

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the
Securities Exchange Act of 1934.

Date of Report: June 5, 2012
(Date of earliest event reported)

Oragenics, Inc

(Exact name of registrant as specified in its charter)

FL
(State or other jurisdiction
of incorporation)

001-32188
(Commission
File Number)

59-3410522
(IRS Employer
Identification Number)

3000 Bayport Drive, Suite 685
Tampa, FL
(Address of principal executive offices)

33607
(Zip Code)

813-286-7900
(Registrant's telephone number, including area code)

Not Applicable
(Former Name or Former Address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

ITEM 1.01 ENTRY INTO A MATERIAL DEFINITIVE AGREEMENT

On June 5, 2012, Oragenics, Inc. (the “Company”) entered into a worldwide exclusive channel collaboration with Intrexon Corporation (“Intrexon”) through which the Company intends to develop and commercialize lantibiotics, a novel class of broad spectrum antibiotics, as active pharmaceutical ingredients (API) for the treatment of infectious diseases in humans and companion animals. The Company and Intrexon entered into an Exclusive Channel Collaboration Agreement (the “ECC”) and contemporaneously with the ECC, the Company and Intrexon entered into a Stock Issuance Agreement (“SIA”) which authorized the issuance of the Technology Access Fee (as defined below) and future stock issuance of Company’s common stock to Intrexon upon the achievement of designated milestones. In addition, on June 5, 2012, the Koski Family Limited Partnership (“KFLP”), an accredited investor and the Company’s largest shareholder and secured lender under that certain Loan agreement dated March 23, 2012, as a condition to its consent to the ECC and SIA entered into an amendment to the Security Agreement (“First Amendment to Security Agreement”), which was approved by the Company’s disinterested directors.

The Exclusive Channel Collaboration Agreement

The ECC governs the “channel collaboration” arrangement in which the Company will use Intrexon’s advanced transgene and cell engineering platforms for the development and production of lantibiotics, a class of peptide antibiotics that are naturally produced in Gram-positive bacteria and contain the characteristic polycyclic thioether amino acids lanthionine and methylanthionine.

The ECC provides for the establishment of committees comprised of Company and Intrexon representatives that will govern activities in the areas of project establishment, chemistry, manufacturing and controls, clinical and regulatory matters, commercialization efforts and intellectual property.

The ECC grants the Company an exclusive worldwide license to utilize Intrexon’s modular genetic engineering platform for the development of API and drug products involving the direct administration to humans or companion animals of a lantibiotic for the prevention or treatment of infectious disease.

Under the ECC, and subject to certain exceptions, the Company is responsible for, among other things, funding the further anticipated development of lantibiotics toward the goal of commercialization, conducting preclinical and clinical development of candidate lantibiotics, as well as for other aspects of manufacturing and the commercialization of the product(s). Among other things, Intrexon is responsible for technology discovery efforts, cell-engineering development, and certain aspects of the manufacturing process.

Subject to certain expense allocations, the Company will pay Intrexon 25% of the gross quarterly profits derived from the sale of products developed from the exclusive channel collaboration.

In addition, in partial consideration for each party’s execution and delivery of the ECC, the Company entered into the SIA.

During the first 18 months, neither the Company nor Intrexon may terminate the ECC, except under limited circumstances. Following the first 18 months, the Company may voluntarily terminate the Channel Agreement upon 90 days written notice to Intrexon. Following the first 18 months, Intrexon may also terminate the ECC if the Company breaches and fails to cure the breach within 60 days or the Company does not pursue development of the Superior Therapy under the Lantibiotics identified by Intrexon that is a “Superior Therapy” as defined in the ECC.

Upon termination of the ECC, the Company may continue to develop and commercialize any Company Product that, at the time of termination that satisfies at least one of the following criteria (i) the particular Company Product is being sold by the Company triggering profit sharing payments under the ECC to Intrexon; (ii) the particular Company Product has received regulatory approval; (iii) the particular Company Product is a subject of an application for regulatory approval in the Field covered by the ECC that is pending before the applicable regulatory authority; and (iv) the particular Company Product is the subject of at least an ongoing Phase 1, Phase 2 or Phase 3 clinical trial in the Field.

The foregoing description of the ECC is qualified in its entirety by reference to such agreement which is filed as Exhibit 10.1 with portions omitted and filed separately with the Securities and Exchange Commission pursuant to a request for confidential treatment. The benefits of the representations and warranties set forth in the ECC are intended to be relied upon by the parties to such agreements only and, except as otherwise expressly provided therein, do not constitute continuing representations and warranties to any other party or for any other purpose.

The Stock Issuance Agreement and Certain Registration Rights

Pursuant to the SIA the Company issued to Intrexon 4,392,245 shares of the Company common stock (the “Technology Access Fee”), in consideration for the execution and delivery of the ECC.

The Company has also agreed to make certain payments to Intrexon upon the Company’s achievement of designated milestones in the form of shares of Company Common Stock or at the Company’s option make a cash payment to Intrexon (based upon the fair market value of the shares otherwise required to be issues). 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 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 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 an Company Product, or alternatively the filing of the first equivalent regulatory filing with a foreign regulatory agency, that number of Shares 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 Oragenics Product, that number of Shares (the equal to the number of shares of Common Stock comprising 3% of the Base Shares).

Base Shares is defined in the SIA to mean (i) the number of shares of Company 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 SIA 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).

Under the SIA, Intrexon is entitled, at its election, to participate in future securities offerings of the Company 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. 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 (the “Securities Act”), at the time of issuance or the Company agrees to register the resale of such shares.

The SIA contains a standstill provision pursuant to which, among other things, Intrexon has agreed that, for a period of three years, subject to certain exceptions and unless invited in writing by the Company to do so, neither Intrexon nor its affiliates will, directly or indirectly: (i) effect or seek, initiate, offer or propose to effect, or cause or participate in any acquisition of securities or assets of the Company; any tender or exchange offer, merger, consolidation or other business combination involving the Company; any recapitalization, restructuring, liquidation, dissolution or other extraordinary transaction with respect to the Company; or any “solicitation” of “proxies” or consents to vote any voting securities of the Company, or in any way advise or, assist any other person in doing so; (ii) form, join or in any way participate in a “group” with respect to any securities of the Company; (iii) otherwise act to seek to control or influence the management, Board of Directors or policies of the Company; (iv) take any action reasonably expected to force the Company to make a public announcement regarding any such matters; or (v) enter into any agreements, discussions or arrangements with any third party with respect to any of the foregoing.

If, at any time, the Company proposes to file a registration statement under the Securities Act, other than a registration relating solely to employee benefit plans or Rule 145 transactions, with respect to an underwritten offering for its own

account of any class of securities of the Company (a "Registration Statement"), then each such time, the Company shall give written notice of such intention to file a Registration Statement (a "Piggyback Notice") to Intrexon at least five (5) days before the anticipated filing date. The Piggyback Notice shall describe the number of shares to be registered and the intended method of distribution and offer Intrexon the opportunity to register pursuant to such Registration Statement such shares held by Intrexon (the "Registrable Shares") as Intrexon may request in writing to the Company within five (5) days after the date Intrexon first received the Piggyback Notice (a "Piggyback Registration"). The Piggyback Registration rights shall be subject ratably to potential underwriter's limitations set forth herein. The Company shall take all reasonable steps to include in the Registration Statement the Registrable Shares which the Company has been so requested to register by Intrexon. The Company shall be entitled to suspend or withdraw a Registration Statement prior to its becoming effective. If the managing underwriter with respect to such an offering advises the Company in writing that the inclusion of all or any portion of the Registrable Shares which Intrexon has requested to be included in the Registration Statement would materially jeopardize the success of the offering, then the Company shall be required to include in the underwriting only that number of Registrable Shares which the underwriter advises the Company in writing may be sold without materially jeopardizing the offering. If Intrexon disapproves of the terms of any such underwriting may elect to withdraw its Registrable Shares from it by written notice to the Company and the underwriter. Intrexon also agrees to be subject to any lock-up agreements reasonably requested by a managing underwriter so long as the Company shares held by the Company's largest shareholder are also subject to a similar lock-up agreement. The Company shall not grant registration rights to any other holder or prospective holder of its securities in connection with a private placement of the Company's securities unless, (i) all shares held by Intrexon are, at the time of such private placement, included on a Registration Statement, or (ii) the Company agrees, in connection with such private placement, to grant Intrexon the right to include on the Registration Statement a number of Intrexon's Registrable Shares equal to one half of the number of shares to be registered on behalf of the other holder or prospective holder.

The foregoing description of the SIA is qualified in its entirety by reference to such agreement which is filed as Exhibit 10.2 to this Current Report and incorporated herein by reference. The benefits of the representations and warranties set forth in the SIA are intended to be relied upon by the parties to such agreements only and, except as otherwise expressly provided therein, do not constitute continuing representations and warranties to any other party or for any other purpose.

The First Amendment to Security Agreement

The First Amendment to the Security Agreement: (i) excludes and releases in-licensed technologies licensed from the University of Florida Research Foundation from the collateral securing the loan made to the Company pursuant to the Loan Agreement; (ii) added the Company's Differentially Protected Orthogonal Lanthionine Technology ("DPOLT") technology to the Collateral securing the loan made to the Company pursuant to the Loan Agreement; and (iii) provided the KFLP with the ability, so long as the Loan Agreements are in force and effect, to cure any claimed breach of the ECC by Intrexon and receive an assignment of the ECC from the Company of the ECC Agreement that Intrexon agreed to as part of the ECC Agreement.

The foregoing description of the First Amendment to the Security Agreement is qualified in its entirety by reference to such agreement, which is filed as Exhibit 10.3 to this Current Report, and incorporated herein by reference.

The press release dated June 6, 2012 announcing the transactions described above is filed as Exhibit 99.1 to this Current Report on Form 8-K and incorporated herein by reference.

Item 3.02 Unregistered Sales of Equity Securities.

The disclosure in Item 1.01 is incorporated herein by reference thereto. The Technology Access Fee and Base Shares issuances will not be registered under the Securities Act at the time of issuance, and therefore may not be offered or sold in the United States absent registration or an applicable exemption from registration requirements. For these issuances, the Company is relying on the exemption from federal registration under Section 4(2) of the Securities Act, based on the Company's belief that the issuance of the Shares have not and will not involve a public offering as Intrexon is an "accredited investor" as defined under Section 501 promulgated under the Securities Act and no general solicitation has been involved in the offering.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

<u>Exhibit No.</u>	<u>Description</u>
10.1	Exclusive Channel Collaboration Agreement by and between Oragenics, Inc. and Intrexon Corporation dated as of June 5, 2012.**
10.2	Stock Issuance Agreement by and between Oragenics, Inc. and Intrexon Corporation dated as of June 5, 2012.
10.3	First Amendment to Security Agreement by and between Oragenics, Inc and the Koski Family Limited Partnership dated June 5, 2012.
99.1	Press Release dated June 6, 2012

** Confidential treatment has been requested for the redacted portions of this exhibit pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

SIGNATURES

In accordance with the requirements of the Exchange Act, the registrant caused this report to be signed on its behalf by the undersigned, thereunto duly authorized on this 11th day of June 2012.

ORAGENICS, INC.
(Registrant)

BY: /s/ Michael Sullivan
Michael Sullivan
Chief Financial Officer

Portions herein identified by [*****] have been omitted pursuant to a request for confidential treatment under Rule 24b-2 of the Securities Exchange Act of 1934, as amended. A complete copy of this document has been filed separately with the Securities and Exchange Commission.

EXCLUSIVE CHANNEL COLLABORATION AGREEMENT

THIS EXCLUSIVE CHANNEL COLLABORATION AGREEMENT (the “**Agreement**”) is made and entered into effective as of June 5, 2012 (the “**Effective Date**”) by and between **INTREXON CORPORATION**, a Virginia corporation with offices at 20358 Seneca Meadows Parkway, Germantown, MD 20876 (“**Intrexon**”), and **ORAGENICS, INC.**, a Florida corporation having its principal place of business at 3000 Bayport Drive, Suite 685, Tampa, FL 33607 (“**Oragenics**”). Intrexon and Oragenics may be referred to herein individually as a “**Party**”, and collectively as the “**Parties**.”

RECITALS

WHEREAS, Intrexon has expertise in and owns or controls proprietary technology relating to the design and production of DNA vectors or their in vivo expression or the control of expression, as well as control over cell function; and

WHEREAS, Oragenics now desires to become Intrexon’s exclusive channel collaborator with respect to such technology for the purpose of developing the Lantibiotics Program (as defined herein), and Intrexon is willing to appoint Oragenics as a channel collaborator in such field under the terms and conditions of this Agreement.

NOW THEREFORE, in consideration of the foregoing and the covenants and promises contained herein, the Parties agree as follows:

ARTICLE 1

DEFINITIONS

As used in this Agreement, the following capitalized terms shall have the following meanings:

1.1 “Affiliate” means, with respect to a particular Party, any other person or entity that directly or indirectly controls, is controlled by, or is in common control with such Party. As used in this Section 1.1, the term “controls” (with correlative meanings for the terms “controlled by” and “under common control with”) means the ownership, directly or indirectly, of more than fifty percent (50%) of the voting securities or other ownership interest of an entity, or the possession, directly or indirectly, of the power to direct the management or policies of an entity, whether through the ownership of voting securities, by contract, or otherwise. Notwithstanding the foregoing, any person, corporation, partnership, or other entity that would be an Affiliate of a Party solely because it and such Party are under common control by Randal J. Kirk shall not be deemed to be an Affiliate of such Party solely by reason of such control by Randal J. Kirk, with the caveat that, notwithstanding the foregoing, any entity affiliated with Randal J. Kirk shall be deemed to be an Affiliate solely for purposes of Article 9. Notwithstanding the foregoing, none of the KFLP Group shall be deemed to be an Affiliate of Oragenics, and any person, corporation, partnership, or other entity that would otherwise be an Affiliate of Oragenics solely because it and Oragenics are under common control by a member of the KFLP Group shall not be deemed to be an Affiliate of Oragenics.

1.2 “Applicable Laws” has the meaning set forth in Section 8.2(d)(xii).

1.3 “Authorizations” has the meaning set forth in Section 8.2(d)(xii).

1.4 “CC” has the meaning set forth in Section 2.2(b).

1.5 “Channel-Related Program IP” has the meaning set forth in Section 6.1(c).

1.6 “Claims” has the meaning set forth in Section 9.1.

1.7 “CMCC” has the meaning set forth in Section 2.2(b).

1.8 “Committees” has the meaning set forth in Section 2.2(a).

1.9 “Commercialize” or “Commercialization” means any activities directed to marketing, promoting, distributing, importing for sale, offering to sell and/or selling Oragenics Products.

1.10 “Confidential Information” means each Party’s confidential Information, inventions, non-public know-how or non-public data disclosed pursuant to this Agreement or any other confidentiality agreement between the Parties and shall include, without limitation, manufacturing, technical, marketing, financial, personnel and other business information and plans, whether in oral, written, graphic or electronic form.

1.11 “Control” means, with respect to Information, a Patent or other intellectual property right, that a Party owns or has a license from a Third Party to such right and has the ability to grant a license or sublicense as provided for in this Agreement under such right without violating the terms of any agreement or other arrangement with any Third Party.

1.12 “Cost of Goods Sold” means all Manufacturing Costs that are directly and reasonably attributable to manufacturing of Oragenics Product in accordance with US GAAP for commercial sale in the countries where such Oragenics Product has been launched.

1.13 “CRC” has the meaning set forth in Section 2.2(b).

1.14 “Diligent Efforts” means, with respect to a Party’s obligation under this Agreement, the level of efforts and resources reasonably required to diligently develop, manufacture, and/or Commercialize (as applicable) each Oragenics Product in a sustained manner, consistent with the efforts and resources a similarly situated company working in the Field would typically devote to a product of similar market potential, profit potential, strategic value and/or proprietary protection, based on market conditions then prevailing. With respect to a particular task or obligation, Diligent Efforts requires that the applicable Party promptly assign responsibility for such task and consistently make and implement decisions and allocate resources designed to advance progress with respect to such task or obligation.

1.15 “Equity Agreements” has the meaning set forth in Section 5.1.

1.16 “Excess Product Liability Costs” has the meaning set forth in Section 9.3.

1.17 “Executive Officer” means: (i) the Chief Executive Officer of the applicable Party, or (2) another senior executive officer of such Party who has been duly appointed by the Chief Executive Officer to act as the representative of the Party to resolve, as the case may be, (a) a Committee dispute, provided that such appointed officer is not a member of the applicable Committee and occupies a position senior to the positions occupied by the applicable Party’s members of the applicable Committee, or (b) a dispute described in Section 11.1.

1.18 “FDA” has the meaning set forth in Section 8.2(d)(xiii).

1.19 “Field Infringement” has the meaning set forth in Section 6.3(b)

1.20 “Field” means the direct administration to humans or other animals of a Lantibiotic as an active pharmaceutical ingredient in drug products for the prevention or treatment of infectious disease, irrespective of whether such requires regulatory approval.

1.21 “First Commercial Sale” means, with respect to an Orogenics Product and country, the first sale to a Third Party of such Orogenics Product in such country after regulatory approval (and any pricing or reimbursement approvals, if necessary) has been obtained in such country.

1.22 “Fully Loaded Cost” means the direct cost of the applicable good, product or service plus indirect charges and overheads reasonably allocable to the provision of such good, product or service in accordance with US GAAP. Subject to the approval of a project and its associated budget by the JSC, Intrexon will bill for its internal direct costs incurred through the use of annualized standard full-time equivalents; such rate shall be based upon the actual fully loaded costs of those personnel directly involved in the provision of such good, product or service. Intrexon may, from time to time, adjust such full-time equivalent rate based on changes to its actual fully loaded costs and will review the accuracy of its full-time equivalent rate at least quarterly. Intrexon shall provide Orogenics with reasonable documentation indicating the basis for any indirect charges, any allocable overhead, and any such adjustment in full-time equivalent rate.

1.23 “Information” means information, results and data of any type whatsoever, in any tangible or intangible form whatsoever, including without limitation, databases, inventions, practices, methods, techniques, specifications, formulations, formulae, knowledge, know-how, skill, experience, test data including pharmacological, biological, chemical, biochemical, toxicological and clinical test data, analytical and quality control data, stability data, studies and procedures, and patent and other legal information or descriptions.

1.24 “Infringement” has the meaning set forth in Section 6.3(a).

1.25 “Intrexon Channel Technology” means Intrexon’s current and future technology directed towards the design, identification, culturing, and/or production of cell lines, including without limitation the technology embodied in the Intrexon Materials and the Intrexon IP, and specifically including without limitation the following of Intrexon’s platform areas and capabilities: (1) UltraVector®, (2) DNA and RNA MOD engineering, (3) protein engineering, (4) transcription control chemistry, (5) genome engineering, and (6) cell system engineering.

1.26 “Intrexon Indemnitees” has the meaning set forth in Section 9.2.

1.27 “Intrexon IP” means the Intrexon Patents and Intrexon Know-How.

1.28 “Intrexon Know-How” means all Information (other than Intrexon Patents) that (a) is Controlled by Intrexon as of the Effective Date or during the Term and (b) is reasonably required or useful for Orogenics to conduct the Lantibiotics Program. For the avoidance of doubt, the Intrexon Know-How shall include any Information (other than Intrexon Patents) in the Channel-Related Program IP.

1.29 “[***] Third Party IP”** has the meaning set forth in Section 3.8(a).

1.30 “Intrexon Materials” means the genetic code and associated amino acids and gene constructs used alone or in combination and such other proprietary reagents including but not limited to plasmid vectors, virus stocks, cells and cell lines, antibodies, and ligand-related chemistry, in each case that are reasonably required or provided to Orogenics to conduct the Lantibiotics Program.

1.31 “Intrexon Patents” means all Patents that (a) are Controlled by Intrexon as of the Effective Date or during the Term; and (b) are reasonably required or useful for Orogenics to conduct the Lantibiotics Program. For the avoidance of doubt, the Intrexon Patents shall include any Patent in the Channel-Related Program IP.

***** **CONFIDENTIAL MATERIAL REDACTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT AND SEPARATELY FILED WITH THE SECURITIES AND EXCHANGE COMMISSION.**

1.32 “Intrexon Trademarks” means those trademarks related to the Intrexon Channel Technology that are established from time to time by Intrexon for use across its channel partnerships or collaborations.

1.33 “Inventions” has the meaning set forth in Section 6.1(b).

1.34 “IPC” has the meaning set forth in Section 2.2(b).

1.35 “JSC” has the meaning set forth in Section 2.2(b).

1.36 “KFLP” means the Koski Family Limited Partnership.

1.37 “KFLP Group” means KFLP, each of its general partners, and Beverly Koski (as sole owner of Koski Management, Inc.).

1.38 “Lantibiotics” means antibiotic compounds that contain the polycyclic thioether amino acids lanthionine or methyllanthionine, as well as, the unsaturated amino acids dehydroalanine and 2-aminoisobutyric acid.

1.39 “Lantibiotics Program” has the meaning set forth in Section 2.1.

1.40 “Losses” has the meaning set forth in Section 9.1.

1.41 “Manufacturing Costs” means, with respect to Orogenics Products, the full-time equivalent costs (under a reasonable accounting mechanism to be agreed upon by the Parties and out-of-pocket costs of a Party or any of its Affiliates incurred in manufacturing such Orogenics Products, including costs and expenses incurred in connection with (1) the development or validation of any manufacturing process, formulations or delivery systems, or improvements to the foregoing; (2) manufacturing scale-up; (3) in-process testing, stability testing and release testing; (4) quality assurance/quality control development; (5) internal and Third Party costs and expenses incurred in connection with qualification and validation of Third Party contract manufacturers, including scale up, process and equipment validation, and initial manufacturing licenses, approvals and inspections; (6) packaging development and final packaging and labeling; (7) shipping configurations and shipping studies; and (8) overseeing the conduct of any of the foregoing. “Manufacturing Costs” shall further include: (a) to the extent that any such Orogenics Product is manufactured by a Third Party manufacturer, the out-of-pocket costs incurred by such Party or any of its Affiliates to the Third Party for the manufacture and supply (including packaging and labeling) thereof, and any reasonable out-of-pocket costs and direct labor costs incurred by such Party or any of its Affiliates in managing or overseeing the Third Party relationship determined in accordance with the books and records of such Party or its Affiliates maintained in accordance with US GAAP; and (b) to the extent that any such Orogenics Product is manufactured by such Party or any of its Affiliates, direct material and direct labor costs attributable to such Orogenics Product, as well as reasonably allocable overhead expenses, determined in accordance with the books and records of such Party or its Affiliates maintained in accordance with US GAAP.

1.42 “Net Sales” means, with respect to any Orogenics Product, the net sales of such Orogenics Product by Orogenics or an Affiliate of Orogenics (including without limitation net sales of Orogenics Product to a non-Affiliate sublicensee but not including net sales by such non-Affiliate sublicensee), as determined in accordance with US GAAP as the gross amount invoiced on account of sales of Orogenics Product less the usual and customary discounts as determined in accordance with US GAAP. In the case of any sale for value, such as barter or counter-trade other than in an arm’s length transaction exclusively for cash, Net Sales shall be deemed to be the net sales at which substantially similar quantities of the product are sold for cash in an arm’s length transaction in the relevant country. If Orogenics Product is sold to any third party together with other products or services, the price of such product, solely for purposes of the calculation of Net Sales, shall be deemed to be no less than the price at which such product would be sold in a similar transaction to a third party not also purchasing the other products or services.

1.43 “Orogenics Indemnitees” has the meaning set forth in Section 9.1.

1.44 “Oragenics Independent IP” has the meaning set forth in Section 6.1(f).

1.45 “[***] Third Party IP”** has the meaning set forth in Section 3.8(a).

1.46 “Oragenics Product” means any product in the Field that is created, produced, developed, or identified in whole or in part, directly or indirectly, by or on behalf of Oragenics during the Term through use or practice of Intrexon Channel Technology, Intrexon IP, or the Intrexon Materials.

1.47 “Oragenics Program Patent” has the meaning set forth in Section 6.2(b).

1.48 “Oragenics Termination IP” means all Patents or other intellectual property that Oragenics or any of its Affiliates Controls as of the Effective Date or during the Term that cover, or is otherwise necessary or useful for, the development, manufacture or commercialization of a Reverted Product or necessary or useful for Intrexon to operate in the Field. Notwithstanding the foregoing, Oragenics Termination IP shall not include Oragenics Independent IP.

1.49 “Patents” means (a) all patents and patent applications (including provisional applications), (b) any substitutions, divisions, continuations, continuations-in-part, reissues, renewals, registrations, requests for continued examination, confirmations, re-examinations, extensions, supplementary protection certificates and the like of the foregoing, and (c) any foreign or international equivalents of any of the foregoing.

1.50 “Product Profit” means Net Sales less Cost of Goods Sold.

1.51 “Product-Specific Program Patent” means any issued Intrexon Patent where all the claims are directed to Inventions that relate solely and specifically to Oragenics Products. In the event of a disagreement between the Parties as to whether a particular Intrexon Patent is or is not a Product-Specific Program Patent, the Parties shall seek to resolve the issue through discussions at the IPC, provided that if the Parties are unable to resolve the disagreement, the issue shall be submitted to arbitration pursuant to Section 11.2. Any Intrexon Patent that is subject to such a dispute shall be deemed not to be a Product-Specific Program Patent unless and until (a) Intrexon agrees in writing that such Patent is a Product-Specific Program Patent or (b) an arbitrator or arbitration panel determines, pursuant to Article 11, that such Intrexon Patent is a Product-Specific Program Patent.

1.52 “Product Sublicense” has the meaning set forth in Section 3.2(c).

1.53 “Product Sublicensee” has the meaning set forth in Section 3.2(c).

1.54 “Proposed Terms” has the meaning set forth in Section 11.2.

1.55 “Prosecuting Party” has the meaning set forth in Section 6.2(c).

1.56 “Recovery” has the meaning set forth in Section 6.3(f).

1.57 “Retained Product” has the meaning set forth in Section 10.4(a).

1.58 “Reverted Product” has the meaning set forth in Section 10.4(c).

1.59 “SEC” means the United States Securities and Exchange Commission.

******* CONFIDENTIAL MATERIAL REDACTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT AND SEPARATELY FILED WITH THE SECURITIES AND EXCHANGE COMMISSION.**

1.60 “Sublicensing Revenue” means any cash consideration, or the cash equivalent value of non-cash consideration, regardless of whether in the form of upfront payments, milestones, or royalties, actually received by Orogenics or its Affiliate from a Third Party in consideration for a grant of a sublicense under the Intrexon IP or any rights to develop or commercialize Orogenics Products, but excluding: (a) any amounts paid as bona fide reimbursement for research and development costs to the extent incurred following such grant; (b) bona fide loans or any payments in consideration for a grant of equity of Orogenics to the extent that such consideration is equal to or less than fair market value (i.e. any amounts in excess of fair market value shall be Sublicensing Revenue); (c) any amounts paid by Orogenics to a Third Party for the right to operate under or utilize Third Party owned intellectual property that is used to make or use an Orogenics Product underlying the Sublicensing Revenue, (d) subject to the waiver provisions of Section 5.2(b), any payments received by Orogenics from permitted sublicensees for the first instance (but not subsequent instances) of attainment of a commercialization milestone event that is the same as (or substantially similar to) a commercialization milestone event for which Intrexon is entitled to receive an equity-based milestone payment under Section 5.2(a), and (e) amounts received from sublicensees in respect of any Orogenics Product sales that are included in Net Sales.

1.61 “Superior Therapy” means a therapy in the Field that, based on the data then available, (a) demonstrably appears to offer either superior efficacy or safety or significantly lower cost of therapy, as compared with both (i) those therapies that are marketed (either by Orogenics or others) at such time for the indication and (ii) those therapies that are being actively developed by Orogenics for such indication; (b) demonstrably appears to represent a substantial improvement over such existing therapies; and (c) has intellectual property protection and a regulatory approval pathway that, in each case, would not present a significant barrier to commercial development.

1.62 “Support Memorandum” has the meaning set forth in Section 11.2.

1.63 “Term” has the meaning set forth in Section 10.1.

1.64 “Territory” means the entire world.

1.65 “Third Party” means any individual or entity other than the Parties or their respective Affiliates.

1.66 “Third Party IP” has the meaning set forth in Section 3.8(a).

1.67 “Third Security” means Third Security, LLC.

1.68 “US GAAP” means generally accepted accounting principles in the United States.

ARTICLE 2

SCOPE OF CHANNEL COLLABORATION; MANAGEMENT

2.1 General. The general purpose of the channel collaboration described in this Agreement will be to use the Intrexon Channel Technology to research, develop and commercialize products for use in the Field (collectively, the “Lantibiotics Program”). As provided below, the JSC shall establish projects for the Lantibiotics Program. Either Party may propose potential projects in the Field for review and consideration by the JSC.

2.2 Committees.

(a) Generally. The Parties desire to establish several committees (collectively, “Committees”) to oversee the Lantibiotics Program and to facilitate communications between the Parties with respect thereto. Each of such Committees shall have the responsibilities and authority allocated to it in this Article 2. Each of the Committees shall have the obligation to exercise its authority consistent with the respective purpose for such Committee as stated herein and any such decisions shall be made in good faith.

(b) Formation and Purpose. Promptly following the Effective Date, the Parties shall confer and then create the Committees listed in the chart below, each of which shall have the purpose indicated in the chart. To the extent that after conferring both Parties agree that a given Committee need not be created until a later date, the Parties may agree to defer the creation of the Committee until one Party informs the other Party of its then desire to create the so-deferred Committee, at which point the Parties will thereafter promptly create the so-deferred Committee and schedule a meeting of such Committee within one (1) month.

<u>Committee</u>	<u>Purpose</u>
Joint Steering Committee (“JSC”)	Establish projects for the Lantibiotics Program and establish the priorities, as well as approve budgets for such projects. Approve all subcommittee projects and plans.
Chemistry, Manufacturing and Controls Committee (“CMCC”)	Establish project plans and review and approve activities and budgets for chemistry, manufacturing, and controls under the Lantibiotics Program.
Clinical/Regulatory Committee (“CRC”)	Review and approve all research and development plans, clinical projects and publications, and regulatory filings and correspondence under the Lantibiotics Program; review and approve itemized budgets with respect to the foregoing.
Commercialization Committee (“CC”)	Establish project plans and review and approve activities and budgets for commercialization activities under the Lantibiotics Program.
Intellectual Property Committee (“IPC”)	Evaluate intellectual property issues in connection with the Lantibiotics Program; review and approve itemized budgets with respect to the foregoing.

2.3 General Committee Membership and Procedure.

(a) Membership. For each Committee, each Party shall designate an equal number of representatives (not to exceed four (4) for each Party) with appropriate expertise to serve as members of such Committee. For the JSC the representatives must all be employees of such Party or an Affiliate of such Party, and for Committees other than the JSC the representatives must all be employees of such Party or an Affiliate of such Party with the caveat that each Party may designate for each such other Committee up to one (1) representative who is not an employee if: (i) such non-employee representative agrees in writing to be bound to the terms of this Agreement for the treatment and ownership of Confidential Information and Inventions of the Parties, and (ii) the other party consents to the designation of such non-employee representative, which consent shall not be unreasonably withheld. Each representative as qualified above may serve on more than one Committee as appropriate in view of the individual’s expertise. Each Party may replace its Committee representatives at any time upon written notice to the other Party. Each Committee shall have a chairperson; the chairperson of each committee shall serve for a two-year term and the right to designate which representative to the Committee will act as chairperson shall alternate between the Parties, with Orogenics selecting the chairperson first for the JSC, CRC and CC, and Intrexon selecting the chairperson first for the CMCC and IPC. The chairperson of each Committee shall be responsible for calling meetings, preparing and circulating an agenda in advance of each meeting of such Committee, and preparing and issuing minutes of each meeting within fifteen (15) days thereafter.

(b) Meetings. Each Committee shall hold meetings at such times as it elects to do so, but in no event shall such meetings be held less frequently than once every six (6) months, with the caveat that both Parties may agree to suspend activities of a given Committee other than the JSC until such time as one Party informs the other Party

of its then desire to reactivate the so-suspended Committee, at which point the Parties will thereafter schedule and hold the next meeting for the reactivated Committee within one (1) month. Meetings of any Committee may be held in person or by means of telecommunication (telephone, video, or web conferences). To the extent that a Committee holds any meetings in person, the Parties will alternate in designating the location for such in-person meetings, with Oragenics selecting the first meeting location for each Committee. A reasonable number of additional representatives of a Party may attend meetings of a Committee in a non-voting capacity. Each Party shall be responsible for all of its own expenses of participating in any Committee excepting that an Intrexon employee or agent serving on a Committee shall not prevent Intrexon from recouping the Fully Loaded Costs otherwise derived from the labor of that employee or agent in the course of providing manufacturing or support services as set forth in Sections 4.6 and 4.7 below.

(c) Meeting Agendas. Each Party will disclose to the other proposed agenda items along with appropriate information at least three (3) business days in advance of each meeting of the applicable Committee; provided, that a Party may provide its agenda items to the other Party within a lesser period of time in advance of the meeting, or may propose that there not be a specific agenda for a particular meeting, so long as such other Party consents to such later addition of such agenda items or the absence of a specific agenda for such Committee meeting.

(d) Limitations of Committee Powers. Each Committee shall have only such powers as are specifically delegated to it hereunder or from time to time as agreed to in writing by the mutual consent of the Parties and shall not be a substitute for the rights of the Parties. Without limiting the generality of the foregoing, no Committee shall have any power to amend this Agreement. Any amendment to the terms and conditions of this Agreement shall be implemented pursuant to Section 12.7 below.

2.4 Committee Decision-Making. If a Committee is unable to reach unanimous consent on a particular matter within thirty (30) days of its initial consideration of such matter, then either Party may provide written notice of such dispute to the Executive Officer of the other Party. The Executive Officers of each of the Parties will meet at least once in person or by means of telecommunication (telephone, video, or web conferences) to discuss the dispute and use their good faith efforts to resolve the dispute within thirty (30) days after submission of such dispute to the Executive Officers. If any such dispute is not resolved by the Executive Officers within thirty (30) days after submission of such dispute to such officers, then the Executive Officer of the Party specified in the applicable subsection below shall have the authority to finally resolve such dispute acting in good faith.

(a) Casting Vote at JSC. If a dispute at the JSC is not resolved pursuant to Section 2.4 above, then the Executive Officer of Oragenics shall have the authority to finally resolve such dispute.

(b) Casting Vote at CMCC. If a dispute at the CMCC is not resolved pursuant to Section 2.4 above, then (i) in the case of any disputes relating to the Intrexon Materials, the manufacture of an Oragenics Product active pharmaceutical ingredient, or the manufacturing of other components of Oragenics Products contracted for or manufactured by Intrexon, the Executive Officer of Intrexon shall have the authority to finally resolve such dispute; and (ii) in the case of any other disputes, the Executive Officer of Oragenics shall have the authority to finally resolve such dispute.

(c) Casting Vote at CRC. If a dispute at the CRC is not resolved pursuant to Section 2.4 above, then the Executive Officer of Oragenics shall have the authority to finally resolve such dispute.

(d) Casting Vote at CC. If a dispute at the CC is not resolved pursuant to Section 2.4 above, then the Executive Officer of Oragenics shall have the authority to finally resolve such dispute.

(e) Casting Vote at IPC. If a dispute at the IPC is not resolved pursuant to Section 2.4 above, then the Executive Officer of Intrexon shall have the authority to finally resolve such dispute, provided that such authority shall be shared by the Parties with respect to Product-Specific Program Patents (i.e., neither Party shall have the casting vote on such matters, and any such disputes shall be resolved pursuant to Article 11).

(f) Other Committees. If any additional Committee other than those set forth in Section 2.2(b) is formed, then the Parties shall, at the time of such formation, agree on which Party shall have the authority to finally resolve a dispute that is not resolved pursuant to Section 2.4 above.

(g) Restrictions. Neither Party shall exercise its right to finally resolve a dispute at a Committee in accordance with this Section 2.4 in a manner that (i) excuses such Party from any of its obligations specifically enumerated under this Agreement; (ii) expands the obligations of the other Party under this Agreement; (iii) negates any consent rights or other rights specifically allocated to the other Party under this Agreement; (iv) purports to resolve any dispute involving the breach or alleged breach of this Agreement; (v) resolves a matter if the provisions of this Agreement specify that mutual agreement is required for such matter; or (vi) would require the other Party to perform any act that is inconsistent with applicable law.

ARTICLE 3

LICENSE GRANTS

3.1 Licenses to Orogenics.

(a) Subject to the terms and conditions of this Agreement, Intrexon hereby grants to Orogenics a license under the Intrexon IP to research, develop, use, import, export, make, have made, sell, and offer for sale Orogenics Products in the Field in the Territory. Such license shall be exclusive (even as to Intrexon) with respect to any clinical development, selling, offering for sale or other Commercialization of Orogenics Products in the Field, and shall be otherwise non-exclusive.

(b) Subject to the terms and conditions of this Agreement, Intrexon hereby grants to Orogenics a non-exclusive, royalty-free license to use and display the Intrexon Trademarks, solely in connection with the Commercialization of Orogenics Products, in the promotional materials, packaging, and labeling for Orogenics Products, as provided under and in accordance with Section 4.9.

3.2 Sublicensing. Except as provided below, Orogenics shall not sublicense the rights granted under Section 3.1 to any Third Party, or transfer the Intrexon Materials to any Third Party, or otherwise grant any Third Party the right to research, develop, use, or Commercialize Orogenics Products or use or display the Intrexon Trademarks, in each case except with Intrexon's written consent, which written consent may be withheld in Intrexon's sole discretion. Notwithstanding the foregoing, Orogenics shall have a limited right to sublicense under the circumstances described in Sections 3.2(a) through 3.2(c) below.

(a) Orogenics may transfer, to the extent reasonably necessary, Intrexon Materials that are or express active pharmaceutical ingredients to a Third Party contractor performing fill/finish responsibilities for Orogenics Products, and may grant any sublicenses necessary to enable such Third Party to perform such activities.

(b) Orogenics may, with Intrexon's written consent, which written consent shall not be unreasonably withheld, conditioned, or delayed, sublicense the rights granted under Section 3.1 to an Affiliate, or transfer the Intrexon Materials to an Affiliate, or grant an Affiliate the right to research, develop, use, or Commercialize Orogenics Products or use or display the Intrexon Trademarks. In the event that Intrexon consents to any such grant or transfer to an Affiliate, Orogenics shall remain responsible for, and be guarantor of, the performance by any such Affiliate and shall cause such Affiliate to comply with the provisions of this Agreement in connection with such performance (as though such Affiliate were Orogenics), including any payment obligations owed to Intrexon hereunder.

(c) Orogenics may grant a sublicense of the rights granted under Section 3.1 to a Third Party licensee of any Orogenics Product (a "**Product Sublicensee**") to the extent necessary to permit such Third Party to research, develop, use, import, export, make, have made, sell, and offer for sale that Orogenics Product (a "**Product Sublicense**"), provided, that (i) such Product Sublicense is expressly limited to the appropriate Orogenics Product, (ii) does not grant the Product Sublicensee any rights to Intrexon IP other than that incorporated into the Orogenics Product at the time of the Product Sublicense, (iii) does not purport to relieve Orogenics of any of its obligations under this

Agreement, (iv) the Product Sublicensee agrees in writing, in a document in form reasonably acceptable to Intrexon and to which Intrexon is an express third party beneficiary, to abide by the following provisions of this Agreement: Sections 3.1., 3.3-3.6, 3.8, 3.10, and 3.11 and Articles VI, VII, and X), (v) the Product Sublicense is presented in full to the JSC by Oragenics before execution by Oragenics and the prospective Product Sublicensee and as soon as is reasonably practical for the purpose of allowing the JSC to review and comment upon the terms and scope of the Product Sublicense agreement before execution, and (vi) the Product Sublicensee is not controlled by or otherwise affiliated with a member of the KFLP Group.

3.3 Limitation on Sublicensees. None of the enforcement rights under the Intrexon Patents that are granted to Oragenics pursuant to Section 6.3 shall be transferred to, or exercised by, a sublicensee except with Intrexon's prior written consent, which may be withheld in Intrexon's sole discretion.

3.4 No Non-Permitted Use. Oragenics hereby covenants that it shall not, nor shall it permit any Affiliate or, if applicable, (sub)licensee, to use or practice, directly or indirectly, any Intrexon IP, Intrexon Channel Technology, or Intrexon Materials for any purposes other than those expressly permitted by this Agreement.

3.5 Exclusivity. Intrexon and Oragenics mutually agree that, under the channel collaboration established by this Agreement, it is intended that the Parties will be exclusive to each other in the Field. To this end, neither Intrexon nor its Affiliates shall make the Intrexon Channel Technology or Intrexon Materials available to any Third Party for the purpose of developing or Commercializing products in the Field, and neither Intrexon nor any Affiliate shall pursue (either by itself or with a Third Party or Affiliate) the research, development or Commercialization of any product for purpose of sale in the Field, outside of the Lantibiotics Program. Further, other than Oragenics' activities within the Lantibiotics Program, neither Oragenics nor its Affiliates shall pursue (either by itself or with a Third Party or Affiliate) the research, development or Commercialization of any product that uses, incorporates, references in a related regulatory filing, or is produced from Intrexon Channel Technology, Intrexon Materials, or Intrexon IP for purpose of sale in the Field. For clarity, Oragenics may continue to research, develop, use, manufacture, and Commercialize Lantibiotics using traditional synthetic chemistry techniques insofar as and for so long as such synthetic chemistry efforts are and remain entirely independent of the Lantibiotics Program and such Lantibiotic does not use, incorporate, reference in a related regulatory filing, or get produced from Intrexon Channel Technology, Intrexon Materials, or Intrexon IP.

3.6 Off Label Use. For purpose of clarity, (a) following the First Commercial Sale of an Oragenics Product, the use by direct or indirect purchasers or other users of Oragenics Products outside the Field (i.e. "off label use") shall not constitute a breach by Oragenics of the terms of Section 3.3 or 3.4, provided that neither Oragenics nor its Affiliate (nor any Third Party under contract with either of them) marketed or promoted Oragenics Products for such off-label use; and (b) following the First Commercial Sale of a product by Intrexon, an Intrexon Affiliate, or a Third Party sublicensee, collaborator, or partner of Intrexon, the use by direct or indirect purchasers or other users of such products in the Field (i.e. "off label use") shall not constitute a breach by Intrexon of the terms of Section 3.4, provided that neither Intrexon nor its Affiliate (nor any Third Party under contract with either of them) marketed or promoted such products for such off-label use.

3.7 No Prohibition on Intrexon. Except as explicitly set forth in Sections 3.1 and 3.4, nothing in this Agreement shall prevent Intrexon from practicing or using the Intrexon Materials, Intrexon Channel Technology, and Intrexon IP for any purpose, and to grant to Third Parties the right to do the same. Without limiting the generality of the foregoing, Oragenics acknowledges that Intrexon has all rights, in Intrexon's sole discretion, to make the Intrexon Materials, Intrexon Channel Technology (including any active pharmaceutical ingredient used in an Oragenics Product), and Intrexon IP available to Third Party channel partners or collaborators for use in fields outside the Field.

3.8 Rights to Clinical and Regulatory Data. Oragenics shall own and control all clinical data and regulatory filings relating to Commercialization of Oragenics Products during the Term. Oragenics shall provide full copies of all clinical and non-clinical data and reports, regulatory filings, and communications from regulatory authorities that relate specifically and solely to Oragenics Products. To the extent that there exist any clinical and non-clinical data and reports, regulatory filings, and communications from regulatory authorities owned by Oragenics or a Product Sublicensee that relate both to Oragenics Products and other products produced by Oragenics or a Product Sublicensee outside the Field, Oragenics shall provide (or require that the Product Sublicensee provide) to Intrexon upon Intrexon's

request copies of the portions of such data, reports, filings, and communications that relate to Oragenics Products. Intrexon shall be permitted, directly or in conjunction with or through partners or other channel collaborators, to reference this data, reports, filings, and communications relating to Oragenics Products in regulatory filings made to obtain regulatory approval for products indicated for use in fields outside the Field. Intrexon shall have the right to use any such information in developing and Commercializing products outside the Field and to license any Third Parties to do so.

3.9 Third Party Licenses.

(a) [*****] shall obtain, [*****], any licenses from Third Parties that are required in order to practice the Intrexon Channel Technology in the Field where the licensed intellectual property is directed towards the manufacture of gene constructs, genetic transformation, methods for altering or controlling genetic expression, or cell lines (but excluding intellectual property directed to any specific Lantibiotic) (“[*****] Third Party IP”). Other than with respect to [*****] Third Party IP, [*****] shall be solely responsible for obtaining, at its sole expense, any licenses from Third Parties that [*****] determines, in its sole discretion, are required in order to lawfully make, use, sell, offer for sale, or import Oragenics Products (“[*****] Third Party IP”). [*****] Third Party IP and [*****] Third Party IP are collectively referred to as “Third Party IP”.

(b) In the event that either Party desires to license from a Third Party any [*****] Third Party IP or [*****] Third Party IP, such Party shall so notify the other Party, and the IPC shall discuss such Third Party IP and its applicability to the Oragenics Products and to the Field. As provided above in Section 3.9(a), [*****] shall have the sole right and responsibility to pursue a license under [*****] Third Party IP, and [*****] hereby covenants that it shall not itself directly license such [*****] Third Party IP at any time, provided that [*****] may (but shall not be obligated to) obtain such a license directly if the Third Party owner or licensee of such [*****] Third Party IP brings an infringement action against [*****] or its Affiliates and, after written notice to [*****] of such action, [*****] fails to obtain a license to such [*****] Third Party IP within ninety (90) days after such notice. Following the IPC’s discussion of any [*****] Third Party IP, subject to Section 3.9(c), [*****] shall have the right to pursue a license under [*****] Third Party IP, at [*****] sole expense. For the avoidance of doubt, Intrexon may at any time obtain a license under [*****] Third Party IP outside the Field, at [*****] sole expense, provided that if [*****] decides to seek to obtain such a license, it shall use reasonable efforts to coordinate its licensing activities in this regard with [*****].

(c) [*****] shall provide the proposed terms of any license under [*****] Third Party IP and the final version of the definitive license agreement for any [*****] Third Party IP to the IPC for review and discussion prior to signing, and shall consider [*****] comments thereto in good faith. To the extent that [*****] obtains a license under [*****] Third Party IP, [*****] shall provide the final version of the definitive license agreement for such [*****] Third Party IP to the IPC. If [*****] acquires rights under any Third Party IP outside the Field, it will do so on a non-exclusive basis unless it obtains the prior written consent of Intrexon for such license outside the Field to be exclusive. Any Party that is pursuing a license to any Third Party IP with respect to the Field under this Section 3.9 shall keep the other Party reasonably informed of the status of any negotiations relating thereto. For purposes of clarity, (i) any costs incurred by Intrexon in obtaining and maintaining licenses to [*****] Third Party IP shall be borne solely by [*****], and (ii) any costs incurred by [*****] in obtaining and maintaining licenses to [*****] Third Party IP (and, to the limited extent provided in subsection (b), [*****] Third Party IP) shall be borne solely by [*****].

(d) For any Third Party license under which Oragenics or its Affiliates obtain a license under Patents claiming inventions or know-how specific to or used or incorporated into the development, manufacture, and/or Commercialization of Oragenics Products, Oragenics shall use commercially reasonable efforts to ensure that Oragenics will have the ability, pursuant to Section 10.4(h), to assign such agreement to Intrexon or grant a sublicense to Intrexon thereunder (having the scope set forth in Section 10.4(h)).

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(e) The licenses granted to Orogenics under Section 3.1 may include sublicenses under Intrexon IP that has been licensed to Intrexon by one or more Third Parties. Any such sublicenses are subject to the terms and conditions set forth in the applicable upstream license agreement, subject to the cost allocation set forth in Section 3.9(c), provided that Intrexon shall either provide unredacted copies of such upstream license agreements to Orogenics or shall disclose in writing to Orogenics all of such terms and conditions that are applicable to Orogenics. Orogenics shall not be responsible for complying with any provisions of such upstream license agreements unless, and to the extent that, such provisions have been disclosed to Orogenics as provided in the preceding sentence.

(f) If either Party receives notice from a Third Party concerning activities of a Party taken in conjunction with performance of obligations under this Agreement, which notice alleges infringement by a Party of, or offers license under, Patents or other intellectual property rights owned or controlled by that Third Party, the receiving Party shall inform the other party thereof within five (5) business days.

3.10 Licenses to Intrexon. Subject to the terms and conditions of this Agreement, Orogenics hereby grants to Intrexon a non-exclusive, worldwide, fully-paid, royalty-free license, under any applicable Patents or other intellectual property Controlled by Orogenics or its Affiliates, solely to the extent necessary for Intrexon to conduct those responsibilities assigned to it under this Agreement, which license shall be sublicensable solely to Intrexon's Affiliates or to any of Intrexon's permitted subcontractors.

3.11 Restrictions Relating to Intrexon Materials. Orogenics and its permitted sublicensees shall use the Intrexon Materials solely for purposes of the Lantibiotics Program and not for any other purpose without the prior written consent of Intrexon. With respect to the Intrexon Materials comprising Intrexon's vector assembly technology, Orogenics shall not, and shall ensure that Orogenics personnel and permitted sublicensees do not (a) distribute, sell, lend or otherwise transfer such Intrexon Materials to any Third Party; (b) co-mingle such Intrexon Materials with any other proprietary biological or chemical materials without Intrexon's written consent; or (c) analyze such Intrexon Materials or in any way attempt to reverse engineer or sequence such Intrexon Materials.

ARTICLE 4

OTHER RIGHTS AND OBLIGATIONS

4.1 Development and Commercialization. Subject to Sections 4.6 and 4.7, Orogenics shall be solely responsible for the performance of the Lantibiotics Program and the development and commercialization of Orogenics Products in the Field. Orogenics shall be responsible for all costs incurred in connection with the Lantibiotics Program except that Intrexon shall be responsible for the following: (a) costs of establishing manufacturing capabilities and facilities in connection with Intrexon's manufacturing obligation under Section 4.6 (provided, however, that Intrexon may include an allocable portion of such costs, through depreciation and amortization, when calculating the Fully Loaded Cost of manufacturing Orogenics Product, to the extent such allocation, depreciation, and amortization is permitted by US GAAP, it being recognized that the majority of non-facilities scale-up costs cannot be capitalized and amortized under US GAAP); (b) costs of basic research with respect to the Intrexon Channel Technology and Intrexon Materials (i.e., platform improvements) but, for clarity, excluding research described in Section 4.7 or research requested by the JSC for the development of an Orogenics Product (which research costs shall be reimbursed by Orogenics); (c) [*****]; and (d) costs of filing, prosecution and maintenance of Intrexon Patents. The costs encompassed within subsection (a) above shall include the scale-up of Intrexon Materials and related active pharmaceutical ingredients for clinical trials and commercialization of Orogenics Products undertaken pursuant to Section 4.6, which shall be at Intrexon's cost whether it elects to conduct such efforts internally or through Third Party contractors retained by either Intrexon or Orogenics (with Intrexon's consent).

4.2 Transfer of Technology and Information. The JSC shall develop a plan and protocol for each project and timing for the transfer of relevant data and Intrexon Materials.

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4.3 Information and Reporting. Orogenics will keep Intrexon informed about Orogenics' efforts to develop and commercialize Orogenics Products, including reasonable and accurate summaries of Orogenics' (and its Affiliates' and, if applicable, (sub)licensees') global development plans (as updated), including preclinical, clinical and regulatory plans, global marketing plans (as updated), progress towards meeting the goals and milestones in such plans and explanations of any material deviations, and significant developments in the development and/or commercialization of the Orogenics Products, including initiation or completion of a clinical trial, submission of a United States or international regulatory filing, receipt of a response to such United States or international regulatory filing, clinical safety event, receipt of Regulatory Approval, or commercial launch. As set forth in Section 3.8 above, Orogenics shall also provide to Intrexon copies of all final preclinical protocols and reports, final clinical protocols and reports, and regulatory correspondence and filings generated by Orogenics as soon as practical after they become available. Intrexon will keep Orogenics informed about Intrexon's efforts (a) to establish manufacturing capabilities and facilities for Orogenics Products (and Intrexon Materials relevant thereto) and otherwise perform its manufacturing responsibilities under Section 4.6 and (b) to undertake discovery-stage research for the Lantibiotics Program with respect to the Intrexon Channel Technology and Intrexon Materials. Unless otherwise provided herein, such disclosures by Orogenics and Intrexon will be made in the course of JSC meetings at least once every six (6) months while Orogenics Products are being developed or commercialized anywhere in the world, and shall be reflected in the minutes of such meetings.

4.4 Regulatory Matters. At all times after the Effective Date, Orogenics shall own and maintain, at its own cost, all regulatory filings and regulatory approvals for Orogenics Products that Orogenics is developing or Commercializing pursuant to this Agreement. As such, Orogenics shall be responsible for reporting all adverse events related to such Orogenics Products to the appropriate regulatory authorities in the relevant countries, in accordance with the applicable laws and regulations of such countries. To the extent that Intrexon will itself develop, or in collaboration with other third parties develop, Intrexon Materials outside of the Field, Intrexon may request that Orogenics and Intrexon establish and execute a separate safety data exchange agreement, which agreement will address and govern the timely exchange of safety information generated by Orogenics, Intrexon, and relevant third parties with respect to specific Intrexon Materials. The decision to list or not list Patents in any regulatory filing for an Orogenics Product (for example, as required by 21 C.F.R. § 314.53(b)), add or delete a Patent from a regulatory filing, or to otherwise identify a Patent to a third party in compliance with laws or regulations relating to regulatory approvals (for example, in compliance with 42 U.S.C. § 262(a)(1)(A)(k) et seq.) shall be determined by Intrexon, after consultation with Orogenics, except with respect to Product Specific Program Patents, which will be mutually determined by the Parties.

4.5 Diligence.

(a) Orogenics shall use, and shall require its Product Sublicensees to use, Diligent Efforts to develop and commercialize Orogenics Products.

(b) Without limiting the generality of the foregoing, Intrexon may, from time to time, notify Orogenics that it believes it has identified a Superior Therapy, and in such case Intrexon shall provide to Orogenics its then-available information about such therapy and reasonable written support for its conclusion that the therapy constitutes a Superior Therapy. Orogenics shall have the following obligations with respect to such proposed Superior Therapy: (i) within sixty (60) days after such notification, Orogenics shall prepare and deliver to the JSC for review and approval a development plan detailing how Orogenics will pursue the Superior Therapy (including a proposed budget); (ii) Orogenics shall revise the development plan as directed by the JSC; and (iii) following approval of the development plan by the JSC, Orogenics shall use Diligent Efforts to pursue the development of the Superior Therapy under the Lantibiotics Program in accordance with such development plan. If Orogenics fails to comply with the foregoing obligations, or if Orogenics unreasonably exercises its casting vote at the JSC to either (x) prevent the approval of a development plan for a Superior Therapy; (y) delay such approval more than sixty (60) days after delivery of the development plan to the JSC; or (z) approve a development plan that is insufficient in view of the nature and magnitude of the opportunity presented by the Superior Therapy, then Intrexon shall have the termination right set forth in Section 10.2(c) (subject to the limitation set forth therein). For clarity, any dispute arising under this 4.5, including any dispute as to whether a proposed project constitutes a Superior Therapy (as with any other dispute under this Agreement) shall be subject to dispute resolution in accordance with Article 11.

(c) The activities of Oragenics' Affiliates and any permitted sublicensees shall be attributed to Oragenics for the purposes of evaluating Oragenics' fulfillment of the obligations set forth in this Section 4.5.

4.6 Manufacturing. Intrexon shall have the option and, in the event it so elects, shall use Diligent Efforts, to perform any manufacturing activities in connection with the Lantibiotics Program that relate to the Intrexon Materials, the manufacture of bulk drug product, the manufacturing of bulk quantities of other components of Oragenics Products, or any earlier steps in the manufacturing process for Oragenics Products. To the extent that Intrexon so elects, Intrexon may request that Oragenics and Intrexon establish and execute a separate manufacturing and supply agreement, which agreement will establish and govern the production, quality assurance, and regulatory activities associated with manufacture of Intrexon Materials. Except as provided in Section 4.1, any manufacturing undertaken by Intrexon pursuant to the preceding sentence shall be performed in exchange for cash payments equal to Intrexon's Fully Loaded Cost in connection with such manufacturing, on terms to be negotiated by the Parties in good faith. In the event that Intrexon does not manufacture Intrexon Materials, bulk drug product or bulk quantities of other components of Oragenics Products, then Intrexon shall provide to Oragenics or a contract manufacturer selected by Oragenics and approved by Intrexon all Information Controlled by Intrexon that is related to the manufacturing of such Intrexon Materials, bulk drug product or bulk quantities of other components of Oragenics Products, for use in the Field and is reasonably necessary to enable Oragenics or such contract manufacturer (as appropriate) for the sole purpose of manufacturing such Intrexon Materials, bulk drug product or bulk quantities of other components of Oragenics Products, in each case as manufactured by Intrexon. The costs and expenses incurred by Intrexon in carrying out such transfer shall be borne by Intrexon. Any manufacturing Information transferred hereunder to Oragenics or its contract manufacturer shall not be further transferred to any Third Party or Oragenics Affiliate without the prior written consent of Intrexon; provided, however, that Intrexon shall not unreasonably withhold such consent if necessary to permit Oragenics to switch manufacturers.

4.7 Support Services. From time to time, on an ongoing basis, Oragenics shall request, or Intrexon may propose, that Intrexon perform certain support services with respect to the Lantibiotics Program. To the extent that the Parties mutually agree that Intrexon should perform such services, the Parties shall negotiate in good faith the terms under which services would be performed, it being understood that Intrexon would be compensated for such services by cash payments equal to Intrexon's Fully Loaded Cost in connection with such services.

4.8 Compliance with Law. Each Party shall comply, and shall ensure that its Affiliates, (sub)slicensees and Third Party contractors comply, with all applicable laws, regulations, and guidelines applicable to the Lantibiotics Program, including without limitation those relating to the transport, storage, and handling of Intrexon Materials and Oragenics Products.

4.9 Trademarks and Patent Marking. To the extent permitted by applicable law and regulations, Oragenics shall, and shall ensure that the packaging, promotional materials, and labeling for Oragenics Products shall carry, in a conspicuous location, the applicable Intrexon Trademark(s), subject to Oragenics' reasonable approval of the size, position, and location thereof. Consistent with the U.S. patent laws, Oragenics shall ensure that Oragenics Products, or its packaging or accompanying literature as appropriate, bear applicable and appropriate patent markings for Intrexon Patent numbers. Oragenics shall provide Intrexon with copies of any materials containing the Intrexon Trademarks or patent markings prior to using or disseminating such materials, in order to obtain Intrexon's approval thereof. Oragenics' use of the Intrexon Trademarks and patent markings shall be subject to prior review and approval of the IPC. Oragenics acknowledges Intrexon's sole ownership of the Intrexon Trademarks and agrees not to take any action inconsistent with such ownership. Oragenics covenants that it shall not use any trademark confusingly similar to any Intrexon Trademarks in connection with any products (including any Oragenics Product). From time to time during the Term, Intrexon shall have the right to obtain from Oragenics samples of Oragenics Product sold by Oragenics or its Affiliates or sublicensees, or other items which reflect public uses of the Intrexon Trademarks or patent markings, for the purpose of inspecting the quality of such Oragenics Products, the use of the Intrexon Trademarks, or the accuracy of the patent markings. In the event that Intrexon inspects under this Section 4.9, Intrexon shall notify the result of such inspection to Oragenics in writing thereafter. Oragenics shall comply with reasonable policies provided by Intrexon from time-to-time to maintain the goodwill and value of the Intrexon Trademarks.

ARTICLE 5

COMPENSATION

5.1 Technology Access Fee. In partial consideration for Oragenics' appointment as an exclusive channel collaborator and the other rights granted to Oragenics hereunder, within thirty (30) days of execution of this Agreement Oragenics shall issue the number of shares of Oragenics' common stock, in accordance with the terms and conditions of that certain Stock Issuance Agreement of even date herewith (the "Equity Agreement"), which shares are termed the Technology Access Fee Shares in the Equity Agreement. Provided that all closing conditions for the Technology Access Fee Shares (as set forth in the Equity Agreement) that are within the reasonable control of Intrexon have been satisfied or waived, the issuance of the Technology Access Fee Shares (as set forth in the Equity Agreement) is a condition subsequent to the effectiveness of this Agreement.

5.2 Milestones.

(a) Oragenics Equity-Based Milestones. Upon the first instance of attainment of certain commercialization milestone events by an Oragenics Product (whether such attainment is achieved by Oragenics or by a permitted sublicensee), Oragenics has agreed to issue to Intrexon certain shares of Oragenics' common stock, or at Oragenics' election make a cash payment to Intrexon at the fair market value of the shares, as set forth in the Equity Agreement. For clarity, each such milestone event triggers payment only once, and Oragenics is not obligated to make any milestone payment for any given Oragenics Product if that milestone payment had been previously paid to Intrexon for any previous Oragenics Product having achieved previously the same milestone event. The specific milestone events and respective amounts due to Intrexon upon achievement of each milestone event are set forth in the Equity Agreement.

(b) Product Sublicense Milestones. If (A) a commercialization milestone event occurs that gives rise to a right for Intrexon to receive an equity-based milestone payment from Oragenics under Section 5.2(a), (B) that milestone event is achieved by an Oragenics Product licensed to a Product Sublicensee under a respective Product Sublicense, and (C) Oragenics is due to receive a milestone payment from the Product Sublicensee for achievement of that same (or substantially similar) milestone event by the sublicensed Oragenics Product under the respective Product Sublicense, then Intrexon may elect at its own discretion to waive that particular equity-based milestone payment from Oragenics for that particular commercialization milestone event and instead designate the amount of the payment due to Oragenics from the Product Sublicensee for that same (or substantially similar) milestone event as Sublicensing Revenue for which Intrexon will be entitled to receive revenue sharing under Section 5.4(b). If it so elects under this Section 5.2(b), Intrexon must notify Oragenics in writing of its waiver of the equity-based milestone and election to share the milestone payment due from the Product Sublicensee as Sublicensing Revenue at least five (5) business days prior to the deadline for Oragenics to issue shares or otherwise make a payment for the waived equity-based milestone payment. The actual receipt by Intrexon of its full share of the Product Sublicensee milestone payment as Sublicensing Revenue will be a condition subsequent to making final any waiver of Intrexon's rights to receive the particular equity-based milestone payment otherwise due from Oragenics under Section 5.2(a). Oragenics will pay Intrexon any amount due under this Section 5.2(b) within the later of (i) thirty (30) days from underlying milestone event, or (ii) ten days following the date stipulated in the underlying Product Sublicense for Oragenics to receive the milestone payment.

5.3 Equity Agreement Controls. All issuances of stock to Intrexon, or cash payments to Intrexon in lieu of stock, shall be in accordance with the terms and conditions of the Equity Agreement, which Equity Agreement shall control to the extent it may conflict with Sections 5.1 through 5.2 of this Agreement.

5.4 Revenue Sharing.

(a) No later than thirty (30) days after each calendar quarter in which there is positive Product Profit arising from the sale of any Oragenics Product in the Field in the Territory, Oragenics shall pay to Intrexon twenty-five percent (25%) of such Product Profit, on an Oragenics Product-by-Oragenics Product basis. Commencing with the Effective Date, in the event that a negative Product Profit occurs for a particular Oragenics Product in any calendar quarter, neither Oragenics nor Intrexon shall owe any payments hereunder with respect to such Oragenics Product. Any negative Product Profit that results from Excess Product Liability Costs may be carried forward to future quarters and

offset against positive Product Profit in such future quarters for the same Orogenics Product. Except as set forth in the preceding sentence, Orogenics shall not be permitted to carry forward any negative Product Profits to subsequent quarters.

(b) No later than thirty (30) days after each calendar quarter in which Orogenics or any Orogenics Affiliate receives Sublicensing Revenue, Orogenics shall pay to Intrexon fifty percent (50%) of such Sublicensing Revenue. For purposes of clarity, sales of Orogenics Products by permitted sublicensees shall not constitute Net Sales.

5.5 Method of Payment. Except for payments payable as and made in the form of common stock, payments due to Intrexon under this Agreement shall be paid in United States dollars by wire transfer to a bank in the United States designated in writing by Intrexon. All references to “dollars” or “\$” herein shall refer to United States dollars.

5.6 Payment Reports and Records Retention. Within thirty (30) days after the end of each calendar quarter during which Net Sales have been generated, during which Sublicensing Revenue has been received, or during which Negative Product Profit has occurred, Orogenics shall deliver to Intrexon a written report that shall contain at a minimum for the applicable calendar quarter:

- (a) gross sales of each Orogenics Product (on a country-by-country basis);
- (b) itemized calculation of Net Sales, showing all applicable deductions;
- (c) itemized calculation of Cost of Goods Sold;
- (d) itemized calculation of Sublicensing Revenue, including any offsets claimed for Third Party license costs;
- (e) the amount of any negative Product Profit for the applicable calendar quarter, and any Negative Product Profit amount carried forward from a prior quarter and applied during the present quarter (as per Section 5.4(a));
- (f) the amount of the payment (if any) due pursuant to Section 5.4(a) and/or 5.4(b);
- (g) the amount of taxes, if any, withheld to comply with any applicable law; and
- (h) the exchange rates used in any of the foregoing calculations.

For three (3) years after each sale of Orogenics Product or the incurring of an item included in Cost of Goods Sold, Orogenics shall keep (and shall ensure that its Affiliates and, if applicable, (sub)licensees shall keep) complete and accurate records of such sales or Cost of Goods Sold (as the case may be) in sufficient detail to confirm the accuracy of the payment calculations hereunder.

5.7 Audits.

(a) Upon the written request of Intrexon, Orogenics shall permit an independent certified public accounting firm of internationally recognized standing selected by Intrexon, and reasonably acceptable to Orogenics, to have access to and to review, during normal business hours and upon no less than thirty (30) days prior written notice, the applicable records of Orogenics and its Affiliates to verify the accuracy and timeliness of the reports and payments made by Orogenics under this Agreement. Such review may cover the records for sales made in any calendar year ending not more than three (3) years prior to the date of such request. The accounting firm shall disclose to both Parties whether the royalty reports and/or know-how reports conform to the provisions of this Agreement and/or US GAAP, as applicable, and the specific details concerning any discrepancies. Such audit may not be conducted more than once in any calendar year.

(b) If such accounting firm concludes that additional amounts were owed during such period, Oragenics shall pay additional amounts, with interest from the date originally due as set forth in Section 5.9, within thirty (30) days of receipt of the accounting firm's written report. If the amount of the underpayment is greater than five percent (5%) of the total amount actually owed for the period audited, then Oragenics shall in addition reimburse Intrexon for all costs related to such audit; otherwise, Intrexon shall pay all costs of the audit. In the event of overpayment, any amount of such overpayment shall be fully creditable against amounts payable for the immediately succeeding calendar quarter(s); provided, however, that if such overpayment is reasonably expected to exceed the amount projected to be payable to Intrexon by Oragenics over next [*****], Intrexon will promptly repay to Oragenics any amount exceeding that projected amount.

(c) Intrexon shall (i) treat all information that it receives under this Section 5.7 in accordance with the confidentiality provisions of Article 7 and (ii) cause its accounting firm to enter into an acceptable confidentiality agreement with Oragenics obligating such firm to retain all such financial information in confidence pursuant to such confidentiality agreement, in each case except to the extent necessary for Intrexon to enforce its rights under this Agreement.

5.8 Taxes. The Parties will cooperate in good faith to obtain the benefit of any relevant tax treaties to minimize as far as reasonably possible any taxes which may be levied on any amounts payable hereunder. Oragenics shall deduct or withhold from any payments any taxes that it is required by applicable law to deduct or withhold. Notwithstanding the foregoing, if Intrexon is entitled under any applicable tax treaty to a reduction of the rate of, or the elimination of, applicable withholding tax, it may deliver to Oragenics or the appropriate governmental authority (with the assistance of Oragenics to the extent that this is reasonably required and is expressly requested in writing) the prescribed forms necessary to reduce the applicable rate of withholding or to relieve Oragenics of its obligation to withhold tax, and Oragenics shall apply the reduced rate of withholding tax, or dispense with withholding tax, as the case may be, provided that Oragenics has received evidence of Intrexon's delivery of all applicable forms (and, if necessary, its receipt of appropriate governmental authorization) at least fifteen (15) days prior to the time that the payment is due. If, in accordance with the foregoing, Oragenics withholds any amount, it shall make timely payment to the proper taxing authority of the withheld amount, and send to Intrexon proof of such payment within forty-five (45) days following that latter payment.

5.9 Late Payments. Any amount owed by Oragenics to Intrexon under this Agreement that is not paid within the applicable time period set forth herein shall accrue interest at the lower of (a) two percent (2%) per month, compounded, or (b) the highest rate permitted under applicable law.

ARTICLE 6

INTELLECTUAL PROPERTY

6.1 Ownership.

(a) Subject to the license granted under Section 3.1, all rights in the Intrexon IP shall remain with Intrexon.

(b) Oragenics and/or Intrexon may solely or jointly conceive, reduce to practice or develop discoveries, inventions, processes, techniques, and other technology, whether or not patentable, in the course of performing the Lantibiotics Program (collectively "Inventions"). Each Party shall promptly provide the other Party with a detailed written description of any such Inventions that relate to the Field. Inventorship shall be determined in accordance with United States patent laws.

***** CONFIDENTIAL MATERIAL REDACTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT AND SEPARATELY FILED WITH THE SECURITIES AND EXCHANGE COMMISSION.

(c) Intrexon shall solely own all right, title and interest in all Inventions related to Intrexon Channel Technology, together with all Patent rights and other intellectual property rights therein (the “**Channel-Related Program IP**”). Oragenics hereby assigns all of its right, title and interest in and to the Channel-Related Program IP to Intrexon. Oragenics agrees to execute such documents and perform such other acts as Intrexon may reasonably request to obtain, perfect and enforce its rights to the Channel-Related Program IP and the assignment thereof.

(d) Notwithstanding anything to the contrary in this Agreement, any discovery, invention, process, technique, or other technology, whether or not patentable, that is conceived, reduced to practice or developed by Oragenics solely or jointly through the use of the Intrexon Channel Technology, Intrexon IP, or Intrexon Materials in breach of the terms and conditions of this Agreement, together with all patent rights and other intellectual property rights therein, shall be solely owned by Intrexon and shall be included in the Channel-Related Program IP.

(e) All information regarding Channel-Related Program IP shall be Confidential Information of Intrexon. Oragenics shall be under appropriate written agreements with each of its employees, contractors, or agents working on the Lantibiotics Program, pursuant to which such person shall grant all rights in the Inventions to Oragenics (so that Oragenics may convey certain of such rights to Intrexon, as provided herein) and agree to protect all Confidential Information relating to the Lantibiotics Program.

(f) All rights, technology, and intellectual property (A) owned by Oragenics or licensed from a Third Party by Oragenics as of the Effective Date, or (B) thereafter developed by Oragenics independent of the Lantibiotics Program, Intrexon Channel Technology, Intrexon IP or Intrexon Materials, shall be owned by and remain the property of Oragenics (the “**Oragenics Independent IP**”).

6.2 Patent Prosecution.

(a) Intrexon shall have the sole right, but not the obligation, to (a) conduct and control the filing, prosecution and maintenance of the Intrexon Patents, and (b) conduct and control the filing, prosecution, and maintenance of any applications for patent term extension and/or supplementary protection certificates for the Intrexon Patents that may be available as a result of the regulatory approval of any Oragenics Product. At the reasonable request of Intrexon, Oragenics shall cooperate with Intrexon in connection with such filing, prosecution, and maintenance, at Intrexon’s expense. Under no circumstances shall Oragenics (a) file, attempt to file, or assist anyone else in filing, or attempting to file, any Patent application, either in the United States or elsewhere, that claims or uses or purports to claim or use or relies for support upon an Invention owned by Intrexon, (b) use, attempt to use, or assist anyone else in using or attempting to use, the Intrexon Know-How, Intrexon Materials, or any Confidential Information of Intrexon to support the filing of a Patent application, either in the United States or elsewhere, that contains claims directed to the Intrexon IP, Intrexon Materials, or the Intrexon Channel Technology, or (c) without prior approval of the IPC, file, attempt to file, or assist anyone else in filing, or attempting to file, any application for patent term extension or supplementary protection certificate, either in the United States or elsewhere, that relies upon the regulatory approval of an Oragenics Product.

(b) Oragenics shall have the sole right, but not the obligation, to conduct and control the filing, prosecution and maintenance of any Patents claiming Inventions that are owned by Oragenics or its Affiliates and not assigned to Intrexon under Section 6.1(c) (“**Oragenics Program Patents**”). At the reasonable request of Oragenics, Intrexon shall cooperate with Oragenics in connection with such filing, prosecution, and maintenance, at Oragenics’ expense.

(c) The Prosecuting Party shall be entitled to use patent counsel selected by it and reasonably acceptable to the non-Prosecuting Party (including in-house patent counsel as well as outside patent counsel) for the prosecution of the Intrexon Patents and Oragenics Program Patents, as applicable. The Prosecuting Party shall:

(i) regularly provide the other Party in advance with reasonable information relating to the Prosecuting Party’s prosecution of Patents hereunder, including by providing copies of substantive communications, notices and actions submitted to or received from the relevant patent authorities and copies of drafts of filings and correspondence that the Prosecuting Party proposes to submit to such patent authorities (it being understood that, to the extent that any such information is readily accessible to the public, the Prosecuting Party may, in lieu of directly providing copies of such information to such other Party, provide such other Party with sufficient information that will permit such other Party to access such information itself directly);

(ii) consider in good faith and consult with the non-Prosecuting Party regarding its timely comments with respect to the same; provided, however, that if, within fifteen (15) days after providing any documents to the non-Prosecuting Party for comment, the Prosecuting Party does not receive any written communication from the non-Prosecuting Party indicating that it has or may have comments on such document, the Prosecuting Party shall be entitled to assume that the non-Prosecuting Party has no comments thereon;

(iii) consult with the non-Prosecuting Party before taking any action that would reasonably be expected to have a material adverse impact on the scope of claims within the Intrexon Patents and Oragenics Program Patents, as applicable.

As used above “**Prosecuting Party**” means Intrexon in the case of Intrexon Patents and Oragenics in the case of Oragenics Program Patents.

6.3 Infringement of Patents by Third Parties.

(a) Except as expressly provided in the remainder of this Section 6.3, Intrexon shall have the sole right to take appropriate action against any person or entity directly or indirectly infringing any Intrexon Patent (or asserting that an Intrexon Patent is invalid or unenforceable) (collectively, “Infringement”), either by settlement or lawsuit or other appropriate action.

(b) Notwithstanding the foregoing, Oragenics shall have the first right, but not the obligation, to take appropriate action to enforce Product-Specific Program Patents against any Infringement that involves a commercially material amount of allegedly infringing activities in the Field (“**Field Infringement**”), either by settlement or lawsuit or other appropriate action. If Oragenics fails to take the appropriate steps to enforce Product-Specific Program Patents against any Field Infringement within one hundred eighty (180) days of the date one Party has provided notice to the other Party pursuant to Section 6.3(g) of such Field Infringement, then Intrexon shall have the right (but not the obligation), at its own expense, to enforce Product-Specific Program Patents against such Field Infringement, either by settlement or lawsuit or other appropriate action.

(c) With respect to any Field Infringement that cannot reasonably be abated through the enforcement of Product-Specific Program Patents pursuant to Section 6.3(b) but can reasonably be abated through the enforcement of Intrexon Patent(s) (other than the Product-Specific Program Patents), Intrexon shall be obligated to choose one of the following courses of action: (i) enforce one or more of the applicable Intrexon Patent(s) in a commercially reasonable manner against such Field Infringement, or (ii) [*****]. The Party enforcing the applicable Intrexon Patent(s) shall bear the costs and expenses of such enforcement. The determination of which Intrexon Patent(s) to assert shall be made by Intrexon in its sole discretion; provided, however, that Intrexon shall consult in good faith with Oragenics on such determination. For the avoidance of doubt, Intrexon has no obligations under this Agreement to enforce any Intrexon Patents against, or otherwise abate, any Infringement that is not a Field Infringement.

(d) In the event a Party pursues an action under this Section 6.3, the other Party shall reasonably cooperate with the enforcing Party with respect to the investigation and prosecution of any alleged, threatened, or actual Infringement, at the enforcing Party’s expense.

(e) Oragenics shall not settle or otherwise compromise any action under this Section 6.3 in a way that diminishes the rights or interests of Intrexon outside the Field or adversely affects any Intrexon Patent without Intrexon’s prior written consent, which consent shall not be unreasonably withheld. Intrexon shall not settle or otherwise

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compromise any action under this Section 6.3 in a way that diminishes the rights or interests of Orogenics in the Field or adversely affects any Intrexon Patent with respect to the Field without Orogenics' prior written consent, which consent shall not be unreasonably withheld.

(f) Except as otherwise agreed to by the Parties in writing, any settlements, damages or other monetary awards recovered pursuant to a suit, proceeding, or action brought pursuant to Section 6.3 will be allocated first to the costs and expenses of the Party controlling such action, and second, to the costs and expenses (if any) of the other Party (to the extent not otherwise reimbursed), and any remaining amounts (the "Recovery") will be shared by the Parties as follows: In any action initiated by Intrexon pursuant to Section 6.3(a) that does not involve Field Infringement, or in any action initiated by Intrexon pursuant to Section 6.3(b), Intrexon shall retain one hundred percent (100%) of any Recovery. In any action initiated by Orogenics pursuant to Section 6.3(b), Orogenics shall retain one hundred percent (100%) of any Recovery, [*****]. In any action initiated by Intrexon or Orogenics pursuant to Section 6.3(c), the enforcing Party shall retain one hundred percent (100%) of any Recovery.

(g) Orogenics shall promptly notify Intrexon in writing of any suspected, alleged, threatened, or actual Infringement of which it becomes aware, and Intrexon shall promptly notify Orogenics in writing of any suspected, alleged, threatened, or actual Field Infringement of which it becomes aware.

ARTICLE 7

CONFIDENTIALITY

7.1 Confidentiality. Except to the extent expressly authorized by this Agreement or otherwise agreed in writing by the Parties, each Party agrees that it shall keep confidential and shall not publish or otherwise disclose and shall not use for any purpose other than as provided for in this Agreement any Confidential Information disclosed to it by the other Party pursuant to this Agreement, except to the extent that the receiving Party can demonstrate by competent evidence that specific Confidential Information:

(a) was already known to the receiving Party, other than under an obligation of confidentiality, at the time of disclosure by the other Party;

(b) was generally available to the public or otherwise part of the public domain at the time of its disclosure to the receiving Party;

(c) became generally available to the public or otherwise part of the public domain after its disclosure and other than through any act or omission of the receiving Party in breach of this Agreement;

(d) was disclosed to the receiving Party, other than under an obligation of confidentiality to a Third Party, by a Third Party who had no obligation to the disclosing Party not to disclose such information to others; or

(e) was independently discovered or developed by the receiving Party without the use of Confidential Information belonging to the disclosing Party, as documented by the receiving Party's written records.

The foregoing non-use and non-disclosure obligation shall continue (i) indefinitely, for all Confidential Information that qualifies as a trade secret under applicable law; or (ii) for the Term of this Agreement and for seven (7) years thereafter, in all other cases.

***** **CONFIDENTIAL MATERIAL REDACTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT AND SEPARATELY FILED WITH THE SECURITIES AND EXCHANGE COMMISSION.**

7.2 Authorized Disclosure. Notwithstanding the limitations in this Article 7, either Party may disclose the Confidential Information belonging to the other Party to the extent such disclosure is reasonably necessary in the following instances:

(a) complying with applicable laws or regulations or valid court orders, provided that the Party making such disclosure provides the other Party with reasonable prior written notice of such disclosure and makes a reasonable effort to obtain, or to assist the other Party in obtaining, a protective order preventing or limiting the disclosure and/or requiring that the terms and conditions of this Agreement be used only for the purposes for which the law or regulation required, or for which the order was issued;

(b) to regulatory authorities in order to seek or obtain approval to conduct clinical trials, or to gain regulatory approval, of Oragenics Products or any products being developed by Intrexon or its other licensees and/or channel partners or collaborators, provided that the Party making such disclosure (i) provides the other Party with reasonable opportunity to review any such disclosure in advance and to suggest redactions or other means of limiting the disclosure of such other Party's Confidential Information and (ii) does not unreasonably reject any such suggestions;

(c) disclosure to investors and potential investors, acquirers, or merger candidates who agree to maintain the confidentiality of such information, provided that such disclosure is used solely for the purpose of evaluating such investment, acquisition, or merger (as the case may be);

(d) disclosure on a need-to-know basis to Affiliates, licensees, sublicensees, employees, consultants or agents (such as CROs and clinical investigators) who agree to be bound by obligations of confidentiality and non-use at least equivalent in scope to those set forth in this Article 7; and

(e) disclosure of the terms of this Agreement by Intrexon to collaborators and other channel partners or collaborators who agree to be bound by obligations of confidentiality and non-use at least equivalent in scope to those set forth in this Article 7.

7.3 Publicity; Publications. The Parties agree that the public announcement of the execution of this Agreement shall be substantially in the form of the press release mutually agreed to by the Parties. Each Party will provide the other Party with the opportunity to review and comment, prior to submission or presentation, on external reports, publications and presentations (e.g., press releases, reports to government agencies, abstracts, posters, manuscripts and oral presentations) that refer to the Lantibiotics Program or programs that are approved by the JSC. For such reports, publications, and presentations, the disclosing Party will provide the other Party at least fifteen (15) calendar days for review of the proposed submission or presentation. For reports and manuscripts, the disclosing Party will provide the other Party at least thirty (30) calendar days for review of the report or manuscript. The presenting Party will act in good faith to incorporate the comments of the other Party and shall, in any event, redact any Confidential Information of the other Party and cooperate with the other Party to postpone such submissions or presentations if necessary to provide the other Party with sufficient time to prepare and file any related Patent applications before the submission or presentation occurs, as appropriate.

7.4 Terms of the Agreement. Each Party shall treat the terms of this Agreement as the Confidential Information of other Party, subject to the exceptions set forth in Section 7.2. Notwithstanding the foregoing, each Party acknowledges that the other Party may be obligated to file a copy of this Agreement with the SEC, either as of the Effective Date or at some point during the Term. Each Party shall be entitled to make such a required filing, provided that it requests confidential treatment of certain commercial terms and sensitive technical terms hereof to the extent such confidential treatment is reasonably available to it. In the event of any such filing, the filing Party shall provide the other Party with a copy of the Agreement marked to show provisions for which the filing Party intends to seek confidential treatment and shall reasonably consider and incorporate the other Party's comments thereon to the extent consistent with the legal requirements governing redaction of information from material agreements that must be publicly filed. The other Party shall promptly provide any such comments.

7.5 Proprietary Information and Operational Audits.

(a) For the purpose of confirming compliance with the Field-limited licenses granted in Article 3, the diligence obligations of Article 4, and the confidentiality obligations under Article 7, Oragenics acknowledges that Intrexon's authorized representative(s), during regular business hours may (i) examine and inspect Oragenics' facilities and (ii) inspect all data and work products relating to this Agreement. Any examination or inspection hereunder shall require five (5) business days written notice from Intrexon to Oragenics. Oragenics will make itself and the pertinent employees and/or agents available, on a reasonable basis, to Intrexon for the aforementioned compliance review.

(b) For the purpose of confirming compliance with the diligence obligations of Section 4.6, and the confidentiality obligations under Article 7, Intrexon acknowledges that Oragenics authorized representative(s), during regular business hours may (i) examine and inspect Intrexon's facilities and (ii) inspect all data and work products relating to this Agreement. Any examination or inspection hereunder shall require five (5) business days written notice from Oragenics to Intrexon. Intrexon will make itself and the pertinent employees and/or agents available, on a reasonable basis, to Oragenics for the aforementioned compliance review.

(c) In view of the Intrexon Confidential Information, Intrexon Know-How, and Intrexon Materials transferred to Oragenics hereunder, Intrexon from time-to-time, but no more than quarterly, may request that Oragenics confirm the status of the Intrexon Materials at Company (i.e. how much used, how much shipped, to whom and any unused amounts destroyed (by whom, when) as well as any amounts returned to Intrexon or destroyed). Within ten (10) business days of Oragenics' receipt of any such written request, Oragenics shall provide the written report to Intrexon.

7.6 Intrexon Commitment. Intrexon shall use reasonable efforts to obtain an agreement with its other licensees and channel partners or collaborators to enable Oragenics to disclose confidential information of such licensees and channel partners or collaborators to regulatory authorities in order to seek or obtain approval to conduct clinical trials, or to gain regulatory approval of, Oragenics Products, in a manner consistent with the provisions of Section 7.2(b).

ARTICLE 8

REPRESENTATIONS AND WARRANTIES

8.1 Representations and Warranties of Oragenics. Oragenics hereby represents and warrants to Intrexon that, as of the Effective Date:

(a) **Corporate Power.** Oragenics is duly organized and validly existing under the laws of Florida and has corporate full power and authority to enter into this Agreement and to carry out the provisions hereof.

(b) **Due Authorization.** Oragenics is duly authorized to execute and deliver this Agreement and to perform its obligations hereunder, and the person executing this Agreement on Oragenics' behalf has been duly authorized to do so by all requisite corporate action.

(c) **Binding Agreement.** This Agreement is a legal and valid obligation binding upon Oragenics and enforceable in accordance with its terms, except as such 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. The execution, delivery and performance of this Agreement by Oragenics does not conflict with any agreement, instrument or understanding, oral or written, to which it is a party or by which it may be bound. Oragenics is aware of no action, suit or inquiry or investigation instituted by any governmental agency which questions or threatens the validity of this Agreement.

8.2 Representations and Warranties of Intrexon. Intrexon hereby represents and warrants to Oragenics that, as of the Effective Date:

(a) **Corporate Power.** Intrexon is duly organized and validly existing under the laws of Virginia and has full corporate power and authority to enter into this Agreement and to carry out the provisions hereof.

(b) Due Authorization. Intrexon is duly authorized to execute and deliver this Agreement and to perform its obligations hereunder, and the person executing this Agreement on Intrexon's behalf has been duly authorized to do so by all requisite corporate action.

(c) Binding Agreement. This Agreement is a legal and valid obligation binding upon Intrexon and enforceable in accordance with its terms, except as such 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. The execution, delivery and performance of this Agreement by Intrexon does not conflict with any agreement, instrument or understanding, oral or written, to which it is a party or by which it may be bound. Intrexon is aware of no action, suit or inquiry or investigation instituted by any governmental agency which questions or threatens the validity of this Agreement.

(d) Additional Intellectual Property Representations.

(i) Intrexon possesses sufficient rights to enable Intrexon to grant all rights and licenses it purports to grant to Oragenics with respect to the Intrexon IP under this Agreement;

(ii) The Intrexon IP existing as of the Effective Date constitute all of the intellectual property Controlled by Intrexon as of such date that is necessary for the development, manufacture or Commercialization of Oragenics Products;

(iii) Intrexon has not granted, and during the Term Intrexon will not grant, any right or license, to any Third Party under the Intrexon IP that conflicts with the rights or licenses granted or to be granted to Oragenics hereunder;

(iv) There is no pending litigation, and Intrexon has not received any written notice of any claims or litigation, seeking to invalidate or otherwise challenge the Intrexon IP or Intrexon's rights therein;

(v) None of the Intrexon IP is subject to any pending re-examination, opposition, interference or litigation proceedings;

(vi) All of the Intrexon Patents have been filed and prosecuted in accordance with all applicable laws and have been maintained, with all applicable fees with respect thereto (to the extent such fees have come due) having been paid;

(vii) Intrexon has entered into agreements with each of its current and former officers, employees and consultants involved in research and development work, including development of the Intrexon's products and technology providing Intrexon, to the extent permitted by law, with title and ownership to patents, patent applications, trade secrets and inventions conceived, developed, reduced to practice by such person, solely or jointly with other of such persons, during the period of employment by Intrexon (except where the failure to have entered into such an agreement would not have a material adverse effect on the rights granted to Oragenics herein), and Intrexon is not aware that any of its employees or consultants is in material violation thereof;

(viii) To Intrexon's knowledge, there is no infringement, misappropriation or violation by third parties of any Intrexon Channel Technology or Intrexon IP in the Field;

(ix) There is no pending or, to Intrexon's knowledge, threatened action, suit, proceeding or claim by others against Intrexon that Intrexon infringes, misappropriates or otherwise violates any intellectual property or other proprietary rights of others in connection with the use of the Intrexon Channel Technology or Intrexon IP, and Intrexon has not received any written notice of such claim;

(x) To Intrexon's knowledge, no employee of Intrexon is the subject of any claim or proceeding involving a violation of any term of any employment contract, patent disclosure agreement, invention assignment agreement, non-competition agreement, non-solicitation agreement, non-disclosure agreement or any restrictive covenant to or with a former employer (A) where the basis of such violation relates to such employee's employment with Intrexon or actions undertaken by the employee while employed with Intrexon and (B) where such violation is relevant to the use of the Intrexon Channel Technology in the Field;

(xi) None of the Intrexon Patents owned by Intrexon or its Affiliates, and, to Intrexon's knowledge, the Intrexon Patents licensed to Intrexon or its Affiliates, have been adjudged invalid or unenforceable by a court of competent jurisdiction or applicable government agency, in whole or in part, and there is no pending or, to Intrexon's knowledge, threatened action, suit, proceeding or claim by others challenging the validity or scope of any such Intrexon Patents; and

(xii) Except as otherwise disclosed in writing to Oragenics, Intrexon: (A) is in material compliance with all statutes, rules or regulations applicable to the ownership, testing, development, manufacture, packaging, processing, use, distribution, marketing, labeling, promotion, sale, offer for sale, storage, import, export or disposal of any product that is under development, manufactured or distributed by Intrexon in the Field ("**Applicable Laws**"); (B) has not received any FDA Form 483, notice of adverse finding, warning letter, untitled letter or other correspondence or notice from the United States Food and Drug Administration (the "**FDA**") or any other federal, state, local or foreign governmental or regulatory authority alleging or asserting material noncompliance with any Applicable Laws or any licenses, certificates, approvals, clearances, authorizations, permits and supplements or amendments thereto required by any such Applicable Laws ("**Authorizations**"), which would not, individually or in the aggregate, result in a material adverse effect; (C) possesses all material Authorizations necessary for the operation of its business as described in the Field and such Authorizations are valid and in full force and effect and Intrexon is not in material violation of any term of any such Authorizations; and (D) since January 1, 2011, (1) has not received notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from the FDA or any other federal, state, local or foreign governmental or regulatory authority or third party alleging that any product operation or activity is in material violation of any Applicable Laws or Authorizations and has no knowledge that the FDA or any other federal, state, local or foreign governmental or regulatory authority or third party is considering any such claim, litigation, arbitration, action, suit investigation or proceeding; (2) has not received notice that the FDA or any other federal, state, local or foreign governmental or regulatory authority has taken, is taking or intends to take action to limit, suspend, modify or revoke any material Authorizations and has no knowledge that the FDA or any other federal, state, local or foreign governmental or regulatory authority is considering such action; (3) has filed, obtained, maintained or submitted all material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Applicable Laws or Authorizations and that all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were materially complete and correct on the date filed (or were corrected or supplemented by a subsequent submission); and (4) has not, either voluntarily or involuntarily, initiated, conducted, or issued or caused to be initiated, conducted or issued, any recall, market withdrawal or replacement, safety alert, post sale warning, "dear doctor" letter, or other notice or action relating to the alleged lack of safety or efficacy of any product or any alleged product defect or violation and, to Intrexon's knowledge, no third party has initiated, conducted or intends to initiate any such notice or action.

except, in each of (ix) through (xii), for any instances which would not, individually or in the aggregate, result in a material adverse effect on the rights granted to Oragenics hereunder or Intrexon's ability to perform its obligations hereunder.

8.3 Warranty Disclaimer. EXCEPT FOR THE EXPRESS WARRANTIES PROVIDED IN THIS ARTICLE 8 OR IN THE EQUITY AGREEMENT, EACH PARTY HEREBY DISCLAIMS ANY AND ALL OTHER WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF TITLE, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NONINFRINGEMENT OF THE INTELLECTUAL PROPERTY RIGHTS OF THIRD PARTIES.

ARTICLE 9

INDEMNIFICATION

9.1 Indemnification by Intrexon. Intrexon agrees to indemnify, hold harmless, and defend Oragenics and its Affiliates and their respective directors, officers, employees, and agents (collectively, the **“Oragenics Indemnitees”**) from and against any and all liabilities, damages, costs, expenses, or losses (including reasonable legal expenses and attorneys’ fees) (collectively, **“Losses”**) resulting from any claims, suits, actions, demands, or other proceedings brought by a Third Party (collectively, **“Claims”**) to the extent arising from (a) the negligence or willful misconduct of Intrexon or any of its Affiliates, or their respective employees or agents, (b) the use, handling, storage or transport of Intrexon Materials by or on behalf of Intrexon or its Affiliates, licensees (other than Oragenics) or sublicensees; or (c) breach by Intrexon of any representation, warranty or covenant in this Agreement. Notwithstanding the foregoing, Intrexon shall not have any obligation to indemnify the Oragenics Indemnitees to the extent that a Claim arises from (i) the negligence or willful misconduct of Oragenics or any of its Affiliates, licensees, or sublicensees, or their respective employees or agents; or (ii) a breach by Oragenics of a representation, warranty, or covenant of this Agreement.

9.2 Indemnification by Oragenics. Oragenics agrees to indemnify, hold harmless, and defend Intrexon, its Affiliates and Third Security, and their respective directors, officers, employees, and agents (and any Third Parties which have licensed to Intrexon intellectual property rights within Intrexon IP on or prior to the Effective Date, to the extent required by the relevant upstream license agreement) (collectively, the **“Intrexon Indemnitees”**) from and against any Losses resulting from Claims, to the extent arising from any of the following: (a) the negligence or willful misconduct of Oragenics or any of its Affiliates or their respective employees or agents; (b) the use, handling, storage, or transport of Intrexon Materials by or on behalf of Oragenics or its Affiliates, licensees, or sublicensees; (c) breach by Oragenics of any material representation, warranty or covenant in this Agreement; or (d) the design, development, manufacture, regulatory approval, handling, storage, transport, distribution, sale or other disposition of any Oragenics Product by or on behalf of Oragenics or its Affiliates, licensees, or sublicensees. Notwithstanding the foregoing, Oragenics shall not have any obligation to indemnify the Intrexon Indemnitees to the extent that a Claim arises from (i) the negligence or willful misconduct of Intrexon or any of its Affiliates, or their respective employees or agents; or (ii) a breach by Intrexon of a representation, warranty, or covenant of this Agreement.

9.3 Product Liability Claims. Notwithstanding the provisions of Section 9.2, any Losses arising out of any Third Party claim, suit, action, proceeding, liability or obligation involving any actual or alleged death or bodily injury arising out of or resulting from the development, manufacture or Commercialization of any Oragenics Products for use or sale in the Field, to the extent that such Losses exceed the amount (if any) covered by the applicable Party’s product liability insurance (**“Excess Product Liability Costs”**), shall be paid by [*****], except to the extent such Losses arise out of any Third-Party Claim based on the gross negligence or willful misconduct of a Party, its Affiliates, or its Affiliates’ Sublicensees, or any of the respective officers, directors, employees and agents of each of the foregoing entities, in the performance of obligations or exercise of rights under this Agreement.

9.4 Control of Defense. As a condition precedent to any indemnification obligations hereunder, any entity entitled to indemnification under this Article 9 shall give written notice to the indemnifying Party of any Claims that may be subject to indemnification, promptly after learning of such Claim. If such Claim falls within the scope of the indemnification obligations of this Article 9, then the indemnifying Party shall assume the defense of such Claim with counsel reasonably satisfactory to the indemnified Party. The indemnified Party shall cooperate with the indemnifying Party in such defense. The indemnified Party may, at its option and expense, be represented by counsel of its choice in any action or proceeding with respect to such Claim. The indemnifying Party shall not be liable for any litigation costs or expenses incurred by the indemnified Party without the indemnifying Party’s written consent, such consent not to be unreasonably withheld. The indemnifying Party shall not settle any such Claim if such settlement (a) does not fully and unconditionally release the indemnified Party from all liability relating thereto or (b) adversely impacts the exercise of the rights granted to the indemnified Party under this Agreement, unless the indemnified Party otherwise agrees in writing.

***** **CONFIDENTIAL MATERIAL REDACTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT AND SEPARATELY FILED WITH THE SECURITIES AND EXCHANGE COMMISSION.**

9.5 Insurance. Immediately prior to, and during marketing, Oragenics shall maintain in effect and good standing a product liability insurance policy issued by a reputable insurance company in amounts considered standard for the industry. Immediately prior to, and during the conduct of any clinical trials, Oragenics shall maintain in effect and good standing a clinical trials liability insurance policy issued by a reputable insurance company in amounts considered standard for the industry. At Intrexon's reasonable request, Oragenics shall provide Intrexon with all details regarding such policies, including without limitation copies of the applicable liability insurance contracts. Oragenics shall use reasonable efforts to include Intrexon as an additional insured on any such policies.

ARTICLE 10

TERM; TERMINATION

10.1 Term. The term of this Agreement shall commence upon the Effective Date and shall continue until terminated pursuant to Section 10.2 or 10.3 (the "Term").

10.2 Termination for Material Breach; Termination Under Section 4.5(b)

(a) Either Party shall have the right to terminate this Agreement upon written notice to the other Party if the other Party commits any material breach of this Agreement that such breaching Party fails to cure within sixty (60) days following written notice from the nonbreaching Party specifying such breach, provided, however, that solely for purposes of Section 9.5 the cure period shall be ninety (90) days.

(b) Intrexon shall have the right to terminate this Agreement, at its sole discretion, if any necessary shareholder, exchange, and/or board of director approvals have not been obtained, and the Technology Access Fee Shares (as defined in the Equity Agreement) have not been issued, within sixty (60) days following the Effective Date.

(c) Intrexon shall have the right to terminate this Agreement under the circumstances set forth in Section 4.5(b) upon written notice to Oragenics, such termination to become effective sixty (60) days following such written notice unless Oragenics remedies the circumstances giving rise to such termination within such sixty (60) day period.

(d) Intrexon shall have the right to terminate this Agreement should Oragenics execute any purported assignment of this Agreement contrary to the prohibitions in Section 12.8, such termination occurring upon Intrexon providing written notice to Oragenics and becoming effective immediately upon such written notice.

(e) Notwithstanding anything in this Agreement to the contrary and for so long as the Loan Agreement, dated March 23, 2012 between Oragenics and KFLP, is in full force and effect, Intrexon hereby agrees that, in the event that it notifies Oragenics of a material breach of this Agreement and Oragenics determines it is unwilling or unable to cure the breach, that Oragenics shall have the right to assign its right to cure the breach to KFLP and that, subject to such cure by KFLP, Oragenics shall have the ability to assign all of its right title and interest in the Agreement together with the Equity Agreement to KFLP subject to KFLP's agreement to assume any and all obligations under such agreements, and Intrexon will, subject to KFLP's cure of the breach, consent to an assignment and assumption of all Oragenics' rights and obligations under the Agreement and Equity Agreement to KFLP, provided that such assignment shall be treated as a "Company Sale" with respect to the Milestone Payments as set forth under Section 1.3 of the Equity Agreement. Except as set forth explicitly in this paragraph, Intrexon does not waive or modify any of its rights under the Agreement or Equity Agreement.

(f) In recognition of the need for Orogenics to raise capital necessary to carry out its obligations under this Agreement, notwithstanding the foregoing, during the twelve (12) month period commencing on the Effective Date, neither Party shall have the right to terminate this Agreement under Section 10.2(a) based on the failure of the other Party to use Diligent Efforts or to comply with any other diligence obligations hereunder (including Section 4.5), nor shall Intrexon have the right to terminate this Agreement under Section 10.2(c).

10.3 Termination by Orogenics. Orogenics shall have the right to voluntarily terminate this Agreement in its entirety upon ninety (90) days written notice to Intrexon at any time, provided that such notice may not be given during the eighteen (18) month period commencing on the Effective Date.

10.4 Effect of Termination. In the event of termination of this Agreement pursuant to Section 10.2 or Section 10.3, the following shall apply:

(a) **Retained Products.** Orogenics shall be permitted to continue the clinical development and Commercialization in the Field of any Orogenics Product that, at the time of termination, satisfies at least one of the following criteria (a “**Retained Product**”):

- (i) the particular Orogenics Product is being sold by Orogenics triggering profit sharing payments therefor under Section 5.4(a) of this Agreement,
- (ii) the particular Orogenics Product has received regulatory approval,
- (iii) the particular Orogenics Product is a subject of an application for regulatory approval in the Field that is pending before the applicable regulatory authority,
- (iv) the particular Orogenics Product is the subject of at least an ongoing Phase 1, Phase 2 or Phase 3 clinical trial in the Field (in the case of a termination by Intrexon due to an Orogenics uncured breach pursuant to Section 10.2(a) or a termination by Orogenics pursuant to Section 10.3).

Such right to continue development and commercialization shall be subject to Orogenics’ full compliance with the payment provisions in Article 5, a continuing obligation for Orogenics to use in accord with Sections 4.5(a) and 4.5(c) Diligent Efforts to develop and commercialize any Retained Products, and all other provisions of this Agreement that survive termination.

(b) **Termination of Licenses.** Except as necessary for Orogenics to continue to obtain regulatory approval for, clinically develop, use, manufacture and Commercialize the Retained Products in the Field as permitted by Section 10.4(a), all rights and licenses granted by Intrexon to Orogenics under this Agreement shall terminate and shall revert to Intrexon without further action by either Intrexon or Orogenics. Orogenics’ license with respect to Retained Products shall be exclusive or non-exclusive, as the case may be, on the same terms as set forth in Section 3.1.

(c) **Reverted Products.** All Orogenics Products other than the Retained Products shall be referred to herein as the “**Reverted Products**.” Orogenics shall immediately cease, and shall cause its Affiliates and, if applicable, (sub)licensees to immediately cease, all development and Commercialization of the Reverted Products, and Orogenics shall not use or practice, nor shall it cause or permit any of its Affiliates or, if applicable, (sub)licensees to use or practice, directly or indirectly, any Intrexon IP with respect to the Reverted Products. Orogenics shall immediately discontinue making any representation regarding its status as a licensee or channel collaborator of Intrexon with respect to the Reverted Products.

(d) **Intrexon Materials.** Orogenics shall promptly return, or at Intrexon’s request, destroy, any Intrexon Materials in Orogenics’ possession or control at the time of termination other than any Intrexon Materials necessary for the continued development, regulatory approval, use, manufacture and Commercialization of the Retained Products in the Field.

(e) Licenses to Intrexon. Oragenics is automatically deemed to grant to Intrexon a worldwide, fully paid, royalty-free, non-exclusive, irrevocable, license (with full rights to sublicense) under the Oragenics Termination IP, to make, have made, import, use, offer for sale and sell Reverted Products and to use the Intrexon Channel Technology, the Intrexon Materials, and/or the Intrexon IP in the Field, subject to any exclusive rights held by Oragenics in Reverted Products pursuant to Section 10.4(c). The Parties shall also take such actions and execute such other instruments and documents as may be reasonably necessary to document such license to Intrexon.

(f) Regulatory Filings. Oragenics shall promptly assign to Intrexon, and will provide full copies of, all regulatory approvals and regulatory filings that relate specifically and solely to Reverted Products. Oragenics shall also take such actions and execute such other instruments, assignments and documents as may be necessary to effect the transfer of rights thereunder to Intrexon. To the extent that there exist any regulatory approvals and regulatory filings that relate both to Reverted Products and other products, Oragenics shall provide copies of the portions of such regulatory filings that relate to Reverted Products and shall reasonably cooperate to assist Intrexon in obtaining the benefits of such regulatory approvals with respect to the Reverted Products.

(g) Data Disclosure. Oragenics shall provide to Intrexon copies of the relevant portions of all material reports and data, including clinical and non-clinical data and reports, obtained or generated by or on behalf of Oragenics or its Affiliates to the extent that they relate to Reverted Products, within sixty (60) days of such termination unless otherwise agreed, and Intrexon shall have the right to use any such Information in developing and commercializing Reverted Products and to license any Third Parties to do so.

(h) Third-Party Licenses. At Intrexon's request, Oragenics shall promptly provide to Intrexon copies of all Third-Party agreements under which Oragenics or its Affiliates obtained a license under Patents claiming inventions or know-how specific to or used or incorporated into the development, manufacture and/or commercialization of the Reverted Products. At Intrexon's request such that Intrexon may Commercialize the Reverted Products, Oragenics shall promptly work with Intrexon to either (A) assign to Intrexon the Third Party agreement(s), or (B) grant a sublicense (with an appropriate scope) to Intrexon under the Third Party agreement(s). Thereafter Intrexon shall be fully responsible for all obligations due for its actions under the sublicensed or assigned Third Party agreements. Notwithstanding the above, if Intrexon does not wish to assume any financial or other obligations associated with a particular Third Party agreement identified to Intrexon under this Section 10.4(h), then Intrexon shall so notify Oragenics and Oragenics shall not make such assignment or grant such sublicense (or cause it to be made or granted).

(i) Remaining Materials. At the request of Intrexon, Oragenics shall transfer to Intrexon all quantities of Reverted Product (including active pharmaceutical ingredient or work-in-process) in the possession of Oragenics or its Affiliates. Oragenics shall transfer to Intrexon all such quantities of Reverted Products without charge, except that Intrexon shall pay the reasonable costs of shipping.

(j) Third Party Vendors. At Intrexon's request, Oragenics shall promptly provide to Intrexon copies of all agreements between Oragenics or its Affiliates and Third Party suppliers, vendors, or distributors that relate to the supply, sale, or distribution of Reverted Products in the Territory. At Intrexon's request, Oragenics shall promptly: (A) with respect to such Third Party agreements relating solely to the applicable Reverted Products and permitting assignment, immediately assign (or cause to be assigned), such agreements to Intrexon, and (B) with respect to all other such Third Party agreements, Oragenics shall reasonably cooperate to assist Intrexon in obtaining the benefits of such agreements. Oragenics shall be liable for any costs associated with assigning a Third Party agreement to Intrexon or otherwise obtaining the benefits of such agreement for Intrexon, to the extent such costs are directly related to Oragenics' breach. For the avoidance of doubt, Intrexon shall have no obligation to assume any of Oragenics' obligations under any Third Party agreement.

(k) Commercialization. Intrexon shall have the right to develop and commercialize the Reverted Products itself or with one or more Third Parties, and shall have the right, without obligation to Oragenics, to take any such actions in connection with such activities as Intrexon (or its designee), at its discretion, deems appropriate.

(l) Confidential Information. Each Party shall promptly return, or at the other Party's request destroy, any Confidential Information of the other Party in such Party's possession or control at the time of termination;

provided, however, that each Party shall be permitted to retain (i) a single copy of each item of Confidential Information of the other Party in its confidential legal files for the sole purpose of monitoring and enforcing its compliance with Article 7, (ii) Confidential Information of the other Party that is maintained as archive copies on the recipient Party's disaster recovery and/or information technology backup systems, or (iii) Confidential Information of the other Party necessary to exercise such Party's rights in Retained Products (in the case of Oragenics) or Reverted Products (in the case of Intrexon). The recipient of Confidential Information shall continue to be bound by the terms and conditions of this Agreement with respect to any such Confidential Information retained in accordance with this Section 10.4(l).

10.5 Surviving Obligations. Termination or expiration of this Agreement shall not affect any rights of either Party arising out of any event or occurrence prior to termination, including, without limitation, any obligation of Oragenics to pay any amount which became due and payable under the terms and conditions of this Agreement prior to expiration or such termination. The following portions of this Agreement shall survive termination or expiration of this Agreement: Sections 3.1 (as applicable with respect to 10.4(b), 5.5, 5.7, 6.1, 6.2 (with subsection (c) surviving only to the extent relating to Intrexon Patents that are relevant to Retained Products that, to Intrexon's knowledge, are being developed or commercialized at such time, if any), 7.1, 7.2, 7.4, 7.5, 10.4, and 10.5; Articles 9, 11, and 12; and any relevant definitions in Article 1. Further, Article 7 and Sections 4.5(a), 4.5(c), 5.2 through 5.8, and 9.5 will survive termination of this Agreement to the extent there are applicable Retained Products.

ARTICLE 11

DISPUTE RESOLUTION

11.1 Disputes. It is the objective of the Parties to establish procedures to facilitate the resolution of disputes arising under this Agreement in an expedient manner by mutual cooperation and without resort to litigation. In the event of any disputes, controversies or differences which may arise between the Parties out of or in relation to or in connection with this Agreement (other than disputes arising from a Committee), including, without limitation, any alleged failure to perform, or breach, of this Agreement, or any issue relating to the interpretation or application of this Agreement, then upon the request of either Party by written notice, the Parties agree to meet and discuss in good faith a possible resolution thereof, which good faith efforts shall include at least one in-person meeting between the Executive Officers of each Party. If the matter is not resolved within thirty (30) days following the written request for discussions, either Party may then invoke the provisions of Section 11.2. For the avoidance of doubt, any disputes, controversies or differences arising from a Committee pursuant to Article 2 shall be resolved solely in accordance with Section 2.4.

11.2 Arbitration. Any dispute, controversy, difference or claim which may arise between the Parties and not from a Committee, out of or in relation to or in connection with this Agreement (including, without limitation, arising out of or relating to the validity, construction, interpretation, enforceability, breach, performance, application or termination of this Agreement) that is not resolved pursuant to Section 11.1 shall, subject to Section 11.10, be settled by binding "baseball arbitration" as follows. Either Party, following the end of the thirty (30) day period referenced in Section 11.1, may refer such issue to arbitration by submitting a written notice of such request to the other Party. Promptly following receipt of such notice, the Parties shall meet and discuss in good faith and seek to agree on an arbitrator to resolve the issue, which arbitrator shall be neutral and independent of both Parties and all of their respective Affiliates, shall have significant experience and expertise in licensing and partnering agreements in the pharmaceutical and biotechnology industries, and shall have some experience in mediating or arbitrating issues relating to such agreements. If the Parties cannot agree on a single arbitrator within fifteen (15) days of request by a Party for arbitration, then each Party shall select an arbitrator meeting the foregoing criteria and the two (2) arbitrators so selected shall select within ten (10) days of their appointment a third arbitrator meeting the foregoing criteria. Within fifteen (15) days after an arbitrator(s) is selected (in the case of the three-person panel, when the third arbitrator is selected), each Party will deliver to both the arbitrator(s) and the other Party a detailed written proposal setting forth its proposed terms for the resolution for the matter at issue (the "**Proposed Terms**" of the Party) and a memorandum (the "**Support Memorandum**") in support thereof. The Parties will also provide the arbitrator(s) a copy of this Agreement, as it may be amended at such time. Within fifteen (15) days after receipt of the other Party's Proposed Terms and Support Memorandum, each Party may submit to the arbitrator(s) (with a copy to the other Party) a response to the other Party's Support Memorandum. Neither Party may have any other communications (either written or oral) with the arbitrator(s) other than for the sole purpose of engaging the arbitrator or as expressly permitted in this Section 11.2; provided that, the

arbitrator(s) may convene a hearing if the arbitrator(s) so chooses to ask questions of the Parties and hear oral argument and discussion regarding each Party's Proposed Terms. Within sixty (60) days after the arbitrator's appointment, the arbitrator(s) will select one of the two Proposed Terms (without modification) provided by the Parties that he or she believes is most consistent with the intention underlying and agreed principles set forth in this Agreement. The decision of the arbitrator(s) shall be final, binding, and unappealable. For clarity, the arbitrator(s) must select as the only method to resolve the matter at issue one of the two sets of Proposed Terms, and may not combine elements of both Proposed Terms or award any other relief or take any other action.

11.3 Governing Law. This Agreement shall be governed by and construed under the substantive laws of the State of New York, excluding any conflicts or choice of law rule or principle that might otherwise refer construction or interpretation of this Agreement to the substantive law of another jurisdiction.

11.4 Award. Any award to be paid by one Party to the other Party as determined by the arbitrator(s) as set forth above under Section 11.2 shall be promptly paid in United States dollars free of any tax, deduction or offset; and any costs, fees or taxes incident to enforcing the award shall, to the maximum extent permitted by law, be charged against the losing Party. Each Party agrees to abide by the award rendered in any arbitration conducted pursuant to this Article 11, and agrees that, subject to the United States Federal Arbitration Act, 9 U.S.C. §§ 1-16, judgment may be entered upon the final award in any United States District Court located in New York and that other courts may award full faith and credit to such judgment in order to enforce such award. The award shall include interest from the date of any damages incurred for breach of the Agreement, and from the date of the award until paid in full, at a rate fixed by the arbitrator(s). With respect to money damages, nothing contained herein shall be construed to permit the arbitrator(s) or any court or any other forum to award consequential, incidental, special, punitive or exemplary damages. By entering into this agreement to arbitrate, the Parties expressly waive any claim for consequential, incidental, special, punitive or exemplary damages. The only damages recoverable under this Agreement are direct compensatory damages.

11.5 Costs. Each Party shall bear its own legal fees. The arbitrator(s) shall assess his or her costs, fees and expenses against the Party losing the arbitration.

11.6 Injunctive Relief. Nothing in this Article 11 will preclude either Party from seeking equitable relief or interim or provisional relief from a court of competent jurisdiction, including a temporary restraining order, preliminary injunction or other interim equitable relief, concerning a dispute either prior to or during any arbitration if necessary to protect the interests of such Party or to preserve the status quo pending the arbitration proceeding. Specifically, the Parties agree that a material breach by either Party of its obligations in Section 3.4 or Article 7 of this Agreement may cause irreparable harm to the other Party, for which damages may not be an adequate remedy. Therefore, in addition to its rights and remedies otherwise available at law, including, without limitation, the recovery of damages for breach of this Agreement, upon an adequate showing of material breach of such Section 3.4 or Article 7, and without further proof of irreparable harm other than this acknowledgement, such non-breaching Party shall be entitled to seek (a) immediate equitable relief, specifically including, but not limited to, both interim and permanent restraining orders and injunctions, without bond, and (b) such other and further equitable relief as the court may deem proper under the circumstances. For the avoidance of doubt, nothing in this Section 11.6 shall otherwise limit a breaching Party's opportunity to cure a material breach as permitted in accordance with Section 10.2.

11.7 Confidentiality. The arbitration proceeding shall be confidential and the arbitrator(s) shall issue appropriate protective orders to safeguard each Party's Confidential Information. Except as required by law, no Party shall make (or instruct the arbitrator(s) to make) any public announcement with respect to the proceedings or decision of the arbitrator(s) without prior written consent of the other Party. The existence of any dispute submitted to arbitration, and the award, shall be kept in confidence by the Parties and the arbitrator(s), except as required in connection with the enforcement of such award or as otherwise required by applicable law.

11.8 Survivability. Any duty to arbitrate under this Agreement shall remain in effect and be enforceable after termination of this Agreement for any reason.

11.9 Jurisdiction. For the purposes of this Article 11, the Parties acknowledge their diversity and agree to accept the jurisdiction of any United States District Court located in New York for the purposes of enforcing or appealing any awards entered pursuant to this Article 11 and for enforcing the agreements reflected in this Article 11 and agree not to commence any action, suit or proceeding related thereto except in such courts.

11.10 Patent Disputes. Notwithstanding any other provisions of this Article 11, and subject to the provisions of Section 6.2, any dispute, controversy or claim relating to the scope, validity, enforceability or infringement of any Intrexon Patents shall be submitted to a court of competent jurisdiction in the country in which such Patent was filed or granted.

ARTICLE 12

GENERAL PROVISIONS

12.1 Use of Name. No right, express or implied, is granted by this Agreement to either Party to use in any manner the name of the other or any other trade name or trademark of the other in connection with the performance of this Agreement, except that (a) either Party may use the name of the other Party as required by regulations and in press releases accompanying quarterly and annual earnings reports approved by the Audit Committee of the issuer's Board of Directors, and (b) Orogenics may use the Intrexon Trademarks in accord with license and restrictions set forth herein.

12.2 LIMITATION OF LIABILITY. NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, PUNITIVE, OR INDIRECT DAMAGES ARISING FROM OR RELATING TO ANY BREACH OF THIS AGREEMENT, REGARDLESS OF ANY NOTICE OF THE POSSIBILITY OF SUCH DAMAGES. NOTWITHSTANDING THE FOREGOING, NOTHING IN THIS PARAGRAPH IS INTENDED TO LIMIT OR RESTRICT THE INDEMNIFICATION RIGHTS OR OBLIGATIONS OF ANY PARTY UNDER ARTICLE 9, OR DAMAGES AVAILABLE FOR BREACHES OF THE OBLIGATIONS SET FORTH IN ARTICLE 7.

12.3 Independent Parties. Neither Party is the employee or legal representative of the other Party for any purpose. Neither Party shall have the authority to enter into any contracts in the name of or on behalf of the other Party. This Agreement shall not constitute, create, or in any way be interpreted as a joint venture, partnership, or business organization of any kind.

12.4 Notice. All notices, including notices of address change, required or permitted to be given under this Agreement shall be in writing and deemed to have been given when delivered if personally delivered or sent by facsimile (provided that the party providing such notice promptly confirms receipt of such transmission with the other party by telephone), on the business day after dispatch if sent by a nationally-recognized overnight courier and on the third business day following the date of mailing if sent by certified mail, postage prepaid, return receipt requested. All such communications shall be sent to the address or facsimile number set forth below (or any updated addresses or facsimile number communicated to the other Party in writing):

If to Intrexon:

Intrexon Corporation
20358 Seneca Meadows Parkway
Germantown, MD 20876
Attention: President, Human Therapeutics Division
Fax: (301) 556-9901

with a copy to:

Intrexon Corporation
20358 Seneca Meadows Parkway
Germantown, MD 20876
Attention: Legal Department
Fax: (301) 556-9902

If to Orogenics:

Orogenics, Inc.
3000 Bayport Dr.
Suite 685
Tampa, FL 33607
Attention: Chief Executive Officer
Fax: (813) 286-7904

with a copy to:

Shumaker, Loop & Kendrick, LLP
101 E. Kennedy Blvd., Suite 2800
Tampa, FL 33602
Attention: Mark Catchur, Esq.
Fax: (813) 229-1660

12.5 Severability. In the event any provision of this Agreement is held to be invalid or unenforceable, the valid or enforceable portion thereof and the remaining provisions of this Agreement will remain in full force and effect.

12.6 Waiver. Any waiver (express or implied) by either Party of any breach of this Agreement shall not constitute a waiver of any other or subsequent breach.

12.7 Entire Agreement; Amendment. This Agreement, including any exhibits attached hereto, constitute the entire, final, complete and exclusive agreement between the Parties and supersede all previous agreements or representations, written or oral, with respect to the subject matter of this Agreement (including any prior confidentiality agreement between the Parties). All information of Intrexon or Orogenics to be kept confidential by the other Party under any prior confidentiality agreement, as of the Effective Date, shall be maintained as Confidential Information by such other Party under the obligations set forth in Article 7 of this Agreement. This Agreement may not be modified or amended except in a writing signed by a duly authorized representative of each Party.

12.8 Non-assignability; Binding on Successors. Any attempted assignment of the rights or delegation of the obligations under this Agreement shall be void without the prior written consent of the non-assigning or non-delegating Party; provided, however, that either Party may assign its rights or delegate its obligations under this Agreement without such consent (a) to an Affiliate of such Party or (b) to its successor in interest in connection with any merger, acquisition, consolidation, corporate reorganization, or similar transaction, or sale of all or substantially all of its assets, provided that such assignee agrees in writing to assume and be bound by the assignor's obligations under this Agreement. This Agreement shall be binding upon, and inure to the benefit of, the successors, executors, heirs, representatives, administrators and permitted assigns of the Parties. Notwithstanding the foregoing, in the event that either Party assigns this Agreement to its successor in interest by way of merger, acquisition, consolidation, corporate reorganization, or similar transaction, or sale of all or substantially all of its assets (whether this Agreement is actually assigned or is assumed by such successor in interest or its affiliate by operation of law (e.g., in the context of a reverse triangular merger)), the intellectual property rights of such successor in interest or any of its Affiliates other than those licensed in this Agreement shall be automatically excluded from the rights licensed to the other Party under this Agreement.

12.9 Force Majeure. Neither Party shall be liable to the other for its failure to perform any of its obligations under this Agreement, except for payment obligations, during any period in which such performance is delayed because rendered impracticable or impossible due to circumstances beyond its reasonable control, including without limitation earthquakes, governmental regulation, fire, flood, labor difficulties, civil disorder, acts of terrorism and acts of God, provided that the Party experiencing the delay promptly notifies the other Party of the delay.

12.10 No Other Licenses. Neither Party grants to the other Party any rights or licenses in or to any intellectual property, whether by implication, estoppel, or otherwise, except to the extent expressly provided for under this Agreement.

12.11 Non-Solicitation. During the Term and for a period of one (1) year following the end of the Term, neither Orogenics nor Intrexon may directly or indirectly solicit in order to offer to employ, engage in any discussion

regarding employment with, or hire any employee of the other Party or an individual who was employed by the other party with one (1) year prior to such solicitation, discussion, or hire, without the prior approval of such other Party. General employment solicitations or advertisements shall not be considered direct or indirect solicitations, and are not prohibited under this Agreement.

12.12 Legal Compliance. The Parties shall review in good faith and cooperate in taking such actions to ensure compliance of this Agreement with all applicable laws.

12.13 Counterparts. This Agreement may be executed in any number of counterparts (including by facsimile, PDF, or other means of electronic communication), each of which taken together will constitute one and the same instrument, and any of the Parties hereto may execute this Agreement by signing any such counterpart.

[Remainder of page intentionally left blank.]

IN WITNESS WHEREOF, the Parties hereto have duly executed this Exclusive Channel Collaboration Agreement.

INTREXON CORPORATION

ORAGENICS, INC.

By: /s/ Jayson Rieger

BY: /s/ John N. Bonfiglio

Name: Jayson Rieger

Name: John N. Bonfiglio

Title: SVP, President, HTD

Title: President and CEO

STOCK ISSUANCE AGREEMENT

THIS STOCK ISSUANCE AGREEMENT (“**Agreement**”) is made and entered into as of June 5, 2012 (the “**Effective Date**”), by and among Orogenics, Inc., a Florida corporation (the “**Company**”) and Intrexon Corporation, a Virginia corporation (“**Intrexon**”).

A. Concurrently with the execution of this Agreement, the Company is entering into an Exclusive Channel Collaboration Agreement with Intrexon (the “**Channel Agreement**”), pursuant to which Intrexon is licensing the rights to certain technology to the Company; and

B. In consideration of Intrexon’s license to the Company under the Channel Agreement, the Company has agreed to issue to Intrexon certain shares of the Company’s common stock, par value \$0.001 per share (“**Common Stock**”) in accordance with the terms and conditions of this Agreement.

NOW THEREFORE, in consideration of the mutual covenants contained in this Agreement and for other good and valuable consideration, the receipt of which is hereby acknowledged, the Company and Intrexon hereby agree as follows:

SECTION 1. AUTHORIZATION OF ISSUANCE OF SHARES.

1.1 Technology Access Fee Shares. Subject to the terms and conditions of this Agreement, the Company has authorized the issuance to Intrexon of 4,392,425 shares of the Company’s Common Stock, “**Technology Access Fee Shares**”) at the Technology Access Fee Shares Closing (as hereinafter defined).

1.2 Milestones. Subject to the terms and conditions of this Agreement and the Channel Agreement, upon the attainment of the commercialization milestones as set forth below, and with respect to only the first Orogenics Product developed under the Channel Agreement that reaches any such milestone, the Company has agreed to make certain milestone payments (each a “**Milestone Payment**” and together “**Milestone Payments**”) to Intrexon in the form of shares of Company Common Stock, or at the Company’s sole option make a cash payment to Intrexon (based upon the fair market value of the shares) on the date the Milestone Event (as defined below) is achieved:

(a) upon the filing of the first Investigational New Drug application (“**IND**”) with the U.S. Food and Drug Administration for an Orogenics Product (as that term is defined in the Channel Agreement), or alternatively the filing of the first equivalent regulatory filing with a foreign regulatory agency, that number of shares of Common Stock (the “**IND Milestone Shares**”) equal to the number of shares of Common Stock comprising 1% of the Base Shares (as hereafter defined). For purposes herein, the Base Shares means (i) the number of shares of 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. For purposes herein, Capital Inducement Securities means 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);

(b) upon the dosing of the first patient in the first Phase 2 clinical study with an Orogenics Product, that number of shares (the “**Phase 2 Milestone Shares**”) equal to the number of shares of Common Stock comprising 1.5% of the Base Shares;

(c) upon the dosing of the first patient in the first Phase 3 clinical study with an Orogenics Product, that number of shares (the “**Phase 3 Milestone Shares**”) equal to the number of shares of Common Stock comprising 2% of the Base Shares;

(d) upon the filing of the first New Drug Application (“NDA”) or Biologics License Application (“BLA”) with the U.S. Food and Drug Administration for an Oragenics Product, or alternatively the filing of the first equivalent regulatory filing with a foreign regulatory agency, that number of shares (the “**NDA Milestone Shares**”) equal to the number of shares of Common Stock comprising 2.5% of the Base Shares; and

(e) upon the granting of the first regulatory approval of an Oragenics Product, that number of shares (the “**Approval Milestone Shares**”) equal to the number of shares of Common Stock comprising 3% of the Base Shares.

The number of shares of Common Stock to be issued under each of subsections (a) through (e) of this Section 1.2 shall be rounded down to the nearest whole share. The event giving rise to an issuance of shares under subsections (a) through (e) of this Section 1.2 shall be a “**Milestone Event**” and together, the “**Milestone Events**.” A Milestone Payment shall be due within thirty days following the date of the occurrence of a Milestone Event.

1.3 Company Sale. In the event that the Company consummates a Company Sale (as defined below in Section 11.13) prior to any one or more of the Subsequent Closings, and the Channel Agreement is transferred or assigned to the buyer or assigned to the buyer in connection with such Company Sale, the Company and Intrexon agree that Intrexon shall be entitled to receive and any successor in interest to Company be obligated to pay, in lieu of the specific Milestone Payment amounts set forth in Section 1.2, at each Subsequent Closing following the Company Sale a minimum milestone payment in cash in an amount set forth in the following subsections (a) through (e) of this Section 1.3 (the “**Minimum Milestone Amounts**”).

(a) If the closing for the Milestone Event in Section 1.2(a) occurs after a Company Sale, Intrexon will receive at that closing, and in lieu of the IND Milestone Shares, the greater of (i) \$1,500,000 or (ii) the fair market value that the IND Milestone Shares would have been entitled to receive had they been outstanding at the consummation of the Company Sale.

(b) If the closing for the Milestone Event in Section 1.2(b) occurs after Company, Intrexon will receive at that closing, and in lieu of the Phase 2 Milestone Shares, the greater of (i) \$5,000,000 or (ii) the fair market value that the Phase 2 Milestone Shares would have been entitled to receive had they been outstanding at the consummation of the Company Sale.

(c) If the closing for the Milestone Event in Section 1.2(c) occurs after a Company Sale, Intrexon will receive at that closing, and in lieu of the Phase 3 Milestone Shares, the greater of (i) \$10,000,000 or (ii) the fair market value that the Phase 3 Milestone Shares would have been entitled to receive had they been outstanding at the consummation of the Company Sale.

(d) If the closing for the Milestone Event in Section 1.2(d) occurs after a Company Sale, Intrexon will receive at that closing, and in lieu of the NDA Milestone Shares, the greater of (i) \$15,000,000 or (ii) the fair market value that the NDA Milestone Shares would have been entitled to receive had they been outstanding at the consummation of the Company Sale.

(e) If the closing for the Milestone Event in Section 1.2(e) occurs after a Company Sale, Intrexon will receive at that closing, and in lieu of the Approval Milestone Shares, the greater of (i) \$25,000,000 or (ii) the fair market value that the Approval Milestone Shares would have been entitled to receive had they been outstanding at the consummation of the Company Sale.

The payment of a Minimum Milestone Amount due under subsections (a) through (e) above will be due within thirty days (30) following the date of the occurrence of the respective Milestone Event.

1.4 Capital Adjustments. If after the date hereof (i) the outstanding shares of the Company’s Common Stock shall be subdivided or split into a greater number of shares or a dividend in Common Stock shall be paid in respect of such Common Stock or (ii) the outstanding shares of Common Stock are combined, then all share quantities in this Agreement not yet issued shall be appropriately adjusted to reflect such stock split, stock dividend or conjunction. If

after the date hereof (i) the Company shall pay a dividend in securities of the Company (other than in Common Stock) or of other property (including cash) on the Common Stock, or (ii) there shall occur any merger, consolidation, capital reorganization or reclassification in which the Common Stock is converted or exchanged for securities, cash or other property, the class or series of stock constituting the Common Stock for purposes of this Agreement, shall be appropriately adjusted to reflect such other dividend, merger, consolidation, capital reorganization or reclassification. After any event referenced in clauses (i) through (ii) of the immediately preceding sentence is consummated, if applicable, all references herein to the Company's Common Stock shall be deemed to refer to the capital stock or property (including cash) into or for which the Common Stock was converted or exchanged, with the necessary changes in detail.

SECTION 2. CLOSING AND DELIVERY

2.1 Issuance of Technology Access Fee Shares. Subject to the terms and conditions of this Agreement, the Channel Agreement and in reliance upon the representations, warranties and agreements contained herein, the Company will issue to Intrexon the Technology Access Fee Shares. The Parties agree that the consideration received by the Company hereunder shall be the execution and delivery by Intrexon of the Channel Agreement which consideration is at least equal to the par value of the Technology Access Fee Shares issued hereunder.

2.2 Closings. Each closing of an issuance of shares pursuant to this Agreement shall be held at the offices of Shumaker, Loop & Kendrick, LLP, 101 East Kennedy Blvd., Suite 2800, Tampa, Florida 33602 or at such other place as the Company and Intrexon may agree, as follows:

(a) the closing of the issuance of the Technology Access Fee Shares will occur, subject to the conditions set forth in Section 9 hereof and applicable to the Technology Access Fee Shares Closing, (i) on the fourth business day following any necessary approvals of this Agreement by stockholders and/or directors of Company (the "**Stockholder Approval**"), or (ii) on such other date as Intrexon and the Company may agree upon (in either case, the "**Technology Access Fee Shares Closing**"); and

(b) the issuance of the IND Milestone Shares, the Phase 2 Milestone Shares, the Phase 3 Milestone Shares, the NDA Milestone Shares, and the Approval Milestone Shares will each occur, subject to achievement of their respective Milestone Events and the conditions set forth in Section 9 hereof and applicable to the Subsequent Closings, on the earlier of (i) the thirtieth day following their respective triggering Milestone Event as set forth in sections 1.2(b) through 1.2(f) above, and (ii) such other date as Intrexon and the Company may agree (singularly, a "**Subsequent Closing**," or collectively, the "**Subsequent Closings**").

The Technology Access Fee Closing and the Subsequent Closings are collectively hereinafter referred to as the "**Closings**" and individually as a "**Closing**".

2.3 Delivery of the Shares. Promptly following a Closing, the Company shall deliver to Intrexon a certificate representing the shares required to be issued at such Closing, registered in the name of Intrexon.

SECTION 3. REPRESENTATIONS AND WARRANTIES OF THE COMPANY.

Subject to and except as set forth in the SEC Documents or on the Schedule of Exceptions which is arranged in sections corresponding to the sub-section numbered provisions contained below in this Section, the Company hereby represents and warrants to Intrexon as of the date hereof as follows:

3.1 Organization, Good Standing and Power. The Company is a corporation duly incorporated, validly existing and in good standing under the laws of the State of Florida and has the requisite corporate power to own, lease and operate its properties and assets and to conduct its business as it is now being conducted and as described in the reports filed by the Company with the Securities and Exchange Commission (the "**Commission**") pursuant to the reporting requirements of the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), since the end of its most recently completed fiscal year through the date hereof, including, without limitation, its most recent report on Form 10-Q. The Company does not have any subsidiaries other than those identified in its most recent report on Form 10-Q.

The Company is qualified to do business as a foreign corporation and is in good standing in every jurisdiction in which the nature of the business conducted or property owned by it makes such qualification necessary, except for any jurisdiction(s) (alone or in the aggregate) in which the failure to be so qualified will not have a Material Adverse Effect. For the purposes of this Agreement, “**Material Adverse Effect**” means any effect on the business, operations, properties or financial condition of the Company that is material and adverse to the Company, taken as a whole, and any condition, circumstance or situation that would prohibit the Company from entering into and performing any of its obligations hereunder.

3.2 Authorization; Enforcement. The Company has the requisite corporate power and authority to enter into and perform this Agreement and to issue the shares in accordance with the terms hereof. The execution, delivery and performance of this Agreement by the Company and the consummation by it of the transactions contemplated hereby have been duly and validly authorized by all necessary corporate action, and no further consent or authorization of the Company, its board of directors or stockholders is required, except pursuant to Section 8. When executed and delivered by the Company, this Agreement shall constitute a valid and binding obligation of the Company enforceable against the Company in accordance with its terms, except as such enforceability may be limited by applicable bankruptcy, reorganization, moratorium, liquidation, conservatorship, receivership or similar laws relating to, or affecting generally the enforcement of, creditor’s rights and remedies or by other equitable principles of general application. The Company’s board of directors, at a meeting duly called and held, adopted resolutions approving the transactions contemplated hereby, including the issuance of the Technology Access Fee Shares.

3.3 Issuance of Shares. The shares to be issued and sold hereunder have been duly authorized by all necessary corporate action and, when issued in accordance with the terms hereof, will be validly issued, fully paid and nonassessable. In addition, such shares will be free and clear of all liens, claims, charges, security interests or agreements, pledges, assignments, covenants, restrictions or other encumbrances created by, or imposed by, the Company (collectively, “**Encumbrances**”) and rights of refusal of any kind imposed by the Company (other than restrictions on transfer under applicable securities laws) and the holder of such shares shall be entitled to all rights accorded to a holder of Common Stock. As of the date hereof, 12,174,795 shares of the Company’s Common Stock are issued and outstanding.

3.4 No Conflicts; Governmental Approvals. The execution, delivery and performance of the Agreement by the Company and the consummation by the Company of the transactions contemplated hereby do not and will not (i) violate any provision of the Company’s Articles of Incorporation or Bylaws, each as amended to date, (ii) conflict with, or constitute a default (or an event which with notice or lapse of time or both would become a default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, any agreement, mortgage, deed of trust, indenture, note, bond, license, lease agreement, instrument or obligation to which the Company is a party or by which the Company’s properties or assets are bound, or (iii) result in a violation of any federal, state, local or foreign statute, rule, regulation, order, judgment or decree (including federal and state securities laws and regulations) applicable to the Company or by which any property or asset of the Company is bound or affected, except for such conflicts, defaults, terminations, amendments, acceleration, cancellations and violations as would not, individually or in the aggregate, have a Material Adverse Effect. The Company is not required under federal, state, foreign or local law, rule or regulation to obtain any consent, authorization or order of, or make any filing or registration with, any court or governmental agency in order for it to execute, deliver or perform any of its obligations under this Agreement or issue and sell the shares in accordance with the terms hereof (other than any filings, consents and approvals which may be required to be made by the Company under applicable state and federal securities laws, rules or regulations prior to or subsequent to the Closing).

3.5 Commission Documents, Financial Statements. The Common Stock of the Company is registered pursuant to Section 12(g) of the Exchange Act. During the year preceding this Agreement, the Company has timely filed all reports, schedules, forms, statements and other documents required to be filed by it with the Commission pursuant to the reporting requirements of the Exchange Act (the “**SEC Documents**”). At the times of their respective filing, all such reports, schedules, forms, statements and other documents complied in all material respects with the requirements of the Exchange Act and the rules and regulations of the Commission promulgated thereunder. At the times of their respective filings, such reports, schedules, forms, statements and other documents did not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in

light of the circumstances under which they were made, not misleading. As of their respective dates, the financial statements of the Company included in the Commission Documents complied in all material respects with applicable accounting requirements and the published rules and regulations of the Commission or other applicable rules and regulations with respect thereto. Such financial statements have been prepared in accordance with generally accepted accounting principles applied on a consistent basis during the periods involved (except (i) as may be otherwise indicated in such financial statements or the notes thereto or (ii) in the case of unaudited interim statements, to the extent they may not include footnotes or may be condensed or summary statements), and fairly present in all material respects the consolidated financial position of the Company as of the dates thereof and the results of operations and cash flows for the periods then ended (subject, in the case of unaudited statements, to normal year-end audit adjustments).

3.6 Accountants. Mayer Hoffman McCann P.C. whose report on the financial statements of the Company is filed with the SEC in the Company's Annual Report on Form 10-K for the year ended December 31, 2011, were, at the time such report was issued, independent registered public accountants as required by the Securities Act of 1933 and the rules and regulations promulgated thereunder (together, the "**Securities Act**").

3.7 Internal Controls. The Company has established and maintains a system of internal accounting controls sufficient to provide reasonable assurances that: (i) transactions are executed in accordance with management's general or specific authorization; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles in the United States and to maintain accountability for assets; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

3.8 Disclosure Controls. The Company has established and maintains disclosure controls and procedures (as such term is defined in Rules 13a-15 and 15d-15 under the Exchange Act). Since the date of the most recent evaluation of such disclosure controls and procedures, there have been no significant changes in internal controls or in other factors that could significantly affect internal controls, including any corrective actions with regard to significant deficiencies and material weaknesses. The Company is in compliance in all material respects with all provisions currently in effect and applicable to the Company of the Sarbanes-Oxley Act of 2002, and all rules and regulations promulgated thereunder or implementing the provisions thereof.

3.9 No Material Adverse Change. Except as disclosed in the Commission Documents, since March 31, 2012, the Company has not (i) experienced or suffered any Material Adverse Effect, (ii) incurred any material liabilities, obligations, claims or losses (whether liquidated or unliquidated, secured or unsecured, absolute, accrued, contingent or otherwise) other than those incurred in the ordinary course of the Company's business or (iii) declared, made or paid any dividend or distribution of any kind on its capital stock.

3.10 No Undisclosed Events or Circumstances. Except as disclosed in the Commission Documents, since March 31, 2012, except for the consummation of the transactions contemplated herein, to the Company's knowledge, no event or circumstance has occurred or exists with respect to the Company or its businesses, properties, prospects, operations or financial condition, which, under applicable law, rule or regulation, requires public disclosure or announcement by the Company but which has not been so publicly announced or disclosed.

3.11 Litigation. No action, suit, proceeding or investigation is currently pending or, to the knowledge of the Company, has been threatened in writing against the Company that: (i) concerns or questions the validity of this Agreement; (ii) concerns or questions the right of the Company to enter into this Agreement; or (iii) is reasonably likely to have a Material Adverse Effect. The Company is neither a party to nor subject to the provisions of any material order, writ, injunction, judgment or decree of any court or government agency or instrumentality. There is no action, suit, proceeding or investigation by the Company currently pending or that the Company intends to initiate that would have a Material Adverse Effect.

3.12 Compliance. Except for defaults or violations which are not reasonably likely to have a Material Adverse Effect, the Company is not (i) in default under or in violation of (and no event has occurred that has not been waived that, with notice or lapse of time or both, would result in a default by the Company under), nor has the Company

received notice of a claim that it is in default under or that it is in violation of, any indenture, loan or credit agreement or any other agreement or instrument to which it is a party or by which it or any of its properties is bound (whether or not such default or violation has been waived), (ii) is in violation of any order of any court, arbitrator or governmental body, or (iii) is or has been in violation of any statute, rule or regulation of any governmental authority, including without limitation all foreign, federal, state and local laws, applicable to its business.

3.13 Intellectual Property

(a) To the best of its knowledge, the Company has entered into agreements with each of its current and former officers, employees and consultants involved in research and development work, including development of the Company's products and technology providing the Company, to the extent permitted by law, with title and ownership to patents, patent applications, trade secrets and inventions conceived, developed, reduced to practice by such person, solely or jointly with other of such persons, during the period of employment by the Company except where the failure to have entered into such an agreement would not have a Material Adverse Effect. The Company is not aware that any of its employees or consultants is in material violation thereof.

(b) To the Company's knowledge, the Company owns or possesses adequate rights to use all trademarks, service marks, trade names, domain names, copyrights, patents, patent applications, inventions, know how (including trade secrets and other unpatented and/or unpatentable proprietary or confidential information, systems or procedures), and other intellectual property rights ("**Intellectual Property**") as are necessary for the conduct of its business as described in the Commission Documents. Except as described in the Commission Documents, (i) to the knowledge of the Company, there is no infringement, misappropriation or violation by third parties of any such Intellectual Property; (ii) there is no pending or, to the knowledge of the Company, threatened action, suit, proceeding or claim by others against the Company challenging the Company's rights in or to any such Intellectual Property; (iii) the Intellectual Property owned by the Company and, to the knowledge of the Company, the Intellectual Property licensed to the Company has not been adjudged invalid or unenforceable by a court of competent jurisdiction or applicable government agency, in whole or in part, and there is no pending or, to the knowledge of the Company, threatened action, suit, proceeding or claim by others challenging the validity or scope of any such Intellectual Property; (iv) there is no pending or, to the knowledge of the Company, threatened action, suit, proceeding or claim by others against the Company that the Company infringes, misappropriates or otherwise violates any Intellectual Property or other proprietary rights of others, and the Company has not received any written notice of such claim; and (v) to the Company's knowledge, no employee of the Company is the subject of any claim or proceeding involving a violation of any term of any employment contract, patent disclosure agreement, invention assignment agreement, non-competition agreement, non-solicitation agreement, nondisclosure agreement or any restrictive covenant to or with a former employer where the basis of such violation relates to such employee's employment with the Company or actions undertaken by the employee while employed with the Company, in each of (i) through (v), for any instances which would not, individually or in the aggregate, result in a Material Adverse Effect.

3.14 FDA Compliance.

(a) Except as described in the Commission Documents, the Company: (i) is in material compliance with all statutes, rules or regulations applicable to the ownership, testing, development, manufacture, packaging, processing, use, distribution, marketing, labeling, promotion, sale, offer for sale, storage, import, export or disposal of any product that is under development, manufactured or distributed by the Company ("*Applicable Laws*"); (ii) has not received any FDA Form 483, notice of adverse finding, warning letter, untitled letter or other correspondence or notice from the U.S. Food and Drug Administration (the "*FDA*") or any other federal, state, local or foreign governmental or regulatory authority alleging or asserting material noncompliance with any Applicable Laws or any licenses, certificates, approvals, clearances, authorizations, permits and supplements or amendments thereto required by any such Applicable Laws ("*Authorizations*"), which would not, individually or in the aggregate, result in a Material Adverse Effect; (iii) possesses all material Authorizations necessary for the operation of its business as described in the Commission Documents and such Authorizations are valid and in full force and effect and the Company is not in material violation of any term of any such Authorizations; and (iv) since January 1, 2009: (A) has not received notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from the FDA or any other federal, state, local or foreign governmental or regulatory authority or third party alleging that any product operation or

activity is in material violation of any Applicable Laws or Authorizations and has no knowledge that the FDA or any other federal, state, local or foreign governmental or regulatory authority or third party is considering any such claim, litigation, arbitration, action, suit, investigation or proceeding; (B) has not received notice that the FDA or any other federal, state, local or foreign governmental or regulatory authority has taken, is taking or intends to take action to limit, suspend, modify or revoke any material Authorizations and has no knowledge that the FDA or any other federal, state, local or foreign governmental or regulatory authority is considering such action; (C) has filed, obtained, maintained or submitted all material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Applicable Laws or Authorizations and that all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were materially complete and correct on the date filed (or were corrected or supplemented by a subsequent submission); and (D) has not, either voluntarily or involuntarily, initiated, conducted, or issued or caused to be initiated, conducted or issued, any recall, market withdrawal or replacement, safety alert, post sale warning, “dear doctor” letter, or other notice or action relating to the alleged lack of safety or efficacy of any product or any alleged product defect or violation and, to the Company’s knowledge, no third party has initiated, conducted or intends to initiate any such notice or action.

(b) Since January 1, 2009, and except to the extent disclosed in the Commission Documents, the Company has not received any notices or correspondence from the FDA or any other federal, state, local or foreign governmental or regulatory authority requiring the termination, suspension or material modification of any studies, tests or preclinical or clinical trials conducted by or on behalf of the Company.

3.15 General Healthcare Regulatory Compliance.

(a) As used in this subsection:

(i) “**Governmental Entity**” means any national, federal, state, county, municipal, local or foreign government, or any political subdivision, court, body, agency or regulatory authority thereof, and any Person exercising executive, legislative, judicial, regulatory, taxing or administrative functions of or pertaining to any of the foregoing.

(ii) “**Law**” means any federal, state, local, national or foreign law, statute, code, ordinance, rule, regulation, order, judgment, writ, stipulation, award, injunction, decree or arbitration award or finding.

(b) The Company has not committed any act, made any statement or failed to make any statement that would reasonably be expected to provide a basis for the FDA or any other Governmental Entity to invoke its policy with respect to “Fraud, Untrue Statements of Material Facts, Bribery, and Illegal Gratuities”, or similar policies, set forth in any applicable Laws. Neither the Company, nor, to the knowledge of the Company, any of its officers, key employees or agents has been convicted of any crime or engaged in any conduct that has resulted, or would reasonably be expected to result, in debarment under applicable Law, including, without limitation, 21 U.S.C. Section 335a. No claims, actions, proceedings or investigations that would reasonably be expected to result in such a material debarment or exclusion are pending, or to the knowledge of the Company, threatened, against the Company or any of its respective officers, employees or agents.

(c) Each of the Company and, to its knowledge, its directors, officers, employees, and agents (while acting in such capacity) is, and at all times has been, in material compliance with all health care Laws applicable to the Company or by which any of its properties, businesses, products or other assets is bound or affected, including, without limitation, the federal Anti-kickback Statute (42 U.S.C. § 1320a-7b(b)), the Anti-Inducement Law (42 U.S.C. § 1320a-7a(a)(5)), the civil False Claims Act (31 U.S.C. §§ 3729 et seq.), the administrative False Claims Law (42 U.S.C. § 1320a-7b(a)), the Health Insurance Portability and Accountability Act of 1996 (42 U.S.C. § 1320d et seq.), the exclusion laws (42 U.S.C. § 1320a-7), the Food Drug and Cosmetic Act (21 U.S.C. §§ 301 et seq.) (collectively, “**Health Care Laws**”). The Company has not received any notification, correspondence or any other written or oral communication from any Governmental Entity, including, without limitation, the FDA, the Centers for Medicare and Medicaid Services, and the Department of Health and Human Services Office of Inspector General, of potential or actual material non-compliance by, or liability of, the Company under any Health Care Laws.

(d) The Company is not a party to any corporate integrity agreements, monitoring agreements, consent decrees, settlement orders, or similar agreements with or imposed by any Governmental Entity.

3.16 Application of Takeover Protections. The issuance of the shares hereunder and Intrexon's ownership thereof is not prohibited by the business combination statutes of the state of Florida. The Company has not adopted any stockholder rights plan, "poison pill" or similar arrangement that would trigger any right, obligation or event as a result of the issuance of such shares and Intrexon's ownership of such shares and there are no similar anti-takeover provisions under the Company's charter documents.

3.17 Listing and Maintenance Requirements. The Company is in compliance with the requirements of the OTC Bulletin Board for continued listing of the Common Stock thereon. The issuance and sale of the shares hereunder does not contravene the rules and regulations of the OTC Bulletin Board.

3.18 Private Placement. Neither the Company nor its Affiliates, nor any Person acting on its or their behalf, (i) has engaged in any form of general solicitation or general advertising (within the meaning of Regulation D under the Securities Act) in connection with the offer or sale of the shares hereunder, (ii) has, directly or indirectly, made any offers or sales of any security or solicited any offers to buy any security, under any circumstances that would require registration of the sale and issuance by the Company of the shares under the Securities Act or (iii) has issued any shares of Common Stock or shares of any series of preferred stock or other securities or instruments convertible into, exchangeable for or otherwise entitling the holder thereof to acquire shares of Common Stock which would be integrated with the sale of the shares to Intrexon for purposes of the Securities Act or of any applicable stockholder approval provisions, including, without limitation, under the rules and regulations of any exchange or automated quotation system on which any of the securities of the Company are listed or designated, nor will the Company or any of its subsidiaries or affiliates take any action or steps that would require registration of any of the shares under the Securities Act or cause the offering of the shares to be integrated with other offerings. Assuming the accuracy of the representations and warranties of Intrexon, the offer and issuance of the shares by the Company to Intrexon pursuant to this Agreement will be exempt from the registration requirements of the Securities Act.

3.19 No Manipulation of Stock. The Company has not taken, and has no plans to take, in violation of applicable law, any action outside the ordinary course of business designed to, or that might reasonably be expected to, cause or result in unlawful manipulation of the price of the Common Stock.

3.20 Brokers. Other than Griffin Securities, Inc., neither the Company nor any of the officers, directors or employees of the Company has employed any broker or finder in connection with the transaction contemplated by this Agreement. The Company shall indemnify Intrexon from and against any broker's, finder's or agent's fees for which the Company is responsible.

SECTION 4. REPRESENTATIONS, WARRANTIES AND COVENANTS OF INTREXON.

4.1 Purchaser Sophistication. Intrexon represents and warrants to, and covenants with, the Company that Intrexon (a) is knowledgeable, sophisticated and experienced in making, and is qualified to make decisions with respect to, investments in shares presenting an investment decision like that involved in the acceptance of the shares pursuant hereto, including investments in securities issued by the Company and investments in comparable companies, and has requested, received, reviewed and considered all information it deemed relevant in making an informed decision to purchase the shares, (b) Intrexon, in connection with its decision to purchase the shares, relied only upon the SEC Documents, other publicly available information, and the representations and warranties of the Company contained herein. Intrexon is an "accredited investor" pursuant to Rule 501 of Regulation D under the Securities Act, (c) Intrexon is acquiring the shares for its own account for investment only and with no present intention of distributing any of such shares or any arrangement or understanding with any other persons regarding the distribution of such shares; (d) Intrexon has not been organized, reorganized or recapitalized specifically for the purpose of investing in the shares; (e) Intrexon will not, directly or indirectly, offer, sell, pledge, transfer or otherwise dispose of (or solicit any offers to buy, purchase or otherwise acquire to take a pledge of) any of the shares except in compliance with the Securities Act and applicable state securities laws, (f) Intrexon understands that the shares are being offered and sold to it in reliance upon specific exemptions from the registration requirements of the Securities Act and state securities laws, and that the Company is

relying upon the truth and accuracy of, and Intrexon's compliance with, the representations, warranties, agreements, acknowledgments and understandings of Intrexon set forth herein in order to determine the availability of such exemptions and the eligibility of Intrexon to acquire the shares, (g) Intrexon understands that its investment in the shares involves a significant degree of risk, including a risk of total loss of Intrexon's investment (provided that such acknowledgment in no way diminishes the representations, warranties and covenants made by the Company hereunder) and (h) Intrexon understands that no United States federal or state agency or any other government or governmental agency has passed upon or made any recommendation or endorsement of the shares.

4.2 Authorization and Power. Intrexon has the requisite power and authority to enter into and perform this Agreement. The execution, delivery and performance of this Agreement by Intrexon and the consummation by it of the transactions contemplated hereby have been duly authorized by all necessary corporate action, and no further consent or authorization of Intrexon or its board of directors or stockholders is required. When executed and delivered by Intrexon, this Agreement shall constitute a valid and binding obligation of Intrexon enforceable against Intrexon in accordance with its terms, except as such enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium, liquidation, conservatorship, receivership or similar laws relating to, or affecting generally the enforcement of, creditor's rights and remedies or by other equitable principles of general application.

4.3 No Conflict. The execution, delivery and performance of this Agreement by Intrexon and the consummation by Intrexon of the transactions contemplated hereby do not and will not (i) violate any provision of Intrexon's charter or organizational documents, (ii) conflict with, or constitute a default (or an event which with notice or lapse of time or both would become a default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, any agreement, mortgage, deed of trust, indenture, note, bond, license, lease agreement, instrument or obligation to which Intrexon is a party or by which Intrexon's properties or assets are bound, or (iii) result in a violation of any federal, state, local or foreign statute, rule, regulation, order, judgment or decree (including federal and state securities laws and regulations) applicable to Intrexon or by which any property or asset of Intrexon are bound or affected, except, in all cases, other than violations (with respect to federal and state securities laws) above, for such conflicts, defaults, terminations, amendments, acceleration, cancellations and violations as would not, individually or in the aggregate, materially and adversely affect Intrexon's ability to perform its obligations under the Agreement.

4.4 Restricted Shares. Intrexon acknowledges that the shares when issued shall be restricted securities and must be held indefinitely unless subsequently registered under the Securities Act or the Company receives an opinion of counsel reasonably satisfactory to the Company that such registration is not required. Intrexon is aware of the provisions of Rule 144 promulgated under the Securities Act which permit limited resale of stock purchased in a private placement subject to the satisfaction of certain conditions, including, among other things, the existence of a public market for the stock, the availability of certain current public information about the Company, the resale occurring not less than one year after a party has purchased and paid for the stock to be sold, the sale being through a "broker's transaction" or a transaction directly with a "market maker" and the number of shares of the stock being sold during any three-month period not exceeding specified limitations. Intrexon further acknowledges and understands that the Company may not be satisfying the current public information requirement of Rule 144 at the time Intrexon wishes to sell the shares and, if so, Intrexon would be precluded from selling the shares under Rule 144 even if the one year minimum holding period has been satisfied.

4.5 Ownership of Common Stock. As of the date hereof, excluding the Technology Access Fee Shares, Intrexon and its Affiliates beneficially own no shares of Common Stock of the Company.

4.6 Stock Legends. Intrexon acknowledges that certificates evidencing the Technology Access Fee Shares shall bear a restrictive legend in substantially the following form (and including related stock transfer instructions and record notations):

4.7 THESE SECURITIES HAVE NOT BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION OR THE SECURITIES COMMISSION OF ANY STATE IN RELIANCE UPON AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), AND, ACCORDINGLY, MAY NOT BE OFFERED OR SOLD EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OR PURSUANT TO AN

AVAILABLE EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND IN ACCORDANCE WITH APPLICABLE STATE SECURITIES LAWS OR BLUE SKY LAWS AS EVIDENCED BY A LEGAL OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE COMPANY.

4.8 Brokers. Neither Intrexon nor any of the officers, directors or employees of Intrexon has employed any broker or finder in connection with the transaction contemplated by this Agreement. Intrexon shall indemnify the Company from and against any broker's, finder's or agent's fees for which Intrexon is responsible.

SECTION 5. REGISTRATION RIGHTS.

5.1 Piggyback Registration Rights. If, at any time, the Company proposes to file a registration statement under the Securities Act, other than a registration relating solely to employee benefit plans or Rule 145 transactions, with respect to an underwritten offering for its own account of any class of securities of the Company (a "**Registration Statement**"), then each such time, the Company shall give written notice of such intention to file a Registration Statement (a "**Piggyback Notice**") to Intrexon at least five (5) days before the anticipated filing date. The Piggyback Notice shall describe the number of shares to be registered and the intended method of distribution and offer Intrexon the opportunity to register pursuant to such Registration Statement such shares held by Intrexon (the "**Registrable Shares**") as Intrexon may request in writing to the Company within five (5) days after the date Intrexon first received the Piggyback Notice (a "**Piggyback Registration**"). The Piggyback Registration rights shall be subject ratably to potential underwriter's limitations set forth herein. The Company shall take all reasonable steps to include in the Registration Statement the Registrable Shares which the Company has been so requested to register by Intrexon. The Company shall be entitled to suspend or withdraw a Registration Statement prior to its becoming effective. If the managing underwriter with respect to such an offering advises the Company in writing that the inclusion of all or any portion of the Registrable Shares which Intrexon has requested to be included in the Registration Statement would materially jeopardize the success of the offering, then the Company shall be required to include in the underwriting only that number of Registrable Shares which the underwriter advises the Company in writing may be sold without materially jeopardizing the offering. If Intrexon disapproves of the terms of any such underwriting may elect to withdraw its Registrable Shares from it by written notice to the Company and the underwriter. Intrexon also agrees to be subject to any lock-up agreements reasonably requested by a managing underwriter so long as the Company shares held by the Company's largest shareholder are also subject to a similar lock-up agreement. The Company shall not grant registration rights to any other holder or prospective holder of its securities in connection with a private placement of the Company's securities unless, (i) all shares held by Intrexon are, at the time of such private placement, included on a Registration Statement, or (ii) the Company agrees, in connection with such private placement, to grant Intrexon the right to include on the Registration Statement a number of Intrexon's Registrable Shares equal to one half of the number of shares to be registered on behalf of the other holder or prospective holder.

5.2 Registration Expenses. All reasonable fees and expenses incident to the performance of or compliance with this Agreement by the Company, except as and to the extent specified in this Section 5, shall be borne by the Company whether or not the Registration Statement is filed or becomes effective and whether or not any shares are sold pursuant to the Registration Statement. The fees and expenses referred to in the foregoing sentence shall include, without limitation, (i) all registration and filing fees (including, without limitation, fees and expenses (A) with respect to filings required to be made with each securities exchange or market on which shares are listed, (B) with respect to filings required to be made with the Financial Industry Regulatory Authority and (C) in compliance with state securities or Blue Sky laws, (ii) messenger, telephone and delivery expenses, (iii) fees and disbursements of counsel for the Company, (iv) Securities Act liability insurance, if the Company so desires such insurance, and (v) fees and expenses of all other persons or entities retained by the Company in connection with the consummation of the transactions contemplated by this Section 5, including, without limitation, the Company's independent public accountants.

5.3 Indemnification by the Company. The Company shall, notwithstanding any termination of this Agreement, indemnify and hold harmless Intrexon, its permitted assignees, officers, directors, agents, Affiliates and employees, to the fullest extent permitted by applicable law, from and against any and all claims, losses, damages, liabilities, penalties, judgments, costs and expenses (including, without limitation, reasonable attorneys' fees and

expenses) (collectively, “Losses”), arising out of or relating to any untrue or alleged untrue statement of a material fact contained in a Registration Statement or arising out of or relating to any omission or alleged omission of a material fact required to be stated therein or necessary to make the statements therein (in the case of any prospectus or form of prospectus or supplement thereto, in the light of the circumstances under which they were made) not misleading, except (i) to the extent that such untrue statements or omissions are based upon information furnished to the Company by Intrexon expressly for use in the Registration Statement; (ii) as a result of the failure of such indemnitee to deliver a prospectus, as amended or supplemented, to a purchaser in connection with an offer or sale; or (iii) the use by the indemnitee of an outdated or defective prospectus after the Company has notified Intrexon in writing that the prospectus is outdated or defective, but only if and to the extent that following such receipt the misstatement or omission giving rise to such Loss would have been corrected; provided, however, that the indemnity agreement contained in this Section 5.3 shall not apply to amounts paid in settlement of any Losses if such settlement is effected without the prior written consent of the Company, which consent shall not be unreasonably withheld.

5.4 Indemnification by Intrexon. Intrexon shall indemnify and hold harmless the Company, its directors, officers, agents and employees to the fullest extent permitted by applicable law, from and against all Losses, as incurred, arising out of or relating to any untrue or alleged untrue statement of a material fact contained in a Registration Statement or arising out of or relating to any omission or alleged omission of a material fact required to be stated therein or necessary to make the statements therein (in the case of any prospectus or supplement thereto, in the light of the circumstances under which they were made) not misleading, to the extent that such untrue statement or omission is contained in or omitted from any information regarding Intrexon furnished in writing to the Company by Intrexon expressly for use therein, and that such information was reasonably relied upon by the Company for use therein, or to the extent that such information relates to Intrexon or Intrexon’s proposed method of distribution of shares and was furnished in writing by Intrexon expressly for use therein. Notwithstanding anything to the contrary contained herein, in no event shall the liability of Intrexon under this Section 5.4 exceed the net proceeds to Intrexon as a result of the sale of shares pursuant to a Registration Statement in connection with which the untrue or alleged untrue statement or material omission was provided.

SECTION 6. SURVIVAL OF REPRESENTATIONS, WARRANTIES AND AGREEMENTS.

Notwithstanding any investigation made by any party to this Agreement, all representations and warranties made by the Company and Intrexon herein shall survive the execution of this Agreement and the issuance to Intrexon of the Technology Access Fee Shares and shall terminate eighteen (18) months after the Technology Access Fee Shares Closing, provided, however, that the representations and warranties in Sections 3.1, 3.2 and 3.3 shall survive for so long as Intrexon continues to hold any of the Technology Access Fee Shares sold hereunder. No claim may be asserted against either party for breach of any representation or warranty contained herein, unless written notice of such claim is received by such party describing in reasonable detail and to the extent available the facts and circumstances with respect to the subject matter of such claim on or prior to the date on which the representation or warranty on which such claim is based ceases to survive as set forth above. In no event shall any party be liable to the other party for any punitive, incidental, consequential, special or indirect damages, including loss of future revenue or income, loss of business reputation or opportunity relating to the breach or alleged breach of any representation or warranty in this Agreement.

SECTION 7. COVENANTS.

7.1 Notifications.

(a) During the period prior to the Technology Access Fee Shares Closing, the Company will promptly advise Intrexon in writing of (i) any Material Adverse Effect, or (ii) any notice or other communication from any third person or entity alleging that the consent of the third person is required in connection with the transactions contemplated by this Agreement.

(b) Information received by Intrexon pursuant to this Section 7.1 shall be considered “Confidential Information” as such term is defined in the Channel Agreement and Intrexon agrees to treat such information in accordance with the provisions of Article 7 of the Channel Agreement.

7.2 Standstill Provision.

(a) Intrexon hereby agrees that, for a period of three years from the date hereof, unless specifically invited in writing by the Company to do so, neither Intrexon nor any of its Affiliates will, or will cause or knowingly permit any of its or their directors, officers, employees, investment bankers, attorneys, accountants or other advisors or representatives to, in any manner, directly or indirectly:

(i) effect or seek, initiate, offer or propose (whether publicly or otherwise) to effect, or cause or participate in or in any way advise or, assist any other person to effect or seek, initiate, offer or propose (whether publicly or otherwise) to effect or cause or participate in, any acquisition of any securities (or beneficial ownership thereof) or assets of the Company; any tender or exchange offer, merger, consolidation or other business combination involving the Company; any recapitalization, restructuring, liquidation, dissolution or other extraordinary transaction with respect to the Company; or any "solicitation" of "proxies" (as such terms are used in the proxy rules of the Commission) or consents to vote any voting securities of the Company;

(ii) form, join or in any way participate in a "group" (as defined under the Exchange Act, hereafter a "Group") with respect to any securities of the Company;

(iii) otherwise act, alone or in concert with others, to seek to control or influence the management, board of directors, or policies of the Company (except as contemplated by Section 7.4 of this Agreement);

(iv) take any action which could reasonably be expected to force the Company to make a public announcement regarding any of the types of matters set forth in this Section 7.2; or

(v) enter into any agreements, discussions or arrangements with any third party with respect to any of the foregoing.

(b) Notwithstanding the foregoing, the Company hereby agrees that the provisions of this Section 7.2 shall not apply to the following:

(i) the purchase by Intrexon and/or its Affiliates after the date hereof (and not pursuant to this Agreement) of up to an aggregate number of shares of Common Stock that does not exceed 10% of the number of shares of Common Stock then issued and outstanding;

(ii) the exercise by Intrexon and/or its Affiliates, if applicable, of any voting rights available to Company stockholders generally pursuant to any transaction described Section 7.2(a)(i) above, provided that Intrexon has not then either directly, indirectly, or as a member of a Group made, effected, initiated or caused such transaction to occur or otherwise violated this Section 7.2;

(iii) the exercise by Intrexon and/or its Affiliates, if applicable, of any voting rights generally available to it or them as non-Affiliate security holders of a third party that is a participant in an action or transaction described in Section 7.2(a)(i) above, provided that Intrexon has not then either directly, indirectly, or as a member of a Group made, effected, initiated or caused such action or transaction to occur or otherwise violated this Section 7.2;

(iv) any activity by Intrexon after the Company has made any public announcement of its intent to solicit or engage in any transaction which would result in a Company Sale;

(v) making any communication to Company executive management on a confidential basis solely that Intrexon would be interested in engaging in discussions with the Company that could result in a negotiated transaction described in Section 7.2(a)(i) so long as Intrexon does not propose any such transaction or discuss or refer to potential terms thereof without the Company's prior consent; and

(vi) Intrexon exercising its Equity Purchase Participation Right in accord with Section 8.

(c) Subject to Section 11.13, Intrexon's rights and the Company's obligations under this Section 7.2 shall terminate upon the termination of the Channel Agreement.

7.3 Intrexon Proposals. Notwithstanding any of the foregoing provisions of Section 7.2, the Company further agrees that nothing herein shall limit the ability of Intrexon to confidentially propose to the executive management of the Company and its board of directors, and/or advocate for, any transaction between the Company and any third party unaffiliated with Intrexon or its Affiliates.

7.4 Further Assurances. Each of the Company and Intrexon shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, as each other party may reasonably request in order to carry out the intent and accomplish the purposes of this Agreement, the Channel Agreement and the consummation of the transactions contemplated thereby.

SECTION 8. EQUITY PURCHASE PARTICIPATION RIGHT

8.1 Intrexon Equity Purchase Participation Right. Intrexon shall be entitled to, at its election, participate in each Qualified Financing (as hereinafter defined) conducted by the Company and may purchase as part of, or in connection with, such Qualified Financing an amount of Common Stock or other of the Company's securities equal to up to 30% of the number of shares of Common Stock (or other of the Company's securities) issued and sold by the Company in the Qualified Financing (excluding the securities sold pursuant to this Section 8.1) (collectively, the "**Equity Purchase Participation Right**"). For the purposes of this Section 8, a "**Qualified Financing**" shall mean a sale by the Company of Common Stock, or equity securities convertible into Common Stock, in a public or private offering, raising gross cash proceeds of at least \$1,000,000 where the shares sold are either registered under the Securities Act on issuance, or the Company agrees to register such shares following the issuance of such shares. The price per share paid by Intrexon in any such Qualified Financing shall be the same as that paid by the other investors in such Qualified Financing, and upon the exercise of the Equity Purchase Participation Right Intrexon shall receive securities of the same type and with the same rights, preferences and privileges as the other investors in such Qualified Financing, including, for example, any warrant coverage, subject to the execution by Intrexon of the investment documents entered into by the other investors in the Qualified Financing.

In the event that the Company intends to conduct a Qualified Financing:

(a) Upon receipt of written notice from the Company that it intends to conduct a Qualified Financing, Intrexon shall, within ten (10) days of receipt of such documents, notify the Company as to whether Intrexon wishes to participate in the Qualified Financing. Upon such election, and subject to Section 8.1(b), the Company shall permit Intrexon to participate in such offering in the amount elected by Intrexon in accordance with the preceding sentence.

(b) If counsel to the Company or counsel to any underwriter in a public offering that is a Qualified Financing advises the Company that Intrexon's inclusion is not permissible under and in compliance with applicable securities laws (including without limitation Section 6 of the Securities Act), the offering and sale of securities to Intrexon pursuant to this Section 8.1 shall be made by the Company in a concurrent private placement and not in such public offering. In any such private placement: (i) the offer of the securities in such private placement shall be made on the same terms and conditions as the offer of the securities in the public offering, (ii) the closing of the private placement shall occur concurrently with the closing of the Qualified Financing, and (iii) the Company shall provide registration rights similar to those provided in Section 5.1 of this Agreement with respect to the securities purchased in the private placement.

SECTION 9. CONDITIONS TO CLOSING.

9.1 The obligation hereunder of the Company to issue shares to Intrexon at each Closing is subject to the satisfaction or waiver, at or before the Closing of the conditions set forth below. These conditions are for the Company's sole benefit and may be waived by the Company at any time in its sole discretion.

(a) Accuracy of Intrexon's Representations and Warranties. The representations and warranties of Intrexon shall be true and correct as of the date when made and as of the Closing Date as though made at that time, except for representations and warranties that are expressly made as of a particular date, which shall be true and correct as of such date.

(b) Performance by Intrexon. Intrexon shall have performed, satisfied and complied in all material respects with all covenants, agreements and conditions required by this Agreement and the Channel Agreement to be performed, satisfied or complied by Intrexon at or prior to the Closing Date.

(c) Channel Partnership Agreement. The Channel Agreement shall have been entered into by the Company and Intrexon and shall be in full force and effect.

(d) No Injunction. No statute, rule, regulation, executive order, decree, ruling or injunction shall have been enacted, entered, promulgated or endorsed by any court or governmental authority of competent jurisdiction which prohibits the consummation of any of the transactions contemplated by this Agreement.

(e) No Proceedings or Litigation. No action, suit or proceeding before any arbitrator or any governmental authority shall have been commenced, and no investigation by any governmental authority shall have been threatened in writing against Intrexon or any of the officers, directors or Affiliates of Intrexon seeking to restrain, prevent or change the transactions contemplated by this Agreement, the Channel Agreement or seeking damages in connection with such transactions.

9.2 The obligation hereunder of Intrexon to receive Shares and consummate the transactions contemplated by this Agreement is subject to the satisfaction or waiver, at or before each Closing, of each of the conditions set forth below. These conditions are for Intrexon's sole benefit and may be waived by Intrexon at any time in its sole discretion.

(a) Accuracy of the Company's Representations and Warranties. Each of the representations and warranties of the Company in this Agreement shall be true and correct as of the Closing Date, except for representations and warranties that speak as of a particular date, which shall be true and correct as of such date.

(b) Performance by the Company. The Company shall have performed, satisfied and complied in all material respects with all covenants, agreements and conditions required by this Agreement and the Channel Agreement to be performed, satisfied or complied with by the Company at or prior to the Closing Date.

(c) Channel Partnership Agreement. The Channel Agreement shall have been entered into by the Company and Intrexon and shall be in full force and effect.

(d) No Injunction. No statute, rule, regulation, executive order, decree, ruling or injunction shall have been enacted, entered, promulgated or endorsed by any court or governmental authority of competent jurisdiction which prohibits the consummation of any of the transactions contemplated by this Agreement or the Channel Agreement.

(e) No Proceedings or Litigation. No action, suit or proceeding before any arbitrator or any governmental authority shall have been commenced, and no investigation by any governmental authority shall have been threatened in writing against the Company or any of the officers, directors or Affiliates of the Company seeking to restrain, prevent or change the transactions contemplated by this Agreement, the Channel Agreement or seeking damages in connection with such transactions.

(f) Opinion. Counsel for the Company shall have delivered to Intrexon an opinion letter containing legal opinions in a form reasonably acceptable to Intrexon.

(g) No Material Adverse Effect. Since the date of this Agreement, there shall not have occurred any Material Adverse Effect.

SECTION 10. NOTICES.

All notices or other communications which are required or permitted hereunder shall be in writing and addressed as follows:

If to the Company:	Oragenics, Inc. 3000 Bayport Drive, Suite 685, Tampa, FL 33607 Attention: Chief Executive Officer Fax No.: (813) 286-7904
If to Intrexon:	Intrexon Corporation 20358 Seneca Meadows Parkway Germantown, MD 20876 Attention: Legal Department Fax No.: (301) 556-9902

or to such other address as the party to whom notice is to be given may have furnished to the other party in writing in accordance herewith. Any such communication shall be deemed to have been given when delivered if personally delivered or sent by facsimile (provided that the party providing such notice promptly confirms receipt of such transmission with the other party by telephone), on the business day after dispatch if sent by a nationally-recognized overnight courier and on the third business day following the date of mailing if sent by certified mail, postage prepaid, return receipt requested.

SECTION 11. MISCELLANEOUS.

11.1 Fees and Expenses. Each party shall pay the fees and expenses of its advisors, counsel, accountants and other experts, if any, and all other expenses, incurred by such party incident to the negotiation, preparation, execution, delivery and performance of this Agreement.

11.2 Waivers and Amendments. Neither this Agreement nor any provision hereof may be changed, waived, discharged, terminated, modified or amended except upon the written consent of the parties hereto.

11.3 Headings. The headings of the various sections of this Agreement have been inserted for convenience of reference only and shall not be deemed to be part of this Agreement.

11.4 Severability. If any provision hereof should be held invalid, illegal or unenforceable in any respect, then, to the fullest extent permitted by law, (a) all other provisions hereof shall remain in full force and effect and shall be liberally construed in order to carry out the intentions of the Parties as nearly as may be possible and (b) the parties shall use their best efforts to replace the invalid, illegal or unenforceable provision(s) with valid, legal and enforceable provision(s) which, insofar as practical, implement the purposes of such provision(s) in this Agreement.

11.5 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Delaware as applied to contracts entered into and performed entirely in the State of Delaware by Delaware residents, without regard to conflicts of law principles.

11.6 Counterparts. This Agreement may be executed in two or more counterparts (including by facsimile, PDF, or other means of electronic communication), each of which shall constitute an original, but all of which, when taken together, shall constitute but one instrument, and shall become effective when one or more counterparts have been signed by each party hereto and delivered to the other parties.

11.7 Successors and Assigns. Except as otherwise expressly provided herein, the provisions hereof shall inure to the benefit of, and be binding upon, the successors, assigns, heirs, executors and administrators of the parties hereto, provided that Intrexon shall not assign its rights or obligations hereunder unless Intrexon assigns such rights in whole and not in part to an assignee of such rights and obligations which shall agree in writing with the Company to be bound by this Agreement and that Intrexon's rights under Sections 7.1 and 7.2 and obligations under Section 8 shall not be assignable.

11.8 No Third Party Beneficiaries. This Agreement is intended for the benefit of the parties hereto and their respective permitted successors and assigns and is not for the benefit of, nor may any provision hereof be enforced by, any other person.

11.9 Expenses. Each party shall pay all costs and expenses that it incurs with respect to the negotiation, execution, delivery and performance of this Agreement.

11.10 Entire Agreement. This Agreement (including the Schedule of Exceptions), the Channel Agreement and other documents executed and delivered pursuant hereto and thereto, including the exhibits, constitute the full and entire understanding and agreement between the parties with regard to the subjects hereof and thereof.

11.11 Publicity. Except as otherwise provided herein, no party shall issue any press releases or otherwise make any public statement with respect to the transactions contemplated by this Agreement without the prior written consent of the other party, except as may be required by applicable law or regulations, in which case such party shall provide the other parties with reasonable notice of such publicity and/or opportunity to review such disclosure. The Company shall issue a press release announcing the transaction contemplated by this Agreement and the Channel Agreement prior to the opening of the financial markets in New York City on the business day immediately following the date hereof. Such press release shall be substantially in the form mutually agreed to by the parties.

11.12 Waiver of Rule of Construction. Each Party has had the opportunity to consult with counsel in connection with the review, drafting and negotiation of this Agreement. Accordingly, the rule of construction that any ambiguity in this Agreement shall be construed against the drafting Party shall not apply.

11.13 Company Sale. For purposes of this Agreement, a "**Company Sale**" shall mean the sale of the Company, whether in a single transaction or in a series of related transactions that are consummated contemporaneously (or consummated pursuant to contemporaneous agreements), to one or more unaffiliated third parties on an arm's-length basis, pursuant to which such unaffiliated third party or parties acquires (i) (whether by merger, consolidation, sale or transfer of capital stock, recapitalization, or otherwise) more than fifty percent (50%) of the Company's capital stock or (ii) all or substantially all of the assets of the Company determined on a consolidated basis.

[Remainder of page intentionally left blank.]

IN WITNESS WHEREOF, the parties hereto have caused this Stock Issuance Agreement to be executed by their duly authorized representatives as of the day and year first above written.

ORAGENICS, INC.

By: /s/ John N. Bonfiglio
Name: John N. Bonfiglio
Title: President and CEO

INTREXON CORPORATION

By: /s/ Jayson Rieger
Name: Jayson Rieger
Title: SVP, President HTD

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**FIRST AMENDMENT TO
SECURITY AGREEMENT**

This FIRST AMENDMENT TO SECURITY AGREEMENT (this "First Amendment") is entered into as of June 5, 2012, by and between ORAGENICS, INC., a Florida corporation located at 3000 Bayport Drive, Suite 685 Tampa, Florida 33607 (the "Company" or "Borrower"), and KOSKI FAMILY LIMITED PARTNERSHIP, a Texas limited partnership having a mailing address of 3525 Turtle Creek Boulevard, Unit 19-B, Dallas, Texas 75219 ("KFLP" or "Lender").

RECITALS:

WHEREAS, the Company entered into that certain Loan Agreement with the Lender on March 23, 2012 and issued a senior secured convertible promissory note for borrowing up to \$2.5 million (the "Loan");

WHEREAS, in connection with the Loan Agreement the Lender and the Company entered into a Security Agreement (the "Security Agreement") of even date therewith which provided Lender with Collateral (as defined in the Security Agreement) to secure the Loan contemplated by the Loan Agreement.

WHEREAS, the Security Agreement included as part of the Collateral securing the Loan, certain in-licensed technologies licensed from the University of Florida Research Foundation (the "UFRF"), specifically the Company's SMaRT Replacement Therapy and MU1140 technologies (the "UFRF In-Licensed Technologies");

WHEREAS, the Company and Intrexon Corporation ("Intrexon") contemplate entering into that certain Exclusive Channel Collaboration Agreement ("ECC") and Stock Issuance Agreement ("SIA") of even date herewith (the ECC and SIA are together the "Intrexon Agreements"); and

WHEREAS, the Company and the KFLP desire to enter into the First Amendment to specifically release and exclude the UFRF In-Licensed Technologies from the Collateral covered by the Security Agreement and add additional collateral in its place.

NOW, THEREFORE, IN CONSIDERATION of the mutual covenants contained in this First Amendment, and for other good and valuable consideration the receipt and adequacy of which are hereby acknowledged, the parties agree as follows:

1. The Recitals set forth above are true and correct and are incorporated herein by reference.
2. The Security Agreement is hereby amended to exclude and release the UFRF In-Licensed Technologies from the Collateral securing the loan made to the Company pursuant to the Loan Agreement.
3. The Security Agreement is hereby amended to include the Company's Differentially Protected Orthogonal Lanthionine Technology ("DPOLT") technology to the Collateral securing the loan made to the Company pursuant to the Loan Agreement.
4. Upon either: (i) a default of the Loan Agreement or Security Agreement or (ii) a breach of the ECC by the Company which gives rise to termination of the ECC by Intrexon, the Company hereby automatically, grants a worldwide, fully paid, non-exclusive, royalty-free sublicense to the UFRF In-Licensed Technologies to the KFLP.
5. Upon the Company becoming aware of the existence of a breach of the ECC and possible termination by Intrexon, it shall provide prompt written notice to the KFLP, which notice shall include the Company's determination that it is unable or unwilling to cure the breach of the ECC (the "ECC Breach Notice"). In addition and as part of the ECC Breach Notice the Company shall include an offer to the KFLP of the right to an assignment

of all right title and interest in and to the Intrexon Agreements, subject to the KFLP's agreement to assume the obligations under the Intrexon Agreements and subject to Intrexon's consent to the assignment upon the KFLP's independent cure of the breach for its own sole benefit as part of this First Amendment to the Security Agreement. If the KFLP notifies the Company of its intent to cure the breach in order to avoid a termination thereof by Intrexon, the Company shall cooperate and take all further actions reasonably necessary in furtherance of effecting the forgoing assignment. For the avoidance of doubt, the KFLP may, but it is not obligated to, proceed to cure a breach of the ECC and receive the protective benefits provided herein.

6. All rights provided herein and pursuant to the Security Agreement as amended hereby shall terminate if the Loan is converted in accordance with its terms.

7. All of the other terms of the Security Agreement not otherwise amended by the foregoing shall remain in full force and affect.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK
AND SIGNATURE PAGES FOLLOW]

IN WITNESS WHEREOF, the parties have executed this FIRST AMENDMENT TO SECURITY AGREEMENT on the date first indicated above.

Borrower:

Oragenics, Inc.

By: /s/ John N. Bonfiglio

Name: John N. Bonfiglio

Title: President and Chief Executive Officer

Lender:

KOSKI FAMILY LIMITED PARTNERSHIP

By: /s/ Christine L. Koski

Name: Christine L. Koski

Title: Managing General Partner

[Signature Page to First Amendment to Security Agreement]

Oragenics and Intrexon Announce Worldwide Exclusive Collaboration for Lantibiotics**For Immediate Release**

Tampa, FL, & Germantown, MD, June 6, 2012— Oragenics, Inc. (OTCBB: ORNI) (the “Company”), a leader in the area of oral care probiotics and a developer of therapeutic products including novel antibiotics, and Intrexon Corporation, a synthetic biology company that utilizes its proprietary technologies to provide control over cellular function, announced today the formation of a global exclusive channel collaboration through which Oragenics intends to develop and commercialize lantibiotics, a novel class of broad spectrum antibiotics, as active pharmaceutical ingredients (API) for the treatment of infectious diseases in humans and companion animals.

John N. Bonfiglio, Ph.D., President and Chief Executive Officer of Oragenics, stated, “We are excited about the tremendous potential that the collaboration brings to the Company and we look forward to working with Intrexon. Intrexon’s state-of-the-art science will allow us access to new techniques and processes which could rapidly allow us to move toward commercialization of this exciting and novel class of antibiotics.”

Randal J. Kirk, CEO and Chairman of the Board of Intrexon, said, “Intrexon thrives on accepting challenges and solving problems that have proved resistant to the efforts of its predecessors. As was the case with our recombinant human alpha 1-antitrypsin (rHuA1AT) project, the production of lantibiotics through bioindustrial process has been a high-value goal that we now take on with confidence and commitment. We are pleased to be working with the Oragenics team on this high-value opportunity.”

Under the collaboration, Oragenics will utilize Intrexon’s advanced transgene and cell engineering platforms for the development and production of lantibiotics, a class of peptide antibiotics that naturally are produced in Gram-positive bacteria and contain the characteristic polycyclic thioether amino acids lanthionine and methyllanthionine. Lantibiotics have shown broad-spectrum antibiotic properties against Gram-positive bacterial infections, such as MRSA and VRE in pre-clinical studies, yet their development as commercially viable products continues to be subject to significant technological hurdles.

Intrexon will be responsible for technology discovery efforts, cell-engineering development, and certain aspects of the manufacturing process. Oragenics will be responsible for conducting preclinical and clinical development of candidate lantibiotics, as well as for other aspects of manufacturing and the commercialization of the product(s).

Under terms of the transaction agreements:

- Oragenics will receive an exclusive, worldwide license to utilize the products of Intrexon’s modular genetic engineering platform for the development of API and drug products involving the direct administration to humans or companion animals of a lantibiotic for the prevention or treatment of infectious disease.
- Intrexon will apply its proprietary platforms and technologies, including UltraVector®, DNA and RNA MOD engineering, protein engineering, transcription control chemistry, genome engineering, and cell system engineering, to Oragenics’ lantibiotics program.
- Oragenics is responsible for funding the further anticipated development of lantibiotics toward the goal of commercialization.
- Oragenics will issue to Intrexon 4,392,425 shares of its common stock upon execution of the agreement along with the potential for additional development milestones.
- Subject to certain expense allocations, Oragenics will pay Intrexon 25% of the gross quarterly profits derived from the sale of products developed from the channel collaboration.

Griffin Securities served as financial advisor to Intrexon in connection with the transaction.

About Oragenics, Inc.

Oragenics, Inc. develops, markets and sells proprietary probiotics specifically designed to enhance oral health for humans and pets, under the brand names Evora® and ProBiora3® in over 13 countries worldwide. In addition, Oragenics develops therapies designed to treat infectious diseases. More information about the company is available at www.oragenics.com.

About Intrexon Corporation

Intrexon Corporation is a privately held synthetic biology company that employs modular DNA control systems to enhance capabilities, improve safety and lower cost in human therapeutics, protein production, industrial products, agricultural biotechnology, and animal science. The company's advanced transgene engineering platform enables Better DNA™ technology by combining revolutionary DNA control systems with corresponding advancements in modular transgene design, assembly and optimization. More information about the company is available at www.dna.com.

Safe Harbor Statement: *Under the Private Securities Litigation Reform Act of 1995: This release includes forward-looking statements that reflect Oragenics' current views with respect to future events and financial performance. These forward-looking statements are based on the management of Oragenics' beliefs and assumptions and information currently available. The words "believe," "expect," "anticipate," "intend," "estimate," "project" and similar expressions that do not relate solely to historical matters identify forward-looking statements. Investors should be cautious in relying on forward-looking statements because they are subject to a variety of risks, uncertainties, and other factors that could cause actual results to differ materially from those expressed in any such forward-looking statements. These factors include, but are not limited to Oragenics' ability to raise additional capital to sustain its operations beyond June 30, 2012, Oragenics' ability to raise additional capital to develop and commercialize lantibiotics, Oragenics' ability to successfully develop or commercialize lantibiotics, any inability to obtain regulatory approval of the lantibiotic candidates, any failure of the results of clinical trials to support lantibiotic candidates, any failure of the preclinical or clinical trials to proceed on schedules that are consistent with Oragenics' current expectations or at all, and any inability of Oragenics to maintain the effectiveness of the exclusive collaboration agreement and those set forth in Oragenics' most recently filed annual report on Form 10-K and quarterly report on Form 10-Q, and other factors detailed from time to time in filings with the U.S. Securities and Exchange Commission. Oragenics expressly disclaims any responsibility to update forward-looking statements.*

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