Description of Series D Preferred Stock

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On July 13, 2018, our board of directors designated 9,364,000 shares of our preferred stock as Series D Convertible Preferred Stock (“Series D Preferred Stock”), none of which are currently issued and outstanding. The preferences and rights of the Series D Preferred Stock was set forth in a Certificate of Designation (the “Series D Certificate of Designation”).

Pursuant to a transfer agency agreement between us and Continental Stock Transfer & Trust Company, as transfer agent, the Series D Preferred Stock will be issued in book-entry form and shall initially be represented only by one or more global certificates deposited with The Depository Trust Company, or DTC, and registered in the name of Cede & Co., a nominee of DTC, or as otherwise directed by DTC.

In the event of a liquidation, the holders of Series D Preferred Shares were entitled to participate on an as-converted-to-Common Stock basis with holders of the Common Stock in any distribution of assets of the Company to the holders of the Common Stock. The Series D Certificate of Designation provides, among other things, that we shall not pay any dividends on shares of Common Stock (other than dividends in the form of Common Stock) unless and until such time as we pay dividends on each Series D Preferred Share on an as-converted basis. Other than as set forth in the previous sentence, the Series D Certificate of Designation provides that no other dividends shall be paid on Series D Preferred Shares and that we shall pay no dividends (other than dividends in the form of common stock) on shares of common stock unless we simultaneously comply with the previous sentence. The Series D Certificate of Designation does not provide for any restriction on the repurchase of Series D Preferred Shares by us while there is any arrearage in the payment of dividends on the Series D Preferred Shares. There are no sinking fund provisions applicable to the Series D Preferred Shares.

In addition, in the event we consummate a merger or consolidation with or into another person or other reorganization event in which our common shares are converted or exchanged for securities, cash or other property, or we sell, lease, license, assign, transfer, convey or otherwise dispose of all or substantially all of our assets or we or another person acquire 50% or more of our outstanding shares of common stock, then following such event, the holders of the Series D Preferred Shares will be entitled to receive upon conversion of the Series D Preferred Shares the same kind and amount of securities, cash or property which the holders would have received had they converted the Series D Preferred immediately prior to such fundamental transaction. Any successor to us or surviving entity shall assume the obligations under the Series D Preferred Shares.

With certain exceptions, as described in the Series D Certificate of Designation, the Series D Preferred Shares have no voting rights. However, as long as any shares of Series D Preferred Shares remain outstanding, the Series D Certificate of Designation provides that we shall not, without the affirmative vote of holders of a majority of the then-outstanding Series D Preferred Shares, (a) alter or change adversely the powers, preferences or rights given to the Series D Preferred Shares or alter or amend the Series D Certificate of Designation, (b) increase the number of authorized shares of Series D Preferred Shares or (c) amend our Certificate of Incorporation or other charter documents in any manner that adversely affects any rights of holders of Series D Preferred Shares.

Each Series D Preferred Share is convertible at any time at the holder’s option into one share of common stock (based on a stated value of \$1.00 per share of Series D Preferred Stock and a conversion price of \$1.00) which conversion ratio will be subject to adjustment for stock splits, stock dividends, distributions, subdivisions and combinations. Notwithstanding the foregoing, the Series D Certificate of Designation further provides that we shall not effect any conversion of Series D Preferred Shares, with certain exceptions, to the extent that, after giving effect to an attempted conversion, the holder of Series D Preferred Shares (together with such holder’s affiliates, and any persons acting as a group together with such holder or any of such holder’s affiliates) would beneficially own a number of shares of Common Stock in excess of 4.99% (or, at the election of the holder prior to the issuance date, 9.99%) of the shares of our Common Stock then outstanding after giving effect to such exercise (the “Preferred Stock Beneficial Ownership Limitation”); provided, however, that upon notice to the Company, the holder may increase or decrease the Preferred Stock Beneficial Ownership Limitation, provided that in no event shall the Preferred Stock Beneficial Ownership Limitation exceed 9.99% and any increase in the Preferred Stock Beneficial Ownership Limitation will not be effective until 61 days following notice of such increase from the holder to us.

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Additionally, subject to certain exceptions, at any time after the issuance of the Series D Preferred Stock, subject to the Preferred Stock Beneficial Ownership Limitation, we will have the right to cause each holder of the Series D Preferred Stock to convert all or part of such holder's Series D Preferred Stock in the event that (i) the volume weighted average price of our common stock for 30 consecutive trading days (the "Measurement Period") exceeds 300% of the initial conversion price of the Series D Preferred Stock (subject to adjustment for forward and reverse stock splits, recapitalizations, stock dividends and similar transactions), (ii) the average daily trading volume for such Measurement Period exceeds \$175,000 per trading day and (iii) the holder is not in possession of any information that constitutes or might constitute, material non-public information which was provided by the Company and subject to the Preferred Stock Beneficial Ownership Limitation. Our right to cause each holder of the Series D Preferred Stock to convert all or part of such holder's Series D Preferred Stock shall be exercised ratably among the holders of the then outstanding preferred stock.

Options and Warrants

As of March 19, 2019, there were 7,371,925 shares of common stock issuable upon exercise of warrants to investors at a weighted average exercise price per share of \$1.74, 1,812,133 shares issuable upon exercise of options outstanding at a weighted average exercise price of \$1.88 per share, and an additional 197,117 shares available for option grants under our 2012 Equity Incentive Plan, as amended. The issuance of shares of our common stock under our 2012 Equity Incentive Plan is covered by Form S-8 registration statements we filed with the Securities and Exchange Commission, or SEC, and upon exercise of the options, such shares may be resold into the market. We have also issued shares of common stock and warrants in connection with previous private placements. Such shares are available for resale as well as certain of the shares of common stock issuable upon exercise of the warrants. We have also issued shares of our common stock in private placement and financing transactions, which are deemed to be "restricted securities," as that term is defined in Rule 144 promulgated under the Securities Act of 1933, as amended, or Securities Act, and such shares may be resold pursuant to the provisions of Rule 144. For example, on June 30, 2016, we issued 9,045,679 restricted shares of our common stock to the KFLP, Intrexon and our Chairman as part of a private placement. The resale of shares acquired from us in private transactions could cause our stock price to decline significantly.

Contingent Share Issuance-Intrexon

On June 9, 2015, we entered into an Exclusive Channel Collaboration Agreement, or ECC, with Intrexon and Actobiotics, a wholly-owned subsidiary of Intrexon, through which we intend to research, develop and commercialize products, including the continued development and commercialization of AG013, for use in the treatment of oral mucositis in humans and/or the administration to humans of a trefoil factor via genetically modified bacteria (including *L. lactis*) for the treatment of diseases and conditions of the oral cavity, throat, and esophagus, but, in any case, excluding the delivery of anti-cancer effectors for the purpose of treatment or prophylaxis of cancer (collectively, the "Program"). Contemporaneously with the ECC, we and Intrexon also entered into a Stock Issuance Agreement (the "SIA" or "Stock Issuance Agreement") which authorized the issuance of a technology access fee and the future stock issuance of our common stock to Intrexon upon the achievement of designated milestones. We issued a Convertible Note in the amount of \$5,000,000 as payment of the technology access fee associated with the Oral Mucositis ECC which was payable, at our option, in cash or shares of our common stock. The convertible note, including accrued interest, was repaid in December 2015 through the issuance of 338,101 shares of our common stock.

Under the SIA, we also agreed to make certain payments to Intrexon upon our achievement of designated milestones in the form of shares of our common stock (based upon the fair market value of the shares otherwise required to be issued) unless the issuance of such shares would reasonably likely cause Intrexon to consolidate our financial statements with Intrexon's financial statements, or at our option make a cash payment to Intrexon. The Commercialization Milestone Events and amounts payable are as follows:

- (i) a one-time payment of twenty-seven million five hundred thousand United States dollars (\$27,500,000) within six (6) months of the achievement of the Regulatory Approval Milestone Event meaning receiving approval from the FDA of a New Product Application for an Oragenics Product (or equivalent regulatory action in a foreign jurisdiction);
- (ii) a one-time payment of five million United States dollars (\$5,000,000) within six (6) months of the achievement of the New Indication Milestone Event meaning receiving approval from the FDA of a Supplemental FDA Application (or an equivalent filing with another equivalent regulatory agency) which Supplemental FDA Application sought approval of an indication for use of the Oragenics Product other than the current regulatory-approved indication; and

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- (iii) a one-time payment of five million United States dollars (\$5,000,000) within six (6) months of the achievement of the New Product Milestone Event meaning receiving approval from the FDA of a New Product Application that is deemed to be a different drug product than the first Oragenics Product that was clinically pursued under the Program.

Equity Participation Right-Intrexon

Pursuant to the Stock Issuance Agreement, Intrexon was also entitled, at its election, to participate in future securities offerings by us that constitute “qualified financings” and purchase securities equal to 30% of the number of shares of common stock or other securities sold in such offering (exclusive of Intrexon’s purchase). For this purpose, a “qualified financing” means a sale of common stock or equity securities convertible into common stock in a public or private offering, raising gross proceeds of at least \$1,000,000, where the sale of shares is either registered under the Securities Act of 1933, as amended, at the time of issuance or we agree to register the resale of such shares. Intrexon waived their right to participate in the July 2012, June 2016, May 2017 and November 2017, April 2018 and July 2018 Private Placements and did not elect to participate in this offering.

Registration Rights

Intrexon Corporation. Pursuant to the Stock Issuance Agreement with Intrexon dated June 5, 2012, we granted certain registration rights to Intrexon. The registration rights consisted of “piggyback registration” rights which permit Intrexon to participate in any firm commitment underwritten offering of securities by us, subject to underwriter cutbacks and lockups. In addition, we are precluded from granting registration rights in connection with a private placement unless (i) all shares held by Intrexon are, at the time of such private placement, included on a registration statement, or (ii) we agree, in connection with such private placement, to grant Intrexon the right to include on the registration statement a number of Intrexon’s Company shares equal to one half of the number of shares to be registered on behalf of the other holders or prospective holders. Intrexon waived its registration rights in connection with the Company’s July 2012, June 2016, May 2017 and November 2017 Private Placements as well this offering.

Series A Preferred Stock Private Placement. Pursuant to the May 10, 2017 Registration Rights Agreement, we granted certain demand registration rights and piggyback registration rights with respect to the shares of our Common Stock issuable upon conversion of the Series A Preferred Stock and exercise of the Summer17 Warrants.

Services B Preferred Stock Private Placement. Pursuant to the November 8, 2017 Amended and Restated Registration Right Agreement, we granted certain demand registration rights and piggyback registration rights with respect to the shares of our Common Stock issuable upon conversion of the Series B Preferred Stock and exercise of the Fall17 Warrants. The Amended and Restated Registration Rights Agreement amended the previous registration rights agreement entered into in connection with our Series A Preferred Stock Financing in May 2017.

Listing

Our common stock is currently listed on the NYSE American under the trading symbol “OGEN.”

Transfer Agent and Registrar

The transfer agent and registrar of our common stock is Continental Stock Transfer & Trust Company, 1 State Street 30th Floor, New York, NY 10004-1561, telephone: (212) 509-4000.

Certain Anti-Takeover Provisions

Florida Law

We are not subject to the statutory anti-takeover provisions under Florida law because in our articles of incorporation we have specifically elected to opt out of both the “control-share acquisitions” (F.S. 607.0902) and the “affiliated transactions” (F.S. 607.0901) statutes. Since these anti-takeover statutes do not apply to a corporation that has specifically elected to opt out of such provisions we would not be able to invoke the protection of such statutes in the event of a hostile takeover attempt.

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Articles of Incorporation and Bylaw Provisions

Our articles of incorporation and bylaws contain provisions that could have an anti-takeover effect. These provisions include:

- authorization of the issuance of “blank check” preferred stock that could be issued by our Board of Directors without shareholder approval and that may be substantially dilutive or contain preferences or rights objectionable to an acquiror;
- the ability of the Board of Directors to amend the bylaws without shareholder approval;
- vacancies on our board may only be filled by the remaining Directors and not our shareholders; and
- requirements that only our Board, our President or holders of more than 10% of our shares can call a special meeting of shareholders.

These provisions in our articles of incorporation and bylaws could delay or discourage transactions involving an actual or potential change in control of us, including transactions in which shareholders might otherwise receive a premium for their shares over their current prices. Such provisions could also limit the ability of shareholders to approve transactions that shareholders may deem to be in their best interests and could adversely affect the price of our common stock.

Disclosure of SEC Position on Indemnification for Securities Act Liabilities

Insofar as indemnification for liabilities arising under the Securities Act may be permitted for directors, officers and persons controlling our company, we understand that it is the SEC’s opinion that such indemnification is against public policy as expressed in the Securities Act and may therefore be unenforceable.

DILUTION

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

Our net tangible book value as of September 30, 2018 was \$13.98 million, or approximately \$0.76 per share. Net tangible book value per share is equal to the amount of our total tangible assets, less total liabilities (excludes 100 shares of Series C, Non-voting, Non-Convertible Preferred Stock with a stated value of \$3,384,799), divided by the aggregate number of shares of our common stock outstanding as of September 30, 2018. Dilution in net tangible book value per share represents the difference between the public offering price per share of our common stock in this public offering and the net tangible book value per share of our common stock immediately after this offering.

After giving effect to the sale of 16,666,668 shares of our common stock and the two series of warrants to purchase up to 16,666,668 shares of common stock in this offering at the public offering price of \$0.75 per share and accompanying warrants (with the two series of warrants being exercisable at a price of \$0.75 and \$0.90 per share, respectively) and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, and excluding the proceeds, if any, from the exercise of warrants in this offering, our as adjusted net tangible book value as of September 30, 2018, would have been approximately \$25.3 million, or \$0.72 per share. This represents an immediate decrease in net tangible book value of \$0.04 per share to existing stockholders and immediate dilution in net tangible book value of \$0.03 per share to new investors purchasing our common stock and warrants in this offering at the public offering price. The following table illustrates this dilution on a per share basis:

| | | |
|--|----|------|
| Offering price per share and accompanying warrants | \$ | 0.75 |
| Net tangible book value per share as of September 30, 2018 | \$ | 0.76 |
| Decrease in net tangible book value per share attributable to new investors | \$ | 0.04 |
| As adjusted, net tangible book value per share as of September 30, 2018 after giving effect to this offering | \$ | 0.72 |
| Dilution per share to new investors in this offering | \$ | 0.03 |

The above discussion and table are based on 18,419,135 shares of our common stock outstanding as of September 30, 2018 and excludes the shares of our common stock issuable upon the exercise of the warrants offered hereby, the shares of common stock issuable upon the conversion of our outstanding preferred stock and the shares of common stock issuable upon the exercise of outstanding options and warrants, including the following securities:

- 1,812,133 shares of our Common Stock subject to outstanding options having a weighted average exercise price of \$1.88 per share;
- 197,117 shares of our Common Stock reserved for future issuance pursuant to our existing Stock Incentive Plan;
- 16,877,425 shares of our Common Stock issuable upon exercise of warrants outstanding, having a weighted average exercise price of \$1.32 per share, of which 9,505,500 shares were issued upon the exercise of warrants in October of 2018 generating proceeds of \$9,505,500;
- 941,701 shares of our Common Stock issuable upon conversion of convertible Series A Preferred stock outstanding;
- 1,320,002 shares of our Common Stock issuable upon conversion of convertible Series B Preferred stock outstanding; and
- 1,496,000 shares of our Common Stock issuable upon conversion of convertible Series D Preferred stock outstanding.

Investors that acquire additional shares of common stock through the exercise of the warrants offered hereby may experience additional dilution depending on our net tangible book value at the time of exercise.

The above illustration of dilution per share to the investors participating in this offering assumes no exercise of outstanding preferred shares or options or warrants to purchase shares of our common stock. To the extent that options, warrants or preferred shares outstanding as of September 30, 2018 or issued thereafter have been or may be exercised or converted or other shares issued, the investors purchasing shares of our common stock and warrants in this offering may experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

UNDERWRITING

We have entered into an underwriting agreement dated March 21, 2019, with H.C. Wainwright & Co., LLC as the sole book-running manager of this offering. Subject to the terms and conditions of the underwriting agreement, we have agreed to sell to the underwriter and the underwriter has agreed to purchase from us, at the public offering price less the underwriting discounts and commissions set forth on the cover page of this prospectus supplement, the number of shares of our common stock and warrants to purchase shares of our common stock as set forth opposite its name below.

| <u>Underwriter</u> | <u>Number of Shares</u> | <u>Number of Series 1 Warrants</u> | <u>Number of Series 2 Warrants</u> |
|----------------------------|-------------------------|------------------------------------|------------------------------------|
| H.C. Wainwright & Co., LLC | 16,666,668 | 8,333,334 | 8,333,334 |
| Total | 16,666,668 | 8,333,334 | 8,333,334 |

The shares of common stock and accompanying warrants to purchase shares of common stock we are offering are being offered by the underwriter subject to certain conditions specified in the underwriting agreement.

We have been advised by the underwriter that it proposes to offer the shares of common stock and warrants to purchase up to 16,666,668 shares of common stock directly to the public at the public offering price set forth on the cover page of this prospectus supplement. Any shares of common stock and accompanying warrants sold by the underwriter to securities dealers will be sold at the public offering price less a selling concession not in excess of \$0.03375 share of common stock and accompanying warrants.

The underwriter has agreed to sell 75,000 shares of common stock (and the accompanying warrants) to Dr. Frederick Telling, a director and chairman of our board, and 50,000 shares of common stock (and the accompanying warrants) to Dr. Alan Joslyn, our Chief Executive Officer and President, at the public offering price set forth on the cover page of this prospectus.

The underwriting agreement provides that the underwriter's obligation to purchase the securities we are offering is subject to conditions contained in the underwriting agreement. The underwriter is obligated to purchase and pay for all of the shares of common stock and accompanying warrants offered by this prospectus supplement.

No action has been taken by us or the underwriter that would permit a public offering of the shares of common stock and accompanying warrants in any jurisdiction where action for that purpose is required. None of the shares of common stock and accompanying warrants included in this offering may 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 sales of any of the shares of common stock and accompanying warrants 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 who receive this prospectus supplement are advised to inform themselves about and to observe any restrictions relating to this offering of the common stock and the distribution of this prospectus supplement. This prospectus supplement is neither an offer to sell nor a solicitation of any offer to buy the common stock in any jurisdiction where that would not be permitted or legal.

The underwriter has advised us that it does not intend to confirm sales to any accounts over which it exercises discretionary authority.

Underwriting Discounts, Commissions and Expenses

The following table shows the public offering price, underwriting discounts and commissions and proceeds, before expenses to us. These amounts are shown assuming both no exercise and full exercise of the underwriter's option to purchase 2,500,000 additional shares and/or Series 1 Warrants to purchase 1,250,000 shares and Series 2 Warrants to purchase 1,250,000 shares.

| | <u>Per Share and Accompanying Warrants(1)</u> | <u>Total</u> | |
|--|---|--------------------------------|----------------------------------|
| | | <u>Without Option Exercise</u> | <u>With Full Option Exercise</u> |
| Public offering price | \$ 0.7500 | \$ 12,500,001 | \$ 14,375,001 |
| Underwriting discounts and commissions | \$ 0.0563 | \$ 937,500 | \$ 1,078,125 |
| Proceeds, before expenses, to us | \$ 0.6938 | \$ 11,562,501 | \$ 13,296,876 |

- (1) The public offering price and underwriting discounts and commissions correspond to a public offering price per share of common stock of \$0.6845 and a public offering price per Series 1 Warrant and Series 2 Warrant of \$0.00925.
- (2) At the closing of this offering, the underwriter has agreed to reduce its fees by \$50,000, which amount will be paid by the Company to an independent financial advisor selected by it. The underwriting discounts and commissions set forth on the cover page of this prospectus supplement and in the table above do not take into account this closing reduction.

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We estimate the total expenses payable by us for this offering to be approximately \$1,189,314, which amount includes (i) the underwriting discount of \$937,500, (ii) a \$25,000 non-accountable expense allowance payable to the underwriter, (iii) up to \$75,000 for fees and expenses of the underwriter's legal counsel, (iv) \$10,000 for the settlement expense of the underwriter, (v) an estimated \$120,000 for fees and expenses of the Company's legal counsel and accountants, (vi) \$65,000 in New York Stock Exchange fees and expenses, (vii) other estimated expenses of \$8,314, and (viii) the \$50,000 reduction in fee being provided at closing.

Right of First Refusal

We granted the underwriter, for a period of six months from the closing of this offering, a right of first refusal to act as sole book-running manager, sole underwriter or sole placement agent for each and every future public equity offering or private placement of equity or equity-linked securities using an underwriter or placement agent by us or any of our successors or subsidiaries.

Tail

We have also agreed to a tail fee equal to the cash compensation in this offering if any investor with whom the underwriter had had substantive communications with regard to this offering during the term of its engagement provides us with further capital in a public or private offering or capital raising transaction, with certain exceptions, during the six-month period following termination of our engagement of the underwriter.

Lock-up Agreements

We and each of our directors and executive officers have entered into lock-up agreements that prevent us and them from selling any shares of our common stock or any securities convertible into or exercisable or exchangeable into share of common stock, subject to certain exceptions, for a period of 90 days, respectively, after the date of this prospectus supplement. The underwriter, in its sole discretion, may release the common stock and other securities subject to the lock-up agreements described above in whole or in part at any time. When determining whether or not to release the common stock and other securities from lock-up agreements, the underwriter will consider, among other factors, the holder's reasons for requesting the release and the number of shares of common stock or other securities for which the release is being requested. Certain limited transfers are permitted during the lock-up period if the transferee agrees to these lock-up restrictions.

Over-Allotment, Stabilization, Short Positions and Penalty Bids

In connection with this offering, the underwriter may engage in stabilizing transactions, over-allotment transactions, syndicate covering transactions and penalty bids in connection with our common stock.

- Overallotment transactions involve sales by the underwriter of shares of common stock and warrants in excess of the number of shares and warrants the underwriter is obligated to purchase. This creates a syndicate short position which may be either a covered short position or a naked short position. In a covered short position, the number of shares and warrants over-allotted by the underwriter is not greater than the number of shares and warrants that it may purchase in the overallotment option. In a naked short position, the number of shares involved is greater than the number of shares in the overallotment option. The underwriter may close out any short position by exercising its option to purchase additional shares and/or purchasing shares in the open market.
- Stabilizing transactions permit bids to purchase shares of common stock so long as the stabilizing bids do not exceed a specified maximum.
- Syndicate covering transactions involve purchases of common stock in the open market after the distribution has been completed in order to cover syndicate short positions. Such a naked short position would be closed out by buying securities in the open market. A naked short position is more likely to be created if the underwriter is concerned that there could be downward pressure on the price of the securities in the open market after pricing that could adversely affect investors who purchase in the offering.

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- Penalty bids permit the underwriter to reclaim a selling concession from a syndicate member when the securities originally sold by the syndicate member are purchased in a stabilizing or syndicate covering transaction to cover syndicate short positions.

In connection with this offering, the underwriter also may engage in passive market making transactions in our common stock in accordance with Regulation M during a period before the commencement of offers or sales of shares of our common stock in this offering and extending through the completion of the distribution. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for that security. However, if all independent bids are lowered below the passive market maker's bid that bid must then be lowered when specific purchase limits are exceeded. Passive market making may stabilize the market price of the securities at a level above that which might otherwise prevail in the open market and, if commenced, may be discontinued at any time.

Neither we nor the underwriter make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the prices of our securities. In addition, neither we nor the underwriter make any representation that the underwriter will engage in these transactions or that any transactions, once commenced, will not be discontinued without notice.

Indemnification

We have agreed to indemnify the underwriter against certain liabilities, including certain liabilities arising under the Securities Act, or to contribute to payments that the underwriter may be required to make for these liabilities.

Other Relationships

The underwriter and its respective affiliates may in the future engage in, investment banking and other commercial dealings in the ordinary course of business with us or our affiliates. The underwriter may in the future receive, customary fees and commissions for these transactions.

NYSE American Market Listing

Our stock is currently traded on The NYSE American under the symbol "OGEN." On March 18, 2019, the closing price of our common stock was \$0.96 per share.

LEGAL MATTERS

The validity of the issuance of the securities offered hereby will be passed upon for us by Shumaker, Loop & Kendrick, LLP. Certain legal matters in connection with the offering will be passed upon for the underwriter by Ellenoff Grossman & Schole LLP.

EXPERTS

The financial statements incorporated in this prospectus by reference from the Company's Annual Report on Form 10-K have been audited by Mayer Hoffman McCann P.C., an independent registered public accounting firm, as stated in their report (which report includes an explanatory paragraph relating to the Company's ability to continue as a going concern), which is incorporated herein by reference. Such financial statements have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing Mayer Hoffman McCann P.C. has no interest in the shares being registered in this filing.

WHERE YOU CAN FIND MORE INFORMATION

We are a public company and file annual, quarterly and current reports, proxy statements and other information with the Securities and Exchange Commission ("SEC"). You may read and copy any document we file at the SEC's Public Reference Room 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 room. Our SEC filings are also available to the public at the SEC's web site at <http://www.sec.gov>.

In addition, we maintain a web site that contains information regarding our company, including copies of reports, proxy statements and other information we file with the SEC. The address of our web site is www.rogenics.com. Except for the documents specifically incorporated by reference into this prospectus, information contained on our website or that can be accessed through our website does not constitute a part of this prospectus. We have included our website address only as an inactive textual reference and do not intend it to be an active link to our website.

This prospectus supplement and the accompanying prospectus are part of a registration statement on Form S-3 that we filed with the SEC registering the securities that may be offered and sold hereunder. The registration statement, including exhibits thereto, contains additional relevant information about us and these securities that, as permitted by the rules and regulations of the SEC, we have not included in this prospectus supplement or the accompanying prospectus. A copy of the registration statement can be obtained at the address set forth above. You should read the registration statement for further information about us and these securities.

INFORMATION INCORPORATED BY REFERENCE

In this document, we “incorporate by reference” certain information we file with the SEC, which means that we can disclose important information to you by referring to that information. The information incorporated by reference is considered to be a part of this prospectus supplement. Any statement contained in a document incorporated by reference herein shall be deemed to be modified or superseded for all purposes to the extent that a statement contained in this prospectus supplement or in any other subsequently filed document that is also incorporated or deemed to be incorporated by reference, modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus supplement. We incorporate by reference the documents listed below (other than, in each case, documents or information deemed to be furnished and not filed in accordance with SEC rules):

- Our Annual Report on Form 10-K for the year ended December 31, 2017, filed with the SEC on February 16, 2018;
- Our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2018, June 30, 2018 and September 30, 2018, filed with the SEC on May 15, 2018, August 13, 2018 and November 13, 2018;
- Our Current Reports on Form 8-K, filed with the SEC on January 9, 2018, January 19, 2018, April 10, 2018, May 25, 2018, May 30, 2018, June 11, 2018, June 26, 2018, July 13, 2018, July 17, 2018, August 15, 2018, September 25, 2018, October 1, 2018, October 5, 2018, October 17, 2018, December 3, 2018, December 21, 2018, February 22, 2019 and March 15, 2019.

We hereby undertake to provide without charge to each person, including any beneficial owner, to whom a copy of this prospectus supplement is delivered, upon written or oral request of any such person, a copy of any and all of the information that has been or may be incorporated by reference in this prospectus supplement, including any exhibits that are specifically incorporated by reference in such documents. Requests for such copies should be directed as follows:

Oragenics, Inc.
4902 Eisenhower Boulevard, Suite 125
Tampa, Florida 33634
Attention: Investor Relations
Phone: (813) 276-7900

PROSPECTUS



\$30,000,000

**Common Stock
Warrants
Units**

From time to time, we may offer, issue and sell up to \$30,000,000 of any combination of the securities described in this prospectus. We may also offer securities as may be issuable upon conversion, redemption, repurchase, exchange or exercise of any securities registered hereunder, including any applicable antidilution provisions. This prospectus provides you with a general description of the securities.

We will provide the specific terms of these offerings and securities in one or more supplements to this prospectus. We may also authorize one or more free writing prospectuses to be provided to you in connection with these offerings. The prospectus supplement and any related free writing prospectus may also add, update or change information contained in this prospectus. You should carefully read this prospectus, the applicable prospectus supplement and any related free writing prospectus, as well as any documents incorporated by reference, before buying any of the securities being offered.

Our common stock is listed on the NYSE MKT under the symbol "OGEN." The last reported sale price of our common stock on August 22, 2016 was \$0.87 per share. The applicable prospectus supplement will contain information, where applicable, as to any other listing, if any, on the NYSE MKT or any securities market or other exchange of the securities covered by the applicable prospectus supplement.

As of August 22, 2016, the aggregate market value of our outstanding common stock held by non-affiliates, or the public float, was approximately \$12,764,802, which was calculated based on 14,672,187 shares of our outstanding common stock held by non-affiliates and on a price of \$0.87 per share, the last reported sale price for our common stock on August 22, 2016. Pursuant to General Instruction I.B.6 of Form S-3, in no event will we sell our securities in a public primary offering with a value exceeding one-third of our public float in any 12-month period unless our public float subsequently rises to \$75.0 million or more. We have not offered any securities pursuant to General Instruction I.B.6 of Form S-3 during the 12 calendar months prior to and including the date of this prospectus.

Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading "[Risk Factors](#)" contained in the applicable prospectus supplement and any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus.

This prospectus may not be used to consummate a sale of any securities unless accompanied by a prospectus supplement.

The securities may be sold directly by us to investors, through agents designated from time to time or to or through underwriters or dealers, on a continuous or delayed basis. For additional information on the methods of sale, you should refer to the section entitled "Plan of Distribution" in this prospectus. If any agents or underwriters are involved in the sale of any securities with respect to which this prospectus is being delivered, the names of such agents or underwriters and any applicable fees, commissions, discounts and over-allotment options will be set forth in a prospectus supplement. The price to the public of such securities and the net proceeds that we expect to receive from such sale will also be set forth 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 September 7, 2016.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or SEC, utilizing a “shelf” registration process. Under this shelf registration statement, we may, from time to time, sell any combination of the securities referred to herein in one or more offerings for total gross proceeds of up to \$30,000,000. This prospectus provides you with a general description of the securities we may offer.

Until such time, if ever, as we are eligible to use General Instruction I.B.1. of Form S-3, pursuant to General Instruction I.B.6. of Form S-3, we are permitted to use the registration statement of which this prospectus forms a part to sell, via a primary offering, a maximum amount of securities equal to one-third of the aggregate market value of our outstanding voting and non-voting common equity held by non-affiliates of our company in any twelve month period.

Each time we offer a type or series of securities under this prospectus, we will provide a prospectus supplement that will contain more specific information about the terms of the offered securities. We also may authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. This prospectus, together with applicable prospectus supplements and any related free writing prospectuses, includes all material information relating to these offerings. We also may add, update or change, in the prospectus supplement and in any related free writing prospectus that we may authorize to be provided to you, any of the information contained in this prospectus or in the documents that we have incorporated by reference into this prospectus. We urge you to read carefully this prospectus, any applicable prospectus supplement and any related free writing prospectus, together with the information incorporated herein by reference as described under the section entitled “Where You Can Find Additional Information” and “Incorporation of Certain Information by Reference” in this prospectus, before buying any of the securities being offered. **THIS PROSPECTUS MAY NOT BE USED TO CONSUMMATE A SALE OF SECURITIES UNLESS IT IS ACCOMPANIED BY A PROSPECTUS SUPPLEMENT.**

You should rely only on the information that we have provided or incorporated by reference in this prospectus, any applicable prospectus supplement and any related free writing prospectus that we may authorize to be provided to you. We have not authorized any other person to provide you with different or additional information. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus that we may authorize to be provided to you. You must not rely on any unauthorized information or representation. This prospectus, any applicable supplement to this prospectus or any related free writing prospectus do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the registered securities to which they relate, nor do this prospectus, any applicable supplement to this prospectus or any related free writing prospectus constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction.

You should assume that the information appearing in this prospectus, any applicable prospectus supplement or any related free writing prospectus is accurate only as of the date on the front of the document and that any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus, any applicable prospectus supplement or any related free writing prospectus or any sale of a security. Our business, financial condition, results of operations and prospectus may have changed since those dates.

This prospectus contains and incorporates by reference market data, industry statistics and other data that have been obtained from, or compiled from, information made available by third parties. We have not independently verified their data. This prospectus and the information incorporated herein by reference 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, any applicable prospectus supplement or any related free writing prospectus are the property of their respective owners.

This prospectus contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed, or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under the section entitled “Where You Can Find Additional Information” and “Incorporation of Certain Information by Reference.”

PROSPECTUS SUMMARY

The items in the following summary are described in more detail elsewhere in this prospectus and in the documents incorporated by reference herein. This summary provides an overview of selected information and does not contain all the information you should consider before investing in our common stock. Therefore, you should read the entire prospectus and any free writing prospectus that we have authorized for use in connection with this offering carefully, including the “Risk Factors” section and other documents or information included or incorporated by reference in this prospectus before making any investment decision.

Unless otherwise mentioned or unless the context requires otherwise, all references in this prospectus to “Oragenics” the “Company,” “we,” “our” and “us” or similar references mean Oragenics, Inc. When we refer to “you,” we mean the holders of the applicable securities.

Overview

We are focused on becoming a leader in novel antibiotics against infectious disease and on developing effective treatments for oral mucositis.

Our Antibiotic Product Candidate

Members of our scientific team discovered that a certain bacterial strain produces MU1140, a molecule belonging to the novel class of antibiotics known as lantibiotics. Lantibiotics, such as MU1140, are highly modified peptide antibiotics made by a small group of Gram positive bacterial species. Approximately 60 lantibiotics have been discovered. We believe lantibiotics are generally recognized by the scientific community to be potent antibiotic agents.

In nonclinical testing, MU1140 has shown activity against all Gram positive bacteria against which it has been tested, including those responsible for a number of healthcare associated infections, or HAIs. A high percentage of hospital-acquired infections are caused by highly resistant bacteria such as methicillin-resistant *Staphylococcus aureus* (MRSA) or multidrug-resistant Gram-negative bacteria. We believe the need for novel antibiotics is increasing as a result of the growing resistance of target pathogens to existing FDA approved antibiotics on the market.

Lantibiotics have been difficult to investigate for their clinical usefulness as a therapeutic agent in the treatment of infectious diseases due to a general inability to produce or synthesize sufficient quantities of pure amounts of these molecules. Traditional fermentation methods can only produce minute amounts of the lantibiotic.

In June 2012, we entered into the Lantibiotic Exclusive Channel Collaboration agreement (“Lantibiotic ECC”) with Intrexon Corporation (“Intrexon”) for the development and commercialization of the native strain of MU1140 and related homologs using Intrexon’s advanced transgene and cell engineering platforms. Through our work with Intrexon, we have been able to produce a significant increase in the fermentation titer of MU1140 compared to standard fermentation methods and have discovered a new purification process for MU1140. Our work with Intrexon has generated a substantial number of homologs of MU1140, and we are continuing our research and development and collaboration efforts with Intrexon to develop potential derivatives of the MU1140 molecule using genetically modified bacteria.

In our pre-clinical studies to support a potential Investigational New Drug (“IND”) filing with the FDA, we tested a total of six homologs of MU1140 for certain compound characteristics, including but not limited to: drug activity (based on minimum inhibitory concentration or “MIC”) equal or better than “standard of care” drugs against certain drug-resistant bacteria, safety, toxicity, stability, and manufacturability. The study specifically evaluated homolog efficacy in relation to survival, measurable amounts of *Clostridium difficile* (*C. diff*) colony forming units, and toxin levels. Three homologs demonstrated promising results with one compound, achieving a 100% survival rate throughout the entire study in contrast to an approximately 30% survival rate for the vancomycin positive control. We selected this compound as our initial lead candidate, OG253, and had a pre IND meeting with the FDA in November of 2015. Since that time we continued our pre-clinical research and development activities on OG253. We also continued our ongoing research and development activities with Intrexon focused on the identification of active lantibiotic homologs with favorable efficacy, safety and drug delivery profiles that can be moved forward in a timely, cost efficient and expeditious manner, which we refer to as second generation homologs. From a group of second generation lantibiotic homologs, we identified a new candidate for treatment of *C. diff*, OG716, which was orally active and exhibited positive results in an animal model. This new lantibiotic candidate showed promising efficacy in reducing clinically relevant *C. diff* infections as measured by increased animal survival and decreased relapse as well as reduced

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production of *C. diff* spores when compared to a vancomycin positive control. As a result of our work on this second generation homolog, we plan to begin IND enabling studies on OG716 (instead of our prior candidate, OG253) toward the goal of an initial IND filing by the end of 2017.

Future work with Intrexon is expected to include evaluation of a large lantibiotic library against a variety of infections including those related to methicillin resistant staphylococcus aureus (MRSA) and vancomycin-resistant enterococci (VRE). The timing of the filing of an IND as well as future work on other second generation homologs, are subject to our having sufficient available capital given all of our anticipated needs and expected requirements in connection with our ongoing research and development initiatives.

Our Oral Mucositis Product Candidate

In June of 2015, we entered into a worldwide Exclusive Channel Collaboration Agreement (“Oral Mucositis ECC”) with Intrexon and Intrexon Actobiotics NV, a wholly-owned subsidiary of Intrexon, pursuant to which we obtained certain exclusive rights to AG013 as a potential treatment of oral mucositis, or OM, which we intend to continue to develop.

In a Phase 1b clinical trial in 25 cancer patients with OM, AG013 was safe and well tolerated. Data published in the journal Cancer showed a 35% reduction of the duration of ulcerative OM in the AG013-treated patients versus the placebo-treated patients. Furthermore, close to 30% of the patients treated with AG013 were full responders while all placebo-treated patients developed ulcerative OM. Additionally, in a Phase 1 pharmacokinetic (PK) study in 10 healthy volunteers, AG013 bacteria adhered to the buccal mucosa and actively secrete protein locally, resulting in homogeneous exposure of the entire mucosal surface up to 24 hours after administration of the rinse. During the first quarter of 2016, we conducted a confirmatory animal study on AG013. We will use the results from that confirmatory study as we move towards a meeting with the Food and Drug Administration with the goal of launching a Phase 2 trial on AG013 for the treatment of oral mucositis in head and neck cancer patients. AG013 has been granted Orphan Drug status in the European Union and we believe it may be eligible for Biologic License Application exclusivity as well as Fast Track designation with the United States Food and Drug Administration (the “FDA”).

We are currently in discussions with the FDA to determine what additional information would be required prior to the initiation of a Phase 2 clinical trial.

Recent Developments

Completed Private Placement. On June 30, 2016, the Company closed on a private placement of 9,045,679 shares of its common stock to three accredited investors. The investors in the private placement included current Company shareholders, Koski Family Limited Partnership and Intrexon Corporation, as well as the Company’s Chairman, Dr. Frederick Telling. Approximately \$4.667 million was raised of which \$2,000,000 is payable by the Koski Family Limited Partnership on or before September 30, 2016. The private placement was approved by the Company’s audit committee and disinterested directors.

Completed Sale of Consumer Probiotic Business. On June 27, 2016, the Company completed the sale of its consumer probiotics business to ProBiora Health, LLC, (“ProBiora Health”) an entity owned by Ms. Christine L. Koski, a director at the time of the transaction. The purchase price was \$1,700,000 in cash of which \$1,250,000 was paid at closing and \$450,000 was payable on or before July 31, 2016. The note accrued interest at the rate of 1% per annum and was paid in full on July 29, 2016. In connection with the sale ProBiora Health assumed certain liabilities. ProBiora Health is obligated to pay the Company contingent consideration annually over a 10 year period based on a percentage of sales of products using the Purchased Assets, with a maximum obligation to the Company of \$2,000,000.

The transaction was approved by a special committee of the Company’s board of directors consisting solely of disinterested directors and Griffin Securities rendered a fairness opinion in connection with the transaction. Ms. Koski, a director since 2009, and a significant shareholder of the Company through the Koski Family Limited Partnership, resigned as a director of the Company upon completion of the sale.

Retained Chief Executive Officer. On June 6, 2016, Alan Joslyn became the Company’s new President and Chief Executive Officer, as well as serving on the Company’s Board of Directors.

Received NYSE Listing Notification and Subsequently Obtained Approval of Plan to Regain Compliance. On May 10, 2016, we received notification from the NYSE MKT LLC that we are not in compliance with certain NYSE MKT continued listing standards relating to stockholders’ equity as of December 31, 2015. Specifically, we are not

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in compliance with Section 1003(a)(iii) (requiring stockholders' equity of \$6.0 million or more if we reported losses from continuing operations and/or net losses in our five most recent fiscal years). As of December 31, 2015, we had stockholders' equity of \$4.7 million. The Company was again notified on June 21, 2016 of non-compliance with the stockholders' equity continued listing standard as set forth in Section 1003(a)(ii). We were required to submit a plan to the NYSE MKT by June 10, 2016 advising of actions we planned to take to regain compliance with the continued listing standards by November 10, 2017.

We submitted a plan by the June 10, 2016 deadline and were notified that NYSE Regulation has accepted the Company's plan to regain compliance with the NYSE MKT exchange's continued listing standards set forth in Sections 1003(a)(ii) and 1003(a)(iii) of the NYSE MKT Company Guide (the "Company Guide") by November 10, 2017, subject to periodic review by the NYSE MKT for compliance with the initiatives set forth in the plan. If the Company is not in compliance with the continued listing standards by November 10, 2017, or if it does not make progress consistent with the plan during the plan period, the NYSE Regulation staff may initiate delisting proceedings as appropriate.

On July 14, 2016, we were notified that NYSE Regulation had accepted our plan to regain compliance with the exchange's continued listing standards set forth in Sections 1003(a)(ii) and 1003(a)(iii) of the NYSE MKT Company Guide (the "Company Guide") by November 10, 2017, subject to periodic review by the NYSE MKT for compliance with the initiatives set forth in the plan. If we are not in compliance with the continued listing standards by November 10, 2017, or if we do not make progress consistent with the plan during the plan period, the NYSE Regulation staff may initiate delisting proceedings as appropriate.

The NYSE MKT notice has no immediate impact on the listing of the Company's common stock, which will continue to trade on the NYSE MKT exchange under the symbol "OGEN.BC" subject to periodic review by the NYSE MKT. The listing of the Company's common stock on the NYSE MKT is being continued pursuant to an extension during the plan period.

Other Technologies.

We out-licensed our weight loss product candidate in December 2013 to, LPThera LLC and LPThera LLC continues to work to develop a product for commercial use.

Corporate and Other Information

We were incorporated in November 1996 and commenced operations in 1999. We consummated our initial public offering in June 2003. We have devoted substantially all of our available resources to the commercialization of our products as well as our discovery efforts comprising research and development, clinical trials for our product candidates, protection of our intellectual property and the general and administrative support of these operations. We have generated limited revenues from grants and product sales through June 30, 2016, and have principally funded our operations through the sale of debt and equity securities, including the exercise of warrants issued in connection with these financing transactions.

As of June 30, 2016, we had an accumulated deficit of \$90,031,468 and we have yet to achieve profitability. We incurred net losses of \$2,375,500 and \$7,628,248 for the six months ended June 30, 2016 and 2015, respectively, and \$11,711,333 and \$5,789,519 for the years ended December 31, 2015 and 2014, respectively. We expect to incur significant and increasing operating losses for the foreseeable future as we seek to advance our product candidates through preclinical testing and clinical trials to ultimately obtain regulatory approval and eventual commercialization. We will need to raise additional capital. Adequate additional funding may not be available to us on acceptable terms, or at all. We expect that research and development expenses will increase along with general and administrative costs, as we seek to grow and continue to operate our business. There can be no assurance that additional capital will be available to us on acceptable terms, if at all.

Our executive office is located at, 4902 Eisenhower Boulevard, Suite 125 Tampa, Florida, 33634 and our research facilities are located at 13700 Progress Boulevard, Alachua, Florida 32615. Our telephone number is (813) 286-7900 and our website is <http://www.oragenics.com>. Information on, or that can be accessed through, our website is not part of this prospectus and should not be relied on in connection with this offering.

For a complete description of our business, financial condition, results of operations and other important information, we refer you to our filings with the Securities and Exchange Commission (the "SEC") that are incorporated by reference in this prospectus, including our Annual Report on Form 10-K for the year ended December 31, 2015. For instructions on how to find copies of these documents, see "Where You Can Find Additional Information" and "Incorporation of Certain Information by Reference."

THE OFFERING

We may offer shares of our common stock, warrant shares of our common stock to purchase, either individually or in combination, and/or units consisting of some or all of such securities for total gross proceeds of up to \$30.0 million, from time to time under this prospectus, together with the applicable prospectus supplement and any related free writing prospectus, at prices and on terms to be determined by market conditions at the time of any offering. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities under this prospectus, we will provide a prospectus supplement that will describe the specific amounts, prices and other important terms of the securities being offered.

We may sell the securities directly to investors or to or through agents, underwriters or dealers. We, and our agents or underwriters, reserve the right to accept or reject all or part of any proposed purchase of securities. Each prospectus supplement will set forth the names of any underwriters, dealers or agents involved in the sale of securities described in that prospectus supplement and any applicable fee, commission or discount arrangements with them.

RISK FACTORS

Investing in our securities involves a high degree of risk. You should carefully review the risks and uncertainties described under the heading “Risk Factors” contained in the applicable prospectus supplement and any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus, before deciding whether to purchase any of the securities being registered pursuant to the registration statement of which this prospectus is a part. Each of the risk factors could adversely affect our business, operating results and financial condition, as well as adversely affect the value of an investment in our securities, and the occurrence of any of these risks might cause you to lose all or part of your investment. Moreover, the risks described are not the only ones that we face. Additional risks not presently known to us or that we currently believe are immaterial may also significantly impair our business operations.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference in this prospectus contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, which we refer to as the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, which we refer to as the Exchange Act. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performances or achievements expressed or implied by the forward-looking statements. Forward-looking statements include statements about our current views with respect to our business strategy, business plan and research and development activities, our future financial results and other future events.

In some cases, you can identify forward-looking statements by terms such as “may,” “will,” “should,” “expect,” “plan,” “anticipate,” “believe,” “estimate,” “predict,” “future,” “intend” or “certain” or the negative of these terms and similar expressions intended to identify forward-looking statements. Discussions containing these forward-looking statements may be found, among other places, in the “Business” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” sections incorporated by reference from our most recent Annual Report on Form 10-K and from our most recent Quarterly Reports on Form 10-Q, as well as any amendments thereto reflected in subsequent filings with the SEC. Forward-looking statements reflect our current views with respect to future events, are based on assumptions and are subject to risks, uncertainties and other important factors. We discuss many of these risks, uncertainties and other important factors in greater detail under the heading “Risk Factors” contained in our most recent Annual Report on Form 10-K and in our most recent Quarterly Report on Form 10-Q, as well as any amendments thereto reflected in subsequent filings with the SEC. Given these risks, uncertainties and other important factors, you should not place undue reliance on these forward-looking statements. Also, these forward-looking statements represent our estimates and assumptions only as of the date such forward-looking statements are made. You should carefully read this prospectus, any applicable supplement to this prospectus and any related free writing prospectus, together with the information incorporated herein by reference as described under the section entitled “Where You Can Find Additional Information,” and “Information Incorporated by Reference” completely and with the understanding that our actual future results may be materially different from what we expect. We can give no assurances that any of the events anticipated by the forward-looking statements will occur or, if any of them do, what impact they will have on our results of operations and financial condition.

We caution investors that any forward-looking statements presented in this prospectus or the documents incorporated by reference, or those which we may make orally or in writing from time to time, are based on our beliefs and assumptions, as well as information currently available to us. Such statements are based on assumptions and the actual outcome will be affected by known and unknown risks, trends, uncertainties and factors that are beyond our control or ability to predict. Although we believe that our assumptions are reasonable, they are not guarantees of future performance and some will inevitably prove to be incorrect. As a result, our actual future results can be expected to differ from our expectations, and those differences may be material. Accordingly, investors should use caution in relying on past forward-looking statements, which are based on known results and trends at the time they are made, to anticipate future results or trends.

Some of the risks and uncertainties that may cause our actual results, performance or achievements to differ materially from those expressed or implied by forward-looking statements include the following:

- we have incurred significant operating losses since our inception and cannot assure you that we will increase revenues or achieve profitability;
- an inability to obtain the capital necessary to fund our operations and research and development activities;
- if we raise additional capital it may be on terms that result in substantial dilution to our existing shareholders;
- success, timing and expenses of our collaboration efforts with Intrexon and expected clinical trials;
- a failure to expand our research activities with Intrexon relating to lantibiotics for infectious diseases or for oral mucositis;
- our inability to achieve success in our identification of homologs or the nonclinical testing of our lantibiotic product candidates;

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- We are subject to extensive and costly regulation by the Food and Drug Administration, which must approve our product candidates in development and could restrict or delay the future commercialization of certain of our product candidates.;
- a failure of our product candidates to be demonstrably safe and effective;
- a failure to obtain regulatory approval for our products or to comply with ongoing regulatory requirements;
- a lack of acceptance of our product candidates in the marketplace;
- we may be unable to achieve commercial viability and acceptance of our proposed product candidates;
- we may be unable to successfully operate internationally;
- we may be unable to improve upon, protect and/or enforce our intellectual property;
- we may be unable to enter into strategic collaborations or partnerships for the development, commercialization, manufacturing and distribution of our proposed product candidates or maintain strategic collaborations or partnerships;
- a failure by us to become or remain profitable;
- a loss of any of our key scientists or management personnel;
- we may be adversely impacted by any significant broad-based financial crises and its impact on consumers, retailers and equity and debt markets as well as our inability to obtain required additional funding to conduct our business;
- we are subject to significant competition.; and
- as a public company, we must implement additional and expensive finance and accounting systems, procedures and controls as we grow our business and organization to satisfy reporting requirements, which add to our costs and require additional management time and resources.

This prospectus and all subsequent written and oral forward-looking statements attributable to us or any person acting on our behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section. We do not undertake any obligation to release publicly any revisions to our forward-looking statements to reflect events or circumstances after the dates that such statements are made.

For more information on the uncertainty of forward-looking statements, see “Risk Factors” in our Annual Reports on Form 10-K and our Quarterly Reports on Form 10-Q and any applicable prospectus supplement.

Except as required by law, we assume no obligation to update any forward-looking statements publicly, or to update the reasons why actual results could differ materially from those anticipated in any forward-looking statements, even if new information becomes available in the future.

USE OF PROCEEDS

Except as described in any prospectus supplement or in any related free writing prospectus that we may authorize to be provided to you, we currently intend to use the net proceeds from the sale of the securities offered hereunder for our ongoing clinical development of lantibiotics, clinical trials of our oral mucositis product candidate, AG013 and for general corporate purposes, including research and development activities for our other product candidates and any future product candidates that we may develop or acquire, as well as for general and administrative costs. In addition, we may use a portion of the net proceeds for licensing or acquiring intellectual property to incorporate into our products and product candidates or our research and development programs. We may also use a portion of the net proceeds to in-license, acquire or invest in complementary businesses or products; however, we have no current commitments or obligations to do so.

The amounts and timing of our actual expenditures will depend on numerous factors, including our development and commercialization efforts, as well as the amount of cash used in our operations. We therefore cannot estimate with certainty the amount of net proceeds to be used for the purposes described above. We may find it necessary or advisable to use the net proceeds for other purposes, and we will have broad discretion in the application of the net proceeds. Pending the uses described above, we plan to invest the net proceeds from this offering in short-term, investment-grade, interest-bearing securities.

DIVIDEND POLICY

We have never paid cash dividends on our common stock. Moreover, we do not anticipate paying periodic cash dividends on our common stock for the foreseeable future. We intend to use all available cash and liquid assets in the operation and growth of our business. 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 our board of directors deems relevant.

DESCRIPTION OF CAPITAL STOCK

The following descriptions are summaries of the material terms that are included in our amended and restated articles of incorporation (as amended) and our bylaws (as amended) as well as the specific agreements such descriptions relate to. This summary is qualified in its entirety by the specific terms and provisions contained in our restated articles of incorporation, bylaws and the specific agreements described herein, copies of which we have filed as exhibits to the registration statement of which this prospectus is a part, and by the provisions of applicable law.

Overview

Authorized Capital Stock

Our authorized capital stock consists of 100,000,000 shares of common stock, par value \$0.001, and 20,000,000 shares of preferred stock, without par value. As of August 22, 2016, there were 49,114,219 shares of our common stock issued and outstanding and no shares of our preferred stock issued and outstanding.

Authorized but Unissued Capital Stock

Florida law does not require shareholder approval for any issuance of authorized shares other than in connection with certain mergers to which we may be a party. These additional shares may be used for a variety of corporate purposes, including future public offerings to raise additional capital or to facilitate corporate acquisitions.

Common Stock

Voting

The holders of our common stock are entitled to one vote for each share held of record on all matters submitted to a vote of the shareholders. Approval of an amendment of our articles of incorporation, a merger, a share exchange, a sale of all our property or dissolution must be approved by a majority of all votes entitled to be cast. Such votes may be cast in person or by proxy as provided in Article I Section 8 of our bylaws.

Distributions

Our Board of Directors, subject to any restrictions contained in (i) the Florida Business Corporation Act, or FBCA; or (ii) our amended and restated articles of incorporation, as amended, or Articles of Incorporation, may make distributions upon our securities. Distributions may be paid in cash, in property, or in our securities.

We have not declared or paid any distributions on our common stock. We presently intend to retain our future earnings, if any, to fund the development and growth of our business and, therefore, do not have plans to pay any dividends in the foreseeable future.

Other Rights

Upon our liquidation, dissolution or winding-up, after payment in full of our liabilities and the amounts required to be paid to holders of any outstanding shares of preferred stock, if any, all holders of our common stock will be entitled to receive a pro rata distribution of all of our assets and funds legally available for distribution.

No shares of our common stock are subject to redemption or have preemptive rights to purchase additional shares of our common stock or any of our other securities.

Preferred Stock

Our Board of Directors has the authority, without action by our shareholders, to designate and issue up to 20,000,000 shares of preferred stock in one or more series or classes and to designate the rights, preferences and privileges of each series or class, which may be greater than the rights of our common stock. We do not have any shares of preferred stock either designated or outstanding. It is not possible to state the actual effect of the issuance of any shares of preferred stock upon the rights of holders of our common stock until our Board of Directors determines the specific rights of the holders of the preferred stock. However, the effects might include:

- restricting dividends on our common stock;

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- diluting the voting power of our common stock;
- impairing liquidation rights of our common stock; or
- delaying or preventing a change in control of us without further action by our shareholders.

The Board of Directors' authority to issue preferred stock without shareholder approval could make it more difficult for a third-party to acquire control of our company, and could discourage such attempt. We have no present plans to issue any shares of preferred stock.

Options and Warrants

As of the date of this prospectus there were 175,584 shares of common stock issuable upon exercise of warrants to investors, 1,797,698 shares issuable upon exercise of options outstanding and an additional 124,840 shares available for option grants under our 2012 Equity Incentive Plan. The issuance of shares of our common stock under our 2012 Equity Incentive Plan is covered by Form S-8 registration statements we filed with the Securities and Exchange Commission, or SEC, and upon exercise of the options, such shares may be resold into the market. We have also issued shares of common stock and warrants in connection with previous private placements. Such shares are available for resale as well as certain of the shares of common stock issuable upon exercise of the warrants. We have also issued shares of our common stock in the private placement and financing transaction, which are deemed to be "restricted securities," as that term is defined in Rule 144 promulgated under the Securities Act of 1933, as amended, or Securities Act, and such shares may be resold pursuant to the provisions of Rule 144. For example, on June 30, 2016 we issued 9,045,679 restricted shares of our common stock to the KFLP, Intrexon and our Chairman as part of a private placement. The resale of shares acquired from us in private transactions could cause our stock price to decline significantly.

Contingent Share Issuance-Intrexon

On June 5, 2012, pursuant to the Stock Issuance Agreement between the Company and Intrexon Corporation ("Intrexon"), we issued to Intrexon 4,392,425 shares of our common stock as a technology access fee, in consideration for the execution and delivery of the Exclusive Channel Collaboration Agreement we simultaneously entered into with Intrexon.

Under the Stock Issuance Agreement, we also agreed to make certain payments to Intrexon upon our achievement of designated milestones in the form of shares of our Common Stock or at our option make a cash payment to Intrexon (based upon the fair market value of the shares otherwise required to be issued). The milestone events and amounts payable are as follows: (i) filing of the first Investigational New Drug application with the U.S. Food and Drug Administration that number of shares of common stock equal to the number of shares of common stock comprising 1.0% of the Base Shares; (ii) upon the dosing of the first patient in the first Phase 2 clinical study, that number of shares equal to the number of shares of common stock comprising 1.5% of the Base Shares; (iii) upon the dosing of the first patient in the first Phase 3 clinical study, that number of shares of common stock equal to the number of shares of common stock comprising 2% of the Base Shares; (iv) upon the filing of the first New Drug Application ("NDA") or Biologics License Application ("BLA") with the U.S. Food and Drug Administration for a Company Product, or alternatively the filing of the first equivalent regulatory filing with a foreign regulatory agency, that number of shares of common stock equal to the number of shares of common stock comprising 2.5% of the Base Shares; and (v) upon the granting of the first regulatory approval of an Orogenics Product, that number of shares of common stock (equal to the number of shares of common stock comprising 3% of the Base Shares).

Base Shares is defined in the Stock Issuance Agreement to mean (i) the number of shares of our common stock together with any securities or instruments convertible or exercisable for shares of common stock issued and outstanding at the time of the relevant Milestone Event, (ii) minus any shares issuable upon conversion of capital inducement securities. Capital Inducement Securities is defined in the Stock Issuance Agreement to mean warrants or other convertible securities of the Company issued to investors in connection with a debt or equity investment in the Company that are issued in addition to the primary investment securities and in an amount not to exceed 10% of the overall number of shares issued in the investment (on an as-converted to common stock basis).

On June 9, 2015, we entered into an ECC with Intrexon and Actobiotics, a wholly-owned subsidiary of Intrexon, through which we intend to research, develop and commercialize products, including the continued development

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and commercialization of AG013, for use in the treatment of oral mucositis in humans and/or the administration to humans of a trefoil factor via genetically modified bacteria (including *L. lactis*) for the treatment of diseases and conditions of the oral cavity, throat, and esophagus, but, in any case, excluding the delivery of anti-cancer effectors for the purpose of treatment or prophylaxis of cancer (collectively, the “Program”). Contemporaneously with the ECC, we and Intrexon also entered into a Stock Issuance Agreement (the “SIA”) which authorized the issuance of the Technology Access Fee and the future stock issuance of our Common Stock to Intrexon upon the achievement of designated milestones. We issued a Convertible Note in the amount of \$5,000,000 as payment of the technology access fee associated with the Oral Mucositis ECC which was payable, at our option, in cash or shares of our common stock.

Under the SIA, we also agreed to make certain payments to Intrexon upon our achievement of designated milestones in the form of shares of our Common Stock (based upon the fair market value of the shares otherwise required to be issued) unless the issuance of such shares would reasonably likely cause Intrexon to consolidate our financial statements with Intrexon’s financial statements, or at our option make a cash payment to Intrexon. The Commercialization Milestone Events and amounts payable are as follows:

- (i) two million United States dollars (\$2,000,000) within thirty (30) days of the first instance of the achievement of the Phase 2 Milestone Event meaning the first dosing of a patient by or on our behalf, or our Affiliate or permitted sublicensee, in a Phase 2 clinical trial, whether such occurs in the United States of America under the jurisdiction of the FDA or elsewhere under the jurisdiction of a foreign regulatory agency, for each different Orogenics Product;
- (ii) five million United States dollars (\$5,000,000) within thirty (30) days of the first instance of the achievement of the Phase 2b/3 Milestone Event meaning meeting of the primary endpoint by or on our behalf, or our Affiliate or permitted sublicensee of Orogenics, in a Phase 3 clinical trial, whether such occurs in the United States of America under the jurisdiction of the FDA or elsewhere under the jurisdiction of a foreign regulatory agency, for each different Orogenics Product;
- (iii) five million United States dollars (\$5,000,000) within thirty (30) days of the first instance of the achievement of the Regulatory Approval Application Milestone Event for each different Orogenics Product which Regulatory Approval Application Milestone Event meaning for a given Orogenics Product, the first to occur of (a) the filing by us, our Affiliate, or a permitted sublicensee thereof, of a FDA New Drug Application or a Biologics License Application with the FDA seeking approval of such Orogenics Product, or (b) the filing of an equivalent approval or marketing application for such Orogenics Product with an equivalent regulatory authority in a foreign jurisdiction;
- (iv) ten million United States dollars (\$10,000,000) within thirty (30) days of the first instance of the achievement of the Approval Milestone Event for each different Orogenics Product which Approval Milestone Event meaning the first to occur of (a) the First Commercial Sale of an Orogenics Product anywhere in the Territory, or (b) 90th day after the approval of a FDA New Drug Application for an Orogenics Product by the FDA or equivalent regulatory action in a foreign jurisdiction;
- (v) We shall pay Intrexon a milestone payment of five million United States dollars (\$5,000,000) within thirty (30) days of the first instance of the achievement of the New Indication Milestone Event meaning the filing by or on our behalf, our Affiliate, or a permitted sublicensee a Supplemental FDA Application with the FDA or with another equivalent regulatory agency seeking approval of an indication for use of the product AG013 other than the current regulatory-approved indication; and
- (vi) We shall pay Intrexon a milestone payment of five million United States dollars (\$5,000,000) within thirty (30) days of the first instance of the achievement of the New Product Milestone Event meaning the filing of a regulatory package filed with the FDA or with another equivalent regulatory agency by or on our behalf, our Affiliate, or a permitted sublicensee, that is deemed (according to relevant FDA guideline) to be a different drug product than AG013.

Equity Participation Right-Intrexon

Pursuant to the Stock issuance Agreement, Intrexon was also entitled, at its election, to participate in future securities offerings by us that constitute “qualified financings” and purchase securities equal to 30% of the number

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of shares of common stock or other securities sold in such offering (exclusive of Intrexon's purchase). For this purpose, a "qualified financing" means a sale of common stock or equity securities convertible into common stock in a public or private offering, raising gross proceeds of at least \$1,000,000, where the sale of shares is either registered under the Securities Act of 1933, as amended, at the time of issuance or we agree to register the resale of such shares. Intrexon waived their right to participate in the July 2012 and June 2016 Private Placements.

Registration Rights

Intrexon Corporation. Pursuant to the Stock Issuance Agreement, we granted certain registration rights to Intrexon. The registration rights consisted of "piggyback registration" rights which permit Intrexon to participate in any firm commitment underwritten offering of securities by us, subject to underwriter cutbacks and lockups. In addition, we are precluded from granting registration rights in connection with a private placement unless (i) all shares held by Intrexon are, at the time of such private placement, included on a registration statement, or (ii) we agree, in connection with such private placement, to grant Intrexon the right to include on the registration statement a number of Intrexon's Company shares equal to one half of the number of shares to be registered on behalf of the other holders or prospective holders. Intrexon waived its registration rights in connection with the Company's July 2012 and June 2016 Private Placements.

Certain Anti-Takeover Provisions

Florida Law

We are not subject to the statutory anti-takeover provisions under Florida law because in our articles of incorporation we have specifically elected to opt out of both the "control-share acquisitions" (F.S. 607.0902) and the "affiliated transactions" (F.S. 607.0901) statutes. Since these anti-takeover statutes do not apply to a corporation that has specifically elected to opt out of such provisions we would not be able to invoke the protection of such statutes in the event of a hostile takeover attempt.

Articles of Incorporation and Bylaw Provisions

Our articles of incorporation and bylaws contain provisions that could have an anti-takeover effect. These provisions include

- authorization of the issuance of "blank check" preferred stock that could be issued by our Board of Directors without shareholder approval and that may be substantially dilutive or contain preferences or rights objectionable to an acquirer;
- the ability of the Board of Directors to amend the bylaws without shareholder approval;
- vacancies on our board may only be filled by the remaining Directors and not our shareholders; and
- requirements that only our Board, our President or holders of more than 10% of our shares can call a special meeting of shareholders.

These provisions in our articles of incorporation and bylaws could delay or discourage transactions involving an actual or potential change in control of us, including transactions in which shareholders might otherwise receive a premium for their shares over their current prices. Such provisions could also limit the ability of shareholders to approve transactions that shareholders may deem to be in their best interests and could adversely affect the price of our common stock.

Listing of Common Stock

Our common stock is currently listed on the NYSE MKT under the trading symbol "OGEN."

Transfer Agent and Registrar

The transfer agent and registrar of our common stock is Continental Stock Transfer & Trust Company, 17 Battery Place, New York, New York 10004, telephone: (212) 509-4000.

DESCRIPTION OF WARRANTS

The following description, together with the additional information that we include in any applicable prospectus supplement and in any related free writing prospectus that we may authorize to be distributed to you, summarizes the material terms and provisions of the warrants that we may offer under this prospectus, which may be issued in one or more series. Warrants may be offered independently or in combination with other securities offered by any prospectus supplement. While the terms we have summarized below will apply generally to any warrants that we may offer under this prospectus, we will describe the particular terms of any series of warrants in more detail in the applicable prospectus supplement. The following description of warrants will apply to the warrants offered by this prospectus unless we provide otherwise in the applicable prospectus supplement. The applicable prospectus supplement for a particular series of warrants may specify different or additional terms.

Any warrants issued under this prospectus may be evidenced by warrant certificates. Warrants also may be issued under an applicable warrant agreement that we enter into with a warrant agent. We will indicate the name and address of the warrant agent, if applicable, in the prospectus supplement relating to the particular series of warrants being offered.

We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of warrant and/or the warrant agreement and warrant certificate, as applicable, that contain the terms of the particular series of warrants we are offering, and any supplemental agreements, before the issuance of such warrants. The following description summarizes the material terms and provisions of the warrants and is subject to, and qualified in its entirety by reference to, all the provisions of the form of warrant and/or the warrant agreement and warrant certificate, as applicable, and any supplemental agreements applicable to a particular series of warrants that we may offer under this prospectus. We urge you to read the applicable prospectus supplement related to the particular series of warrants that we may offer under this prospectus, as well as any related free writing prospectuses, and the complete form of warrant and/or the warrant agreement and warrant certificate, as applicable, and any supplemental agreements, that contain the terms of the warrants.

General

We will describe in the applicable prospectus supplement the terms of the series of warrants being offered, 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;
- 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;
- a discussion of any material or special U.S. federal income tax considerations 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: in the case of warrants to purchase common stock or preferred stock, 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. The warrants may be exercised as set forth in the prospectus supplement relating to the warrants offered. Unless we otherwise specify in the applicable prospectus supplement, warrants may be exercised at any time up to the close of business on the expiration date set forth in the prospectus supplement relating to the warrants offered thereby. After the close of business on the expiration date, unexercised warrants will become void.

Upon receipt of payment and the warrant or warrant certificate, as applicable, properly completed and duly executed at the corporate trust office of the warrant agent, if any, or any other office, including ours, indicated in the prospectus supplement, we will, as soon as practicable, issue and deliver the securities purchasable upon such exercise. If less than all of the warrants (or the warrants represented by such warrant certificate) are exercised, a new warrant or a new warrant certificate, as applicable, will be issued for the remaining warrants.

Governing Law

Unless we otherwise specify in the applicable prospectus supplement, the warrants and any warrant agreements will be governed by and construed in accordance with the laws of the State of Florida.

Enforceability of Rights by Holders of Warrants

Each warrant agent, if any, 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 UNITS

Units

We may issue units consisting of any combination of our common stock and warrants. We will issue each unit so that the holder of the unit is also the holder of each security included in the unit. As a result, 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.

The summary below and that contained in any prospectus supplement is qualified in its entirety by reference to all of the provisions of the unit agreement and/or unit certificate, and depositary arrangements, if applicable. We urge you to read the applicable prospectus supplements and any related free writing prospectuses related to the units that we may offer under this prospectus, as well as the complete unit agreement and/or unit certificate, and depositary arrangements, as applicable, that contain the terms of the units.

We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of unit agreement and/or unit certificate, and depositary arrangements, as applicable, that contain the terms of the particular series of units we are offering, and any supplemental agreements, before the issuance of such units.

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

- 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 for the issuance, payment, settlement, transfer, or exchange of the units or of the securities composing the units;
- whether the units will be issued in fully registered or global form; and
- any other terms of the units.

The applicable provisions described in this section, as well as those described under “Common Stock” and “Warrants” above, will apply to each unit and to each security included in each unit, respectively

PLAN OF DISTRIBUTION

We may sell the securities covered hereby from time to time pursuant to underwritten public offerings, direct sales to the public, negotiated transactions, block trades or a combination of these methods. A distribution of the securities offered by this prospectus may also be effected through the issuance of derivative securities, including without limitation, warrants and subscriptions. We may sell the securities to or through underwriters or dealers, through one or more agents, or directly to one or more purchasers. 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 time of sale;
- at prices related to such prevailing market prices;
- at varying prices determined at the time of sale; or
- at negotiated prices.

A prospectus supplement or supplements will describe the terms of the offering of the securities, including:

- the name or names of the underwriters, dealers or agents participating in the offering, if any;
- the purchase price of the securities sold by us to any underwriter or dealer and the net proceeds we expect to receive from the offering;
- any over-allotment options under which underwriters may purchase additional securities from us;
- any agency fees or underwriting discounts or commissions and other items constituting agents' or underwriters' compensation;
- any public offering price;
- any discounts or concessions allowed or reallocated or paid to dealers; and
- any securities exchange or market on which the securities may be listed.

Only the agents or underwriters named in each prospectus supplement will be agents or underwriters in connection with the securities offered by a prospectus supplement.

Offers to purchase the securities being offered by this prospectus may be solicited directly. Agents may also be designated to solicit offers to purchase the securities from time to time. Any agent involved in the offer or sale of our securities will be identified in a prospectus supplement. Unless the prospectus supplement states otherwise, our agent will act on a best-efforts basis for the period of its appointment.

If a dealer is utilized in the sale of the securities being offered by this prospectus, the securities will be sold to the dealer, as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale.

If an underwriter is utilized in the sale of the securities being offered by this prospectus, an underwriting agreement will be executed with the underwriter at the time of sale and the name of any underwriter will be provided in the prospectus supplement that the underwriter will use to make resales of the securities to the public. In connection with the sale of the securities, we, or the purchasers of securities for whom the underwriter may act as agent, may compensate the underwriter in the form of underwriting discounts or commissions. The underwriter 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 which they may act as agent. Unless otherwise indicated in a prospectus supplement, an agent will be acting on a best efforts basis and a dealer will purchase securities as a principal, and may then resell the securities at varying prices to be determined by the dealer.

Any compensation paid to underwriters, dealers or agents in connection with the offering of the securities, and any discounts, concessions or commissions allowed by underwriters to participating dealers will be provided in the applicable prospectus supplement. Underwriters, dealers and agents participating in the distribution of the securities may be deemed to be underwriters within the meaning of the Securities Act, and any discounts and commissions

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received by them and any profit realized by them on resale of the securities may be deemed to be underwriting discounts and commissions. We may enter into agreements to indemnify underwriters, dealers and agents against civil liabilities, including liabilities under the Securities Act, or to contribute to payments they may be required to make in respect thereof and to reimburse those persons for certain expenses.

Any common stock will be listed on the NYSE MKT, but any other securities may or may not be listed on a national securities exchange. To facilitate the offering of securities, certain persons participating in the offering may engage in transactions that stabilize, maintain or otherwise affect the price of the securities. This may include over-allotments or short sales of the securities, which involve the sale by persons participating in the offering of more securities than were sold to them. In these circumstances, these persons would cover such over-allotments or short positions by making purchases in the open market or by exercising their over-allotment option, if any. In addition, these persons may stabilize or maintain the price of the securities by bidding for or purchasing securities in the open market or by imposing penalty bids, whereby selling concessions allowed to dealers participating in the offering may be reclaimed if securities sold by them are repurchased in connection with stabilization transactions. The effect of these transactions may be to stabilize or maintain the market price of the securities at a level above that which might otherwise prevail in the open market. These transactions may be discontinued at any time.

We may authorize underwriters, dealers or other persons acting as our agents to solicit offers by certain institutions or other suitable purchasers 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 the date stated in each applicable prospectus supplement. Each contract will be for an amount not less than, and the aggregate amount of securities sold pursuant to such contracts shall not be less nor more than, the respective amounts stated in each applicable prospectus supplement. Institutions with whom the contracts, when authorized, may be made include commercial and savings banks, insurance companies, pension funds, investment companies, educational and charitable institutions and other institutions, but shall in all cases be subject to our approval. Delayed delivery contracts will be subject only to those conditions set forth in each applicable prospectus supplement and include the condition that the purchase of the securities covered by the delayed delivery contracts will not at the time of delivery be prohibited under the laws of any jurisdiction in the United States to which the purchaser is subject. Each prospectus supplement will set forth any commissions we pay for solicitation of these contracts. The underwriters and agents will not have any responsibility with respect to the validity or performance of these contracts.

All securities we may offer, other than common stock, will be new issues of securities with no established trading market. Any agents or underwriters may make a market in these securities, but will not be obligated to do so and may discontinue any market making at any time without notice. We cannot guarantee the liquidity of the trading markets for any securities. There is currently no market for any of the offered securities, other than our common stock which is listed on the NYSE MKT. Any common stock will be listed on the NYSE MKT but any other securities may or may not be listed on a national securities exchange. We have no current plans for listing of the, warrants on any securities exchange or quotation system; any such listing with respect to any particular warrants will be described in the applicable prospectus supplement or other offering materials, as the case may be.

Any agents and underwriters who are qualified market makers on the NYSE MKT may engage in passive market making transactions in the securities on the NYSE MKT in accordance with Regulation M, during the business day prior to the pricing of the offering, before the commencement of offers or sales of the securities. Passive market makers must comply with applicable volume and price limitations and must be identified as passive market makers. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for such security; if all independent bids are lowered below the passive market maker's bid, however, the passive market maker's bid must then be lowered when certain purchase limits are exceeded. Passive market making may stabilize the market price of the securities at a level above that which might otherwise prevail in the open market and, if commenced, may be discontinued at any time.

We may engage in at the market offerings into an existing trading market in accordance with Rule 415(a)(4) under the Securities Act. In addition, we may enter into derivative transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement so indicates, in connection with those derivatives, the third parties may sell securities covered by this prospectus and the applicable prospectus supplement, including in short sale transactions. If so, the third party may use securities pledged by us or borrowed from us or others to settle those sales or to close out any related open borrowings of stock, and may use securities received from us in settlement of those derivatives to close out any

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related open borrowings of stock. The third party in such sale transactions will be an underwriter and, if not identified in this prospectus, will be named in the applicable prospectus supplement (or a post-effective amendment). In addition, we may otherwise loan or pledge securities to a financial institution or other third party that in turn may sell the securities short using this prospectus and an applicable prospectus supplement. Such financial institution or other third party may transfer its economic short position to investors in our securities or in connection with a concurrent offering of other securities.

The specific terms of any lock-up provisions in respect of any given offering will be described in the applicable prospectus supplement.

The underwriters, dealers and agents may engage in transactions with us, or perform services for us, in the ordinary course of business for which they receive compensation.

In compliance with guidelines of the Financial Industry Regulatory Authority, Inc., or FINRA, the maximum compensation to be received by any FINRA member or independent broker dealer may not exceed 8% of the aggregate amount of the securities offered pursuant to this prospectus and any applicable prospectus supplement.

LEGAL MATTERS

Unless otherwise indicated in the applicable prospectus supplement, certain legal matters in connection with the offering and the validity of the securities offered by this prospectus, and any supplement thereto, will be passed upon for us by Shumaker, Loop & Kendrick, LLP.

EXPERTS

The audited financial statements of Oragenics, Inc. as of December 31, 2015 and 2014, and for the two-year period ended December 31, 2015, included in our Annual Report on Form 10-K for the year ended December 31, 2015, incorporated by reference in this prospectus have been audited by Mayer Hoffman McCann P.C., an independent registered public accounting firm, as stated in their report dated March 30, 2016, which is incorporated by reference herein, and has been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We file annual, quarterly and current reports, proxy statements and other documents with the Securities and Exchange Commission (“SEC”). These filings contain important information which does not appear in this prospectus. You may read and copy, at prescribed rates, any documents we have filed with the SEC at its Public Reference Room located at 100 F Street, N.E., Washington, DC 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. We also file these documents with the SEC electronically. You can access the electronic versions of these filings on the SEC’s website found at <http://www.sec.gov>. You may also obtain free copies of the documents that we file with the SEC by going to the Investors section of our website, www.oragenics.com. The information provided on our website is not part of this prospectus, and therefore is not incorporated by reference.

This prospectus is part of a registration statement on Form S-3 that we have filed with the SEC under the Securities Act. This prospectus does not contain all of the information in the registration statement. We have omitted certain parts of the registration statement, as permitted by the rules and regulations of the SEC. You may inspect and copy the registration statement, including exhibits, at the SEC’s public reference room or Internet site.

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 another document that we have filed separately with the SEC. You should read the information incorporated by reference because it is an important part of this prospectus. We incorporate by reference the following information or documents that we have filed with the SEC, excluding any portions of any Current Report on Form 8-K that are not deemed “filed” pursuant to the General Instructions of Form 8-K:

- Our Annual Report on Form 10-K for the year ended December 31, 2015, filed with the SEC on March 30, 2016 and our Form 10-K/A for the year ended December 31, 2015, filed with the SEC on April 27, 2016;
- Our Quarterly Reports on Form 10-Q for the quarter ended March 31, 2016, filed with the SEC on May 16, 2016 and for the quarter ended June 30, 2016 filed with the SEC on August 15, 2016;
- Our Definitive Proxy Statement on Schedule 14A, filed with the SEC on July 15, 2016;
- Our Current Reports on Form 8-K, filed May 13, 2016, June 6, 2016, June 23, 2016, June 27, 2016, June 30, 2016, July 8, 2016, July 19, 2016 and August 23, 2016; and
- The description of our common stock set forth in our registration statement on Form 8-A12B, filed April 8, 2013.

Any information in any of the foregoing documents will automatically be deemed to be modified or superseded to the extent that information in this prospectus or in a later filed document that is incorporated or deemed to be incorporated herein by reference modifies or replaces such information.

We also incorporate by reference any future filings (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items) made with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, including those made after the date of filing of the initial registration statement and prior to effectiveness of the registration statement, until we file a post-effective amendment that indicates the termination of the offering of the securities made by this prospectus. Information in such future filings updates and supplements the information provided in this prospectus. Any statements in any such future filings will automatically be deemed to modify and supersede any information in any document we previously filed with the SEC that is incorporated or deemed to be incorporated herein by reference to the extent that statements in the later filed document modify or replace such earlier statements.

We will provide to each person, including any beneficial owner, to whom a prospectus is delivered, without charge upon written or oral request, a copy of any or all of the documents that are incorporated by reference into this prospectus but not delivered with the prospectus, including exhibits which are specifically incorporated by reference into such documents. You may request a copy of these filings at no cost, by writing to or telephoning us at the following address:

Oragenics, Inc.
4902 Eisenhower Boulevard, Suite 125
Tampa, Florida 33634
Attention: Investor Relations
Phone: (813) 276-7900



16,666,668 Shares of Common Stock

Warrants to purchase up to 16,666,668 shares of common stock

PROSPECTUS SUPPLEMENT

March 21, 2019

H.C. Wainwright & Co.
