

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

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**FORM S-3**  
**REGISTRATION STATEMENT**  
*UNDER*  
*THE SECURITIES ACT OF 1933*

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

**Florida**  
(State or other jurisdiction of  
incorporation or organization)

**2836**  
(Primary Standard Industrial  
Classification Code Number)

**59-3410522**  
(I.R.S. Employer  
Identification No.)

(Address, including zip code, and telephone number, including area code, of principal executive offices)

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**John N. Bonfiglio**  
**Chief Executive Officer and President**  
**Oragenics, Inc.**  
**4902 Eisenhower Boulevard, Suite 125**  
**Tampa, Florida 33634**  
**(813) 286-7900**

(Name, address, including zip code, and telephone number, including area code, of agent for service)

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*With copies to:*

**Mark A. Catchur, Esq.**  
**Shumaker, Loop & Kendrick, LLP**  
**101 East Kennedy Boulevard**  
**Suite 2800**  
**Tampa, Florida 33602**  
**Telephone: (813) 229-7600**  
**Facsimile: (813) 229-1660**

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**Approximate date of commencement of proposed sale to the public:** From time to time after this registration statement becomes effective.

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

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

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

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

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If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective on filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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

Large accelerated filer

Accelerated filer

Non-accelerated filer  (Do not check if a smaller reporting company)

Smaller reporting company

### CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered	Amount to be Registered <sup>(1)</sup>	Proposed Maximum Offering Price per Unit <sup>(2)</sup>	Proposed Maximum Aggregate Offering Price <sup>(2)</sup>	Amount of Registration Fee <sup>(3)</sup>
Common Stock, par value \$0.001 per share	—	—	—	—
Warrants	—	—	—	—
Units	—	—	—	—
Total			\$30,000,000	\$4,092

- (1) There are being registered hereunder such indeterminate number of shares of common stock and such indeterminate number of warrants to purchase common stock, shall have an aggregate initial offering price not to exceed \$30,000,000. Any securities registered hereunder may be sold separately or in combination with any of the other securities registered hereunder. The proposed maximum offering price will be determined, from time to time, by the registrant in connection with the issuance by the registrant of the securities registered hereunder. The securities registered hereunder also include such indeterminate number of shares of common stock, upon exercise of warrants or pursuant to antidilution provisions of any such securities. In addition, pursuant to Rule 416 under the Securities Act of 1933, as amended, the shares being registered hereunder includes such indeterminate number of shares of common stock as may be issuable with respect to the shares being registered hereunder as a result of stock splits, stock dividends or similar transactions.
- (2) The proposed maximum aggregate offering price per class of security will be determined from time to time by the registrant in connection with the issuance by the registrant of the securities registered hereunder and is not specified as to each class of security pursuant to General Instruction II.D of Form S-3 under the Securities Act of 1933, as amended. Pursuant to General Instruction I.B.6. of Form S-3, if the aggregate market value of the registrant's outstanding voting and non-voting common equity held by non-affiliates of the registrant does not equal or exceed \$75,000,000 subsequent to the effective date of this registration statement, then the aggregate offering price of all types of securities that the registrant may issue in primary offerings pursuant to this registration statement in any 12-month period may not exceed one-third of the aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant at such time. In the event that subsequent to the effective date of this registration statement, the aggregate market value of the registrant's outstanding common stock held by non-affiliates equals or exceeds \$75,000,000, then the one-third limitation on sales shall not apply to additional sales made in primary offerings pursuant to this registration statement.
- (3) Calculated pursuant to Rule 457(o) under the Securities Act of 1933, as amended.

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

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**The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.**

**Subject to Completion, Dated August 14, 2013**

**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 9, 2013 was \$3.30 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 9, 2013, the aggregate market value of our outstanding common stock held by non-affiliates, or the public float, was approximately \$34,609,495, which was calculated based on 10,487,726 shares of our outstanding common stock held by non-affiliates and on a price of \$3.30 per share, the last reported sale price for our common stock on August 9, 2013. 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 \_\_\_\_\_, 2013.**

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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.

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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 a healthcare company focused primarily on developing novel antibiotics and oral health products. Within oral health we are marketing our oral health probiotics blend, ProBiora3 to consumers and to dental professionals. We also maintain a suite of other technologies stemming from several years of our research efforts in the oral health space.

### *Our Antibiotics*

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 since 1927 when the first lantibiotic, Nisin, was discovered. Lantibiotics are generally recognized to be potent antibiotic agents.

We have performed preclinical testing on MU1140, which has demonstrated the molecule’s novel mechanism of action. MU1140 has proven active preclinically against all Gram positive bacteria against which it has been tested, including those responsible for a number of healthcare associated infections or HAIs. The most common HAIs are caused by drug-resistant bacteria, including methicillin-resistant *Staphylococcus aureus*, or MRSA, vancomycin-resistant *Enterococcus faecalis*, or VRE; and *Clostridium difficile*, or *C. diff*. 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.

The challenge presented by lantibiotics is that they 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 any of these molecules. Standard fermentation methods are used to make a variety of currently marketed antibiotics. When such fermentation methods are used to make lantibiotics the result is the production of only minute amounts of the lantibiotic.

In order to meet the challenge associated with producing sufficient quantities of MU1140 for our clinical trials and ultimately our commercialization efforts, we are currently pursuing the following path:

- In June 2012, we entered into a worldwide exclusive collaboration agreement (ECC) with Intrexon Corporation (Intrexon) for the development and commercialization of the native strain of MU1140 using Intrexon’s advanced transgene and cell engineering platforms. We expect to pursue our research and development efforts with Intrexon in accordance with the terms of the ECC on the development of the MU1140 molecule and potential derivatives of the molecule.

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We have previously performed preclinical testing on native MU1140 and such testing has demonstrated the molecule's novel mechanism of action. We expect to begin preclinical activities on either native MU1140, or an analog developed under the ECC with Intrexon, in the second half of 2013. These preclinical activities are expected to include toxicity results, pharmacokinetic studies, and efficacy studies in animals. This work will be done solely by us through the use of outside contractors. Pursuit of clinical trials toward the goal of ultimately obtaining regulatory approval will depend upon further successful advancements in our research collaboration efforts with Intrexon and our efforts to have additional product manufactured. Developments from these efforts will dictate our regulatory path. If our preclinical work is successful, we would expect to file an Investigational New Drug application with the FDA by the first quarter of 2015.

Through our work with Intrexon, we have been able to produce an exponential increase in the fermentation titer of the target compound MU1140 and the discovery of a new purification process for MU1140. We believe these developments represent progress toward our goal of commercial production of sufficient quantities of MU1140 and deliver a step in validating the lantibiotics platform targeting infectious diseases. Previously, the ability to manufacture MU1140 by fermentation was originally thought not to be commercially feasible due to low titers and difficulties in purification. In addition to the optimization of fermentation and purification strategies, we are working to leverage Intrexon's genetic and cell engineering expertise to produce analogs of MU1140 toward the goal of establishing a pipeline of new lantibiotics.

Manufacturing requirements and methods for producing MU1140, or an analog, will primarily be dependent upon the end results of our efforts under the ECC with Intrexon. We are actively seeking a third party manufacturer to produce additional quantities of MU1140, or a designated analog, based upon the developments achieved from our work with Intrexon. The additional quantities of MU1140, or a designated analog, are needed for the consummation and pursuit of our preclinical testing activities.

We also produced a synthetic version of MU1140 known as MU1140-S. We created MU1140-S using our patented, novel organic chemistry synthesis platform known as DPOLT (Differentially Protected Orthogonal Lanthionine Technology). We engaged Bachem Americas, Inc. ("Bachem"), a peptide synthesis manufacturing company to assist us with research on producing greater amounts of MU1140-S. While the work performed by Bachem generated improvements in the yield of components necessary to synthesize MU1140-S, further research was determined to be needed, which was beyond the scope of our initial agreement with Bachem. While we continue to pursue this research internally through the use of existing grant funds, at this time our primary focus is with the ongoing research and development efforts with Intrexon.

### *Our Probiotic Products*

We are marketing a variety of probiotic products that we developed. Our probiotic products contain the active ingredient ProBiora3, a patented blend of oral care probiotics that promote fresher breath, whiter teeth and support overall oral health. We have conducted scientific studies on ProBiora3 in order to market our products under self-affirmed Generally Recognized As Safe status, or GRAS. We sell our ProBiora3 products through multiple distribution channels. We continue to seek improvement in the performance of our oral care probiotics business and consistent with these efforts:

- We are focusing our efforts on our direct-to-consumer channel, including internet, as well as on our Dental channel, which entails distribution to dentists throughout the United States.
- To better serve our customers, we continue to evaluate new delivery systems which we believe will enable us to deliver ProBiora3 to new markets and end-users;

In order to better understand and define our customer base, we conducted detailed market research utilizing outside consultants at the end of 2012. The goal of the research was to develop a plan to improve market



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awareness and sales of our oral probiotic product line. The effort produced strategic marketing and sales plans that we have begun to implement. The initial implementation of our new sales approach commenced during the quarter ended June 30, 2013 and as such, was in, and continues to be in a roll-out mode. While results for the June 30, 2013 quarter have not met expectations, management believes more time is needed for the expected benefits of the marketing plan to materialize. Our quarter over quarter sales of our probiotic product lines may fluctuate. We believe that the successful execution of our marketing plans can lead to improved probiotic sales on a year over year sales basis.

We initiated two, double blinded randomized, placebo controlled clinical studies one at the University of Washington and the other at Loma Linda University in California that we believe could allow us to enhance the claims we can make about our ProBiora3 products and assist us in registering the product for commercial sale in the European Union. Review of the baseline clinical and microbial data from these studies did not demonstrate support for enhanced claims. We believe the results were attributable to the enrollment of test subjects with better than average oral health which created a situation where there was little or no room for demonstrating an improvement in clinical indices. We have determined that it is more cost effective to terminate these studies and transition our clinical efforts and resources to a more standardized oral care clinical study design capable of demonstrating a product benefit. We, however, continue supporting a two-year study in children in Scandinavia.

### *Other Product Candidates and Technologies*

We also possess and have developed other product candidates and technologies that originated from the discoveries of our scientific team. These other product candidates and technologies include our SMaRT Replacement Therapy, our weight loss agent, LPT3-04, DPOLT which was specifically designed as a methodology for synthesizing lantibiotics using traditional organic chemistry techniques. We continue to consider and evaluate opportunities that could promote the advancement of our other product candidates and technologies. We believe our other product candidates and technologies could provide potential partnership opportunities for us. For our product candidates and technologies we expect to devote limited financial resources toward continued research and development while exploring the possibilities for outlicensing such product candidates or entering into partnerships or collaborative arrangements for the further development of such product candidates.

*Our SMaRT Replacement Therapy.* Our SMaRT Replacement Therapy is based on the creation of a genetically modified strain of bacteria that colonizes in the oral cavity and replaces native bacteria that cause tooth decay. Our SMaRT Replacement Therapy product candidate is designed to be a painless, one-time, five-minute topical treatment applied to the teeth that has the potential to offer lifelong protection against dental caries, or tooth decay. While we commenced a Phase 1b clinical trial for SMaRT Replacement Therapy during the first quarter of 2011, the very restrictive study enrollment criteria required by the FDA made the enrollment of candidates meeting the restrictive criteria difficult. Due to the enrollment difficulty we encountered with our initial our Phase 1a clinical trial and now with our phase 1b clinical trial, we determined to discontinue pursuit of our Phase 1b clinical trial and instead focus our efforts on possible partnering opportunities that may exist for our SMaRT Replacement Therapy.

*Our Weight Loss Agent-LPT3-04.* LPT3-04 is a naturally occurring compound that is normally consumed in the human diet in small amounts. In the course of our SMaRT Replacement Therapy research, our scientific team also discovered that consumption of a significant amount of LPT3-04 resulted in dose-dependent weight loss in experimental animal models. We have filed a patent application for use of LPT3-04 for weight regulation with the United States Patent Office. We believe this product candidate is positioned for collaboration, or outlicensing opportunities, which we may pursue.

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### **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 ProBiora3 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 ProBiora3 product sales through December 31, 2012, 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. Prior to 2008 our revenues were derived solely from research grants. Since 2008, our revenues have also included sales of our ProBiora3 products, which we initiated in late 2008. Our net revenues were \$344,075 and \$636,934 for the six months ended June 30, 2013 and 2012, respectively, and \$1,331,764 and \$1,444,447 for the years ended December 31, 2012 and 2011, respectively.

As of June 30, 2013, we had an accumulated deficit of \$57,750,357 and we have yet to achieve profitability. We incurred net losses of \$3,663,995 and \$8,545,679 for the six months ended June 30, 2013 and 2012, respectively, and \$13,090,446 and \$7,678,868 for the years ended December 31, 2012 and 2011, 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 are continuing our efforts 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 grow and 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, 2012. 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:

- 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;

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- a failure to continue to undertake preclinical development and clinical trials for our product candidates;
- a failure to increase sales of our ProiBiora3 products;
- orders we receive for our consumer and professional products may be subject to terms and conditions that could result in their cancellation or the return of products to us;
- 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;
- an inability to enter into strategic collaborations or partnerships for the development, commercialization, manufacturing and distribution of our other product candidates or maintain strategic collaborations or partnerships;
- a failure by us to become or remain profitable;
- an inability to improve upon, protect and/or enforce our intellectual property; and
- a loss of any of our key scientists or management personnel.

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 antibiotics, probiotics sales and marketing 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 50,000,000 shares of common stock, par value \$0.001, and 20,000,000 shares of preferred stock, without par value. As of August 14, 2013, there were 27,514,080 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.

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### *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;
- 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 644,343 options to acquire shares of our common stock outstanding at exercises prices between \$1.20 and \$17.00 under our 2012 Equity Incentive Plan and 2,659,711 shares were available for future grants under our 2012 Equity Incentive Plan. As of such date, we also have warrants outstanding to acquire an aggregate of 2,747,094 shares of our common stock at an exercise price ranging from \$1.50 to \$26.00. Holders of options and warrants do not have any of the rights or privileges of our shareholders, including voting rights, prior to exercise of the options and warrants. The number of shares of common stock for which these options and warrants are exercisable and the exercise price of these options and warrants are subject to proportional adjustment for stock splits and similar changes affecting our common stock. We have reserved sufficient shares of authorized common stock to cover the issuance of common stock subject to the options and warrants. Included in the number of our outstanding warrants are (i) warrants to acquire 571,169 shares of our common stock at an exercise price of \$1.50 (constituting the warrants remaining after a portion of such warrants were exercised through a cashless exercise in January 2013) we issued to the placement agent in connection with the closing of our private placement on July 31, 2012 and (ii) warrants to acquire 2,170,925 shares of our common stock at an exercise price of \$2.00 that were issued to the Koski Family Limited Partnership, pursuant to the terms of a Debt Exchange Agreement and a new Loan Agreement with the KFLP (which Loan Agreement was subsequently terminated in connection with our July 2012 Private Placement).

### **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.

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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).

### **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 its right to participate in the July 2012 Private Placement.

### **Registration Rights**

*Koski Family Limited Partnership (“KFLP”).* Pursuant to the June 2009 Private Placement with the KFLP, we also agreed to provide the KFLP with certain registration rights in connection with any underwritten or other offering by us within five years of such agreement. We are required under the June 2009 Private Placement to register on behalf of KFLP 15% of the total number of shares being offered, except that in an underwritten public offering the inclusion of shares is subject to the discretion of the managing underwriter. The KFLP waived its registration rights in connection with the Company’s July 2012 Private Placement.

*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 Private Placement.



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*Purchasers in July 2012 Private Placement.* In connection with the closing of our July 2012 Private Placement (the “Offering”), the Company also entered into a registration rights agreement with the purchasers (the “Registration Rights Agreement”). The Registration Rights Agreement required that the Company file a registration statement (the “Registration Statement”) with the Securities and Exchange Commission (the “SEC”) within forty-five (45) days of the closing date of the Offering for the resale by the Purchasers of all of the Common Shares and all shares of Common Stock issuable upon any stock split, dividend or other distribution, recapitalization or similar event with respect thereto. We subsequently filed a Form S-1 Registration Statement (No. 333-183685) with the SEC which was declared effective by the SEC on September 26, 2012. We filed a post-effective amendment to the Registration Statement on April 23, 2013 on Form S-3 which was declared effective on May 2, 2013. Our obligations to the Purchasers in the Offering under the Registration Rights Agreement ceased on July 31, 2013, the one year anniversary of closing of the Offering and upon the availability of Rule 144 for resales by the purchasers without restriction (except for purchasers who are considered affiliates of the Company).

### **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 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.

On September 24, 2010 the shareholders approved an amendment to our articles of incorporation to effect a 1-for-20 reverse stock split with an aggregate of 35,000,000 shares of capital stock consisting of 15,000,000 shares of common stock and 20,000,000 shares of preferred stock. On August 30, 2010 the shareholders approved an amendment to our articles of incorporation to increase the capital stock to an aggregate of 70,000,000 shares consisting of 50,000,000 shares of common stock and 20,000,000 shares of preferred stock.

### **Listing of Common Stock**

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

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### **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;

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- 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.

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.

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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 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-

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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 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-

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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 Orogenics, Inc. as of December 31, 2012 and 2011, and for the two-year period ended December 31, 2012, included in our Annual Report on Form 10-K for the year ended December 31, 2012, 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 22, 2013, 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.orogenics.com](http://www.orogenics.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, 2012, filed with the SEC on March 26, 2013;
- Our Quarterly Reports on Form 10-Q for the quarter ended March 31, 2013, filed with the SEC on May 15, 2013 and for the quarter ended June 30, 2013 filed with the SEC on August 12, 2013;
- Our Definitive Proxy Statement on Schedule 14A, filed with the SEC on September 17, 2012;
- Our Current Reports on Form 8-K, filed February 15, 2013, April 8, 2013 and April 23, 2013, and June 10, 2013.
- 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



**PART II**  
**INFORMATION NOT REQUIRED IN PROSPECTUS**

**Item 14. Other Expenses of Issuance and Distribution.**

The following table sets forth an estimate of the fees and expenses payable by the registrant in connection with the issuance and distribution of the securities being registered. All amounts are estimated except the SEC registration filing fee. All of the expenses below will be paid by us.

SEC registration fee	\$4,092
FINRA filing fee	\$ *
Accounting fees and expenses	\$ *
Legal fees and expenses	\$ *
Transfer agent and registrar fees	\$ *
Printing and engraving expenses	\$ *
Miscellaneous	\$ *
Total	<u>\$ *</u>

\* These fees cannot be estimated at this time as they are calculated based on the securities offered and the number of issuances. An estimate of the aggregate expenses in connection with the sale and distribution of the securities being offered will be included in the applicable prospectus supplement.

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

Under our Bylaws, each of our directors has the right to be indemnified by us to the maximum extent permitted by law against (i) reasonable expenses incurred in connection with any threatened, pending or completed civil, criminal, administrative, investigative or arbitral action, suit or proceeding seeking to hold the director liable by reason of his or her actions in such capacity and (ii) reasonable payments made by the director in satisfaction of any judgment, money decree, fine, penalty or settlement for which he or she became liable in such action, suit or proceeding. This right to indemnification includes the right to the advancement of reasonable expenses by us, to the maximum extent permitted by law. Under our Bylaws, each of our officers who are not directors is entitled to the same indemnification rights, including the right to the advancement of reasonable expenses, which are provided to our directors.

Pursuant to the Florida Business Corporation Act, a Florida corporation has the power to indemnify its directors and officers provided that they act in good faith and reasonably believe that their conduct was lawful and in the corporate interest (or not opposed thereto), as set forth in the Business Corporation Act. Under the Business Corporation Act, unless limited by its articles of incorporation, a corporation must indemnify a director or officer who is wholly successful, on the merits or otherwise, in the defense of any proceeding to which he or she was a party because he or she is or was a director or officer, against reasonable expenses incurred by the director or officer in connection with the proceeding. Our Articles of Incorporation do not contain any such limitations. The Business Corporation Act permits a corporation to pay for or reimburse reasonable expenses in advance of final disposition of an action, suit or proceeding only upon (i) the director's certification that he or she acted in good faith and in the corporate interest (or not opposed thereto), (ii) the director furnishing a written undertaking to repay the advance if it is ultimately determined that he or she did not meet this standard of conduct, and (iii) a determination is made that the facts then known to those making the determination would not preclude indemnification under the Business Corporation Act.

Under our Articles of Incorporation, no director will be liable to us or our shareholders for monetary damages for breach of his or her fiduciary duty as a director, to the maximum extent permitted by law.

The Florida Business Corporation Act also empowers a corporation to provide insurance for directors and officers against liability arising out of their positions, even though the insurance coverage may be broader than the corporation's power to indemnify. We maintain directors' and officers' liability insurance for the benefit of our directors and officers.

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In our employment agreements Dr. John Bonfiglio, our President and Chief Executive Officer and, and Michael Sullivan, our Chief Financial Officer, we agreed to indemnify each of these officers for all claims arising out of performance of his duties, other than those arising out of his breach of the agreement or his gross negligence or willful misconduct.

At present, there is no pending litigation or proceeding involving any of the registrant's directors or executive officers as to which indemnification is being sought nor is the registrant aware of any threatened litigation that may result in claims for indemnification by any executive officer or director.

The registrant maintains an insurance policy covering its officers and directors with respect to certain liabilities, including liabilities arising under the Securities Act or otherwise.

The underwriting agreement, if any, entered into with respect to an offering of securities registered hereunder will provide for indemnification by any underwriters of any offering, our directors and officers who sign the registration statement and our controlling persons for some liabilities, including liabilities arising under the Securities Act.

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**Item 16. Exhibits and Financial Statement Schedules.**

(a) Exhibit Index

Exhibit number	Exhibit description	Incorporated by Reference				Filed Herewith
		Form	File no.	Exhibit	Filing date	
1.1*	Form of Underwriting Agreement					
3.1	Amended and Restated Articles of Incorporation	SB-2	333-100568	3.3	10/16/02	
3.2	Articles of Amendment to Amended and Restated Articles of Incorporation	8-K	001-32188	10.2	10/30/09	
3.3	Articles of Amendment to Amended and Restated Articles of Incorporation	8-K	001-32188	3.1	9/27/10	
3.4	Articles of Amendment to Amended and Restated Articles of Incorporation	8-K	001-32188	3.1	09/01/11	
3.5	Bylaws	SB-2	333-100568	3.2	10/16/02	
3.6	First Amendment to Bylaws	8-K	001-32188	3.1	6/9/10	
3.7	Second Amendment to Bylaws	8-K	001-32188	3.1	8/24/10	
4.1	Specimen Stock Certificate	S-1/A	333-169031	4.0	10/05/10	
4.2*	Form of Warrant					
4.3*	Form of Warrant Agreement					
4.4*	Form of Unit					
4.5*	Form of Unit Agreement					
5.1	Opinion of Shumaker, Loop & Kendrick, LLP					X
23.1	Consent of Mayer Hoffman McCann P.C., an independent public accounting firm					X
23.2	Consent of Shumaker, Loop & Kendrick, LLP (included as part of Exhibit 5.1)					X
24.1	Power of Attorney for our directors (included on signature page)					X

\* To be filed by amendment or by a Current Report on Form 8-K and incorporated by reference herein.

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### **Item 17. Undertakings.**

The undersigned registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
  - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act;
  - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
  - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

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

- (2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (4) That, for the purpose of determining liability under the Securities Act to any purchaser:
  - (A) Each prospectus filed by a registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and
  - (B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5) or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii) or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which the prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.
- (5) That, for the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

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- (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
  - (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
  - (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
  - (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.
- (6) That, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (7) That, for purposes of determining any liability under the Securities Act, (i) the information omitted from the form of prospectus filed as part of the registration statement in reliance upon Rule 430A and contained in the form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be a part of the registration statement as of the time it was declared effective; and (ii) each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (8) To file an application for the purpose of determining the eligibility of the trustee to act under subsection (a) of Section 310 of the Trust Indenture Act of 1939, as amended (the "Act"), in accordance with the rules and regulations prescribed by the SEC under Section 305(b)(2) of the Act.

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

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**SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Tampa, State of Florida on August 14, 2013.

ORAGENICS, INC.

By: /s/ John N. Bonfiglio  
John N. Bonfiglio,  
Chief Executive Officer, and Principal  
Executive Officer

**POWER OF ATTORNEY**

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints John Bonfiglio as his or her true and lawful attorney-in-fact and agent, with full power of substitution and re-substitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement, and to sign any registration statement for the same offering covered by the Registration Statement that is to be effective upon filing pursuant to Rule 462(b) promulgated under the Securities Act of 1933, as amended, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their, his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed below by the following persons in the capacities and on August 14, 2013.

<u>Signature</u>	<u>Title</u>
<u>/s/ John N. Bonfiglio</u> John N. Bonfiglio	Principal Executive Officer, Chief Executive Officer and Director
<u>/s/ Michael Sullivan</u> Michael Sullivan	Principal Financial Officer, Chief Financial Officer (Principal Accounting Officer)
<u>/s/ Christine L. Koski</u> Christine L. Koski	Director
<u>/s/ Robert C. Koski</u> Robert C. Koski	Director
<u>/s/ Frederick W. Telling</u> Frederick W. Telling	Chairman and Director
<u>/s/ Charles L. Pope</u> Charles L. Pope	Director
<u>/s/ Alan W. Dunton</u> Alan W. Dunton	Director

August 14, 2013

Oragenics, Inc.  
4902 Eisenhower Boulevard, Suite 125  
Tampa, FL 33634

Re: Form S-3 Registration Statement

Ladies and Gentlemen:

You have requested our opinion with respect to certain matters in connection with the filing by Oragenics, Inc., a Florida corporation (the "**Company**"), of a registration statement on Form S-3 (the "**Registration Statement**") under the Securities Act of 1933, as amended (the "**Securities Act**"), with the Securities and Exchange Commission, including the base prospectus (the "**Base Prospectus**") filed with the Registration Statement. The Base Prospectus provides that it will be supplemented in the future by one or more prospectus supplements (each, a "**Prospectus Supplement**") and any free-writing prospectus(es). The Registration Statement, including the Base Prospectus as supplemented from time to time by one or more Prospectus Supplements and any free-writing prospectus(es), covers the registration of:

- shares of common stock, par value \$0.001 per share, of the Company (the "**Common Stock**"); and
- warrants to purchase Common Stock (the "**Warrants**"), which may be issued under warrant agreements, to be dated on or about the date of the first issuance of the applicable Warrants thereunder, by and between a warrant agent to be selected by the Company (the "**Warrant Agent**") and the Company (each, a "**Warrant Agreement**").

The Common Stock and the Warrants are collectively referred to herein as the "**Securities**." The Securities are being registered for offering and sale from time to time pursuant to Rule 415 under the Securities Act. The aggregate public offering price of the Securities being registered is \$30,000,000.

In connection with this opinion, we have examined and relied upon originals, or copies certified to our satisfaction, of such records, documents, certificates, opinions, memoranda and other instruments as in our judgment are necessary or appropriate to enable us to render the opinion expressed below. As to certain factual matters, we have relied upon a certificate of an officer of the Company and have not independently sought to verify such matters.

In rendering this opinion, we have assumed the genuineness and authenticity of all signatures on original documents; the authenticity of all documents submitted to us as originals; the conformity to originals of all documents submitted to us as copies; the accuracy, completeness and authenticity of certificates of public officials; and the due authorization, execution and delivery of all documents where authorization, execution and delivery are prerequisites to the effectiveness of such documents. With respect to our opinion as to the Common Stock, we have assumed that, at the time of issuance and sale, a sufficient number of shares of Common Stock are authorized and available for issuance and that the consideration for the issuance and sale of the Common Stock (or for Warrants exercisable for Common Stock) is in an amount that is not less than the par value of the Common Stock. We have also assumed that any Warrants offered under the Registration Statement, and the related Warrant Agreement, as applicable, will be executed in the forms filed as exhibits to the Registration Statement or otherwise incorporated by reference into the Registration Statement. We have also assumed that with respect to any Securities being issued upon exercise of any Warrants, the applicable Warrants will be valid

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and legally binding obligations of the Company, enforceable against the Company in accordance with their terms, except as enforcement may be limited by applicable bankruptcy, insolvency, reorganization, arrangement, moratorium or other similar laws affecting creditors' rights, and subject to general equity principles and to limitations on availability of equitable relief, including specific performance.

Our opinion herein is expressed solely with respect to the federal laws of the United States and the laws of the State of Florida. Our opinion is based on these laws as in effect on the date hereof. We express no opinion as to whether the laws of any jurisdiction are applicable to the subject matter hereof. We are not rendering any opinion as to compliance with any federal or state law, rule or regulation relating to securities, or to the sale or issuance thereof.

On the basis of the foregoing and in reliance thereon, and subject to the qualifications herein stated, we are of the opinion that:

1. With respect to the Common Stock offered under the Registration Statement, provided that (i) the Registration Statement and any required post-effective amendment thereto have all become effective under the Securities Act and the Base Prospectus, any and all Prospectus Supplement(s) required by applicable laws and all free-writing prospectus(es) related to the offer and sale of the Common Stock have been delivered and filed as required by such laws; (ii) the issuance of the Common Stock has been duly authorized by all necessary corporate action on the part of the Company; (iii) the issuance and sale of the Common Stock do not violate any applicable law, are in conformity with the Company's then operative articles of incorporation (the "*Articles of Incorporation*") and bylaws (the "*Bylaws*"), do not result in a default under or breach of any agreement or instrument binding upon the Company and comply with any applicable requirement or restriction imposed by any court or governmental body having jurisdiction over the Company; and (iv) the certificates for the Common Stock have been duly executed by the Company, countersigned by the transfer agent therefor and duly delivered to the purchasers thereof against payment therefor, then the Common Stock, when issued and sold as contemplated in the Registration Statement, the Base Prospectus and the related Prospectus Supplement(s) and any related free-writing prospectus(es) and in accordance with any applicable duly authorized, executed and delivered purchase, underwriting or similar agreement or upon exercise of any Warrants in accordance with their terms, will be duly authorized, validly issued, fully paid and nonassessable.

2. With respect to the Warrants issued under a Warrant Agreement and offered under the Registration Statement, provided that (i) the Registration Statement and any required post-effective amendment thereto have all become effective under the Securities Act and the Base Prospectus, any and all Prospectus Supplement(s) required by applicable laws and free-writing prospectus(es) related to the offer and sale of the Warrants have been delivered and filed as required by such laws; (ii) the Warrant Agreement has been duly authorized by the Company and the Warrant Agent by all necessary corporate action; (iii) the Warrant Agreement has been duly executed and delivered by the Company and the Warrant Agent; (iv) the terms of the Warrants and their issuance and sale have been duly authorized by the Company by all necessary corporate action; (v) the terms of the Warrants and of their issuance and sale have been duly established in conformity with the Warrant Agreement and as described in the Registration Statement, the Base Prospectus and the related Prospectus Supplement(s) and any related free-writing prospectus(es), so as not to violate any applicable law or result in a default under or breach of any agreement or instrument binding upon the Company, so as to be in conformity with the Articles of Incorporation and Bylaws, and so as to comply with any requirement or restriction imposed by any court or governmental body having jurisdiction over the Company; and (vi) the Warrants have been duly executed and delivered by the Company and authenticated by the Warrant Agent pursuant to the Warrant Agreement and delivered against payment therefor, then the Warrants, when issued and sold in accordance with the Warrant Agreement and a duly authorized, executed and delivered purchase, underwriting or similar agreement, will be valid and legally binding obligations of the Company, enforceable against the Company in accordance with their terms, except as enforcement thereof may be limited by applicable bankruptcy, insolvency, reorganization, arrangement, moratorium or other similar laws affecting creditors' rights, and subject to general equity principles and to limitations on availability of equitable relief, including specific performance.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement and to the reference to our firm under the caption "Legal Matters" in the Base Prospectus and any Prospectus Supplements. This opinion is expressed as of the date hereof, and we disclaim any undertaking to advise you of any subsequent changes in the facts stated or assumed herein or of any subsequent changes in applicable law.

Very truly yours,  
/s/ Shumaker, Loop & Kendrick, LLP  
SHUMAKER, LOOP & KENDRICK, LLP



**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in this Registration Statement of Oragenics, Inc. on Form S-3 of our report dated March 22, 2013, with respect to our audits of the financial statements of Oragenics, Inc. as of December 31, 2012 and 2011, and for each of the two years ended December 31, 2012 and 2011 and to the reference to us under the heading "Experts" in the Prospectus, which is part of this Registration Statement.

/s/ Mayer Hoffman McCann P.C.  
Mayer Hoffman McCann P.C.  
Clearwater, Florida  
August 14, 2012