
**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 9, 2015
(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)

4902 Eisenhower Boulevard, Suite 125
Tampa, Florida
(Address of principal executive offices)

33634
(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))
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Item 1.01 Entry into a Material Definitive Agreement

On June 9, 2015, Oragenics, Inc. (the “Company” or “Oragenics”) entered into a worldwide Exclusive Channel Collaboration Agreement (the “ECC”) with Intrexon Corporation (“Intrexon”) and Intrexon Actobiotics NV (“Actobiotics”), a wholly-owned subsidiary of Intrexon, through which the Company intends to research, develop and commercialize products, including the continued development and commercialization of AG013, for use in the treatment of oral mucositis in humans and/or the administration to humans of a trefoil factor via genetically modified bacteria (including *L. lactis*) for the treatment of diseases and conditions of the oral cavity, throat, and esophagus, but, in any case, excluding the delivery of anti-cancer effectors for the purpose of treatment or prophylaxis of cancer (collectively, the “Program”). Contemporaneously with the ECC, the Company and Intrexon also entered into a Stock Issuance Agreement (the “SIA”) which authorized the issuance of the Technology Access Fee (as defined below) and the future stock issuance of Company’s Common Stock to Intrexon upon the achievement of designated milestones.

The Exclusive Channel Collaboration Agreement

The ECC governs the “channel collaboration” arrangement in which the Company will use Intrexon’s proprietary technology relating to the identification, design and production of genetically modified bacteria (the “Technology”) for the purpose of developing the Program.

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 and Actobiotics’ intellectual property to develop and commercialize products, including the continued development and commercialization of AG013, for use in the treatment of oral mucositis in humans and/or the administration to humans of a trefoil factor via genetically modified bacteria (including *L. lactis*) for the treatment of diseases and conditions of the oral cavity, throat, and esophagus, but, in any case, excluding the delivery of anti-cancer effectors for the purpose of treatment or prophylaxis of cancer (the “Field”). It also grants the Company an exclusive license in the Field under all Information Controlled by Actobiotics (or otherwise by Intrexon) and existing as of the Effective Date relating to the regulatory approval of AG013, including regulatory filings, data, clinical trial reports, and rights thereunder.

Under the ECC, and subject to certain exceptions, the Company is responsible for, among other things, funding the further anticipated development of products toward the goal of commercialization, conducting preclinical and clinical development of candidate products, 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.

The Company will pay Intrexon 12% of the net sales derived from the sale of products developed from the exclusive channel collaboration.

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 (based upon the fair market value of the shares otherwise required to be issued) unless the issuance of such shares would reasonably likely cause Intrexon to consolidate the Company’s financial statements with Intrexon’s financial statements, or at the Company’s option make a cash payment to Intrexon. The Commercialization Milestone Events and amounts payable are as follows: (i) two million United States dollars (\$2,000,000) within thirty (30) days of the first instance of the achievement of the Phase II Milestone Event meaning the first dosing of a patient by or on behalf of Oragenics, or an Affiliate or permitted sublicensee of Oragenics, in a phase II clinical trial, whether such occurs in the United States of America under the jurisdiction of the FDA or elsewhere under the jurisdiction of a foreign regulatory agency, for each different Oragenics Product; (ii) five million United States dollars (\$5,000,000) within thirty (30) days of the first instance of the achievement of the Phase IIb/III Milestone Event meaning meeting of the primary endpoint by or on behalf of Oragenics, or an Affiliate or permitted sublicensee of Oragenics, in a phase III clinical trial, whether such occurs in the United States of America under the jurisdiction of the FDA or elsewhere under the jurisdiction of a foreign regulatory agency, for each different Oragenics Product; (iii) five million United States dollars (\$5,000,000)

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

The ECC provides that in the event Oragenics is required to make a milestone payment in cash if an issuance of shares would cause Intrexon to consolidate the Company's financial statements with Intrexon's financial statements and Oragenics reasonably concludes that a cash milestone payment would have an adverse effect on its working capital needs over the next twelve (12) months, then such cash payment shall be in the form of an interest bearing promissory note with a maturity date of less than twelve (12) months and include other conventional market terms that would not be expected to unreasonably have an adverse effect on Oragenics working capital needs over such next twelve (12) months.

In the event that Oragenics consummates a Company Sale prior to paying to Intrexon any one or more of the respective Commercialization Milestone Payments and the ECC is transferred or assigned to the buyer in connection with such Company Sale, then all subsequent payments for Commercialization Milestone Events shall thereafter each be payable only in cash to Intrexon. In the event Oragenics consummates a reverse merger the Commercialization Milestone Payments shall be payable at Intrexon's option in either cash or stock.

The Company may voluntarily terminate the Channel Agreement upon 90 days written notice to Intrexon. 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 probiotics 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; (iv) the particular Company Product is AG013, and such Company Product has been the subject of at least one completed phase II clinical trial (as such is defined by relevant FDA guidelines) during the Term; or (v) the particular Company Product other than AGO13 and such Oragenics 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. Defined terms used in the above description of the ECC but not defined in this Form 8-K have their meaning ascribed in the EEC.

The Stock Issuance Agreement,

Pursuant to the SIA, the Company paid a technology access fee (the "Technology Access Fee") to Intrexon in the form of a convertible promissory note to Intrexon in the principal amount of \$5,000,000 (the "Convertible Note"). The SIA also provides for payments of any milestones (described above) triggered under the ECC in Oragenics' Common Stock.

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.

The Convertible Promissory Note

The Convertible Promissory Note is payable, at the Company's option, in cash or shares of Company Common Stock. The Convertible Note matures on December 31, 2015. In order to repay the Convertible Note in shares of common stock the Company will be required to obtain shareholder approval prior to any conversion into Common Stock pursuant to applicable rules of the New York Stock Exchange. The conversion price would be equal to the closing price of the Company's Common Stock on the last trading day immediately prior to the date of conversion.

The foregoing description of the SIA and the Convertible Note is qualified in its entirety by reference to such documents which are filed as Exhibits 10.2 and 10.3 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. Defined terms used in the above description of the SIA and the Convertible Note but not defined in this Form 8-K have their meaning ascribed in the SIA and the Convertible Note.

The press release dated June 10, 2015 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 9.01 Financial Statements and Exhibits.

(d) Exhibits

<u>Exhibit No.</u>	<u>Description</u>
10.1	Exclusive Channel Collaboration Agreement by and between Intrexon Corporation, Intrexon Actobiotics NV and Oragenics, Inc. dated as of June 9, 2015.**
10.2	Stock Issuance Agreement by and between Oragenics, Inc. and Intrexon Corporation dated as of June 9, 2015.
10.3	Convertible Promissory Note dated June 9, 2015.
99.1	Press Release dated June 10, 2015

** 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.

Dated: June 11, 2015

ORAGENICS, INC.
(Registrant)

BY: /s/ Michael Sullivan

Michael Sullivan
Interim CEO and Chief Financial Officer

CONFIDENTIAL TREATMENT REQUESTED BY ORAGENICS, INC.

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 9, 2015 (the “**Effective Date**”) by and between **INTREXON CORPORATION**, a Virginia corporation with offices at 20374 Seneca Meadows Parkway, Germantown, MD 20876, U.S.A. (“**Intrexon**”), Intrexon Actobiotics NV, a *naamloze vennootschap* under Belgian law with registered offices at Technologiepark 4, 9052 Zwijnaarde (CBE no. 0882.251.820 (Ghent), Belgium (“**Actobiotics**”), and **ORAGENICS, INC.**, a Florida corporation having its principal place of business at 4902 Eisenhower Boulevard, Suite 125, Tampa, FL 33634, U.S.A. (“**Oragenics**”). Intrexon and Actobiotics together on the one hand and Oragenics on the other hand 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 identification, design and production of genetically modified cells, DNA vectors and *in vivo* control of expression;

WHEREAS, Actobiotics (formerly known as ActoGeniX NV and now legally operating under the name above), a wholly-owned subsidiary of Intrexon, Controls proprietary technology known as AG013 and a related *L. lactis* expression platform; and

WHEREAS, Oragenics now desires to become Intrexon’s exclusive channel collaborator with respect to such technology for the purpose of developing the 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 “Actobiotics IP” means all Information, Patents, and proprietary biological materials that (a) are Controlled by Actobiotics as of the Effective Date or during the Term and (b) are reasonably required or useful for Oragenics to conduct the Program. For the avoidance of doubt, the Actobiotics IP shall include the AG013 Regulatory Rights, and any Information, Patents, and proprietary biological materials relating to AG013 and to other *L. lactis* strains under development that express human Trefoil Factor.

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1.2 “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 1.2, the term “controls” (with correlative meanings for the terms “controlled by” and “under common control with”) means the ownership, directly or indirectly, fifty percent (50%) or more 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, Third Security shall be deemed not to be an Affiliate of Intrexon or Oragenics, and neither Party shall be deemed to be an Affiliate of the other Party. In addition, any other person, corporation, partnership, or other entity that would be an Affiliate of a Intrexon or Oragenics solely because it and Intrexon are under common control by Randal J. Kirk or by investment funds managed by Third Security or an affiliate of Third Security shall also be deemed not to be an Affiliate of Intrexon or Oragenics. Further 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.

1.3 “AG013” shall mean the existing drug product candidate as described in Investigational New Drug application number 13995 filed with the FDA and under clinical development as of the Effective Date comprising genetically modified *L. lactis* that expresses a human Trefoil Factor and that is indicated for the treatment of oral mucositis, which regulatory application, corresponding drug product candidate and intellectual property rights are owned by Actobiotics and licensed to Oragenics in accord with the terms and conditions of this Agreement.

1.4 “AG013 Regulatory Rights” means all Information Controlled by Actobiotics (or otherwise by Intrexon) and existing as of the Effective Date relating to the regulatory approval of AG013, including regulatory filings, data, clinical trial reports, and rights thereunder.

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

1.6 “Approval Milestone Event” means the first to occur for a particular Oragenics Product of (i) the First Commercial Sale of such Oragenics Product anywhere in the Territory, or (ii) the ninetieth (90th) day after the approval of an FDA New Product Application for such Oragenics Product by the FDA or equivalent regulatory action in a foreign jurisdiction.

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

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

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

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

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

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

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

1.14 “Commercialization Milestone Event” means any one of the Phase II Milestone Event, the Phase IIb/III Milestone Event, the Regulatory Approval Application Milestone Event, the Approval Milestone Event, the New Indication Milestone Event, and the New Product Milestone Event.

1.15 “Commercial Sale” means for a given product and country the sale for value of that product by a Party (or, as the case may be, by an Affiliate or permitted sublicensee of a Party), to a Third Party after regulatory approval (if necessary) has been obtained for such product in such country.

1.16 “Company Sale” means the sale of Orogenics, 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 Third Parties on an arm’s length basis, pursuant to which such Third Party or Third Parties acquires (i) (whether by merger, consolidation, sale or transfer of capital stock, recapitalization, or otherwise) more than fifty percent (50%) of Orogenics’ common stock other than a Reverse Merger, or (ii) all or substantially all of the assets of Orogenics determined on a consolidated basis.

1.17 “Complementary In-Licensed Third Party IP” has the meaning set forth in Section 3.8(a).

1.18 “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.

1.19 “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.

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

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1.21 “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.

1.22 “Equity Agreement” has the meaning set forth in Section 5.1.

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

1.24 “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.

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

1.26 “FDA New Product Application” means a “New Drug Application” or a “Biologics License Application” (as both of such are defined according to relevant FDA guidelines and regulations establishing the mechanisms for the submission of new drug products in the United States of America for regulatory approval prior to commercial sale and marketing), but excluding any Supplemental FDA Applications.

1.27 “Field” means, irrespective of whether such requires regulatory approval, (i) the treatment of oral mucositis in humans, (ii) the administration to humans of a trefoil factor via genetically modified bacteria (including *L. lactis*) for the treatment of diseases and conditions of the oral cavity, throat, and esophagus, or (iii) both of (i) and (ii). Notwithstanding the foregoing, the Field shall exclude (a) the delivery of anti-cancer effectors for the purpose of treatment or prophylaxis of cancer, and (b) the Prior Field. For the sake of clarity, the Field does include the amelioration of symptoms or complications of cancer (as opposed to the treatment of the cancer itself), including those symptoms or complications that are side effects of other cancer treatments, such as, for example, the delivery of AG013 to treat oral mucositis in cancer patients.

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

1.29 “First Commercial Sale” means, with respect to an Oragenics Product and country, the first sale to a Third Party of such Oragenics Product in such country after any necessary regulatory approvals and any necessary pricing or reimbursement approvals have been obtained in such country.

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1.30 “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 and/or Actobiotics will bill for its respective 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 of Intrexon and its Affiliates (including Actobiotics) 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 and Actobiotics shall provide Oragenics with reasonable documentation indicating the basis for any direct costs (including costs charged to Intrexon and/or Actobiotics by JSC-authorized Third Party providers), indirect charges, any allocable overhead, and any such adjustment in full-time equivalent rate.

1.31 “Initial Financing Period” has the meaning set forth in Section 10.2(e).

1.32 “Initial Study” means a study to be conducted under the Program to determine according to pre-set criteria the next steps with respect to the advancement of AG013 as a clinical candidate, which study, guidelines, and criteria are described in a written plan exchanged between and approved by the Parties prior to the Effective Date.

1.33 “In-Licensed Program IP” has the meaning set forth in Section 3.8(a).

1.34 “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.

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

1.36 “Intrexon Channel Technology” means Intrexon’s current and future technology directed towards the design, identification, culturing, and/or production of genetically modified cells, 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, (6) cell system engineering, and (7) the Actobiotics IP.

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

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

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1.39 “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 Oragenics to conduct the Program. For the avoidance of doubt, the Intrexon Know-How shall include any Information (other than Intrexon Patents) in the Channel-Related Program IP and the AG013 Regulatory Rights.

1.40 “Intrexon Materials” means the genetic code and associated amino acids and gene constructs, in each case that are Controlled by Intrexon, used alone or in combination and such other proprietary reagents and biological materials 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 Oragenics by or on behalf of Intrexon to conduct the Program.

1.41 “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 Oragenics to conduct the Program. For the avoidance of doubt, the Intrexon Patents shall include any Patent in the Channel-Related Program IP.

1.42 “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.

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

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

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

1.46 “KFLP” means the Koski Family Limited Partnership.

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

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

1.49 “Net Sales” means, with respect to any Oragenics Product, the net sales of such Oragenics Product by Oragenics, any Affiliates of Oragenics (including without limitation net sales of Oragenics Product to a non-Affiliate sublicensee but not including net sales by such non-Affiliate sublicensee), and any Product Sublicensees as determined in accordance with US GAAP as the gross amount invoiced on account of sales of Oragenics 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 Oragenics Product is sold to any Third Party together with other products or services, the price of such

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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.

1.50 “New Indication Milestone Event” means the filing by or on behalf of Orogenics, or an Affiliate or permitted sublicensee of Orogenics, of a Supplemental FDA Application with the FDA (or an equivalent filing with another equivalent regulatory agency) which Supplemental FDA Application seeks approval of an indication for use of an Orogenics Product for a use other than the current regulatory-approved indication for the respective Orogenics Product. Notwithstanding the foregoing and in order to incentivize Orogenics to pursue new indications for the product AG013 in parallel with the existing indication (as such existing indication is described in Investigational Drug Application no. 13995) for product AG013, the New Indication Milestone Event will be deemed not to have occurred if the filed regulatory package under the prior sentence relies upon one or more human clinical trials for the specific new indication, which clinical trial(s) were conducted simultaneously and in parallel with human clinical trials underpinning the first-approved indication for AG013. For the avoidance of doubt and clarification purposes, any occurrence of the New Indication Milestone Event shall not also be deemed the occurrence of the New Product Milestone Event or vice versa.

1.51 “New Product Milestone Event” means the filing by or on behalf of Orogenics, or an Affiliate or permitted sublicensee of Orogenics, of a regulatory package with the FDA or with another equivalent regulatory agency, which regulatory package seeks approval of, or seeks permission to begin human trials in support of approval of, a subject Orogenics Product that is deemed (according to relevant FDA guidelines) to be a different drug product than the first Orogenics Product that was clinically pursued under the Program. For purposes of the New Product Milestone Event, the subject Orogenics Product shall be deemed to be a “different” Orogenics Product from the first Orogenics Product (and thus constitute an occurrence of the New Product Milestone Event) if regulatory approval of the subject Orogenics Product must be obtained from the FDA under a different FDA New Product Application than the first Orogenics Product. For the avoidance of doubt and clarification purposes, any occurrence of the New Product Milestone Event shall not also be deemed the occurrence of the New Indication Milestone Event or vice versa.

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

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

1.54 “Orogenics 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 Orogenics during the Term through use or practice of Intrexon Channel Technology, Intrexon IP, Actobiotics IP, or the Intrexon Materials. For clarity, the continued development and Commercialization of AG013 shall be pursued under the Program as an Orogenics Product.

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

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1.56 “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.

1.57 “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.

1.58 “Phase II Milestone Event” means the first dosing of a patient by or on behalf of Oragenics, or an Affiliate or permitted sublicensee of Oragenics, in a phase II clinical trial (as such is defined by relevant FDA guidelines) for a given Oragenics Product, irrespective of whether such occurs in the United States of America under the jurisdiction of the FDA or elsewhere under the jurisdiction of a foreign regulatory agency.

1.59 “Phase IIb/III Milestone Event” means the first to occur for a particular Oragenics Product of (i) the meeting of the primary endpoint by or on behalf of Oragenics, or an Affiliate or permitted sublicensee of Oragenics, in a phase IIb clinical trial (as such is defined by relevant FDA guidelines wherein the subject clinical trial endpoints are designed to be sufficient for regulatory approval of the clinical product without a subsequent clinical phase III trial) for a given Oragenics Product, irrespective of whether such occurs in the United States of America under the jurisdiction of the FDA or elsewhere under the jurisdiction of a foreign regulatory agency, or (ii) the meeting of the primary endpoint by or on behalf of Oragenics, or an Affiliate or permitted sublicensee of Oragenics, in a phase III clinical trial (as such is defined by relevant FDA guidelines) for a given Oragenics Product, irrespective of whether such occurs in the United States of America under the jurisdiction of the FDA or elsewhere under the jurisdiction of a foreign regulatory agency.

1.60 “Prior Field” means the “Field” as recited and defined in Section 1.24 of the prior “Exclusive Channel Collaboration Agreement” dated September 30, 2013 and previously executed by and between Intrexon and Oragenics. For clarity, the use of “Field” in the prior sentence does not have the meaning ascribed in Section 1.27 of this Agreement.

1.61 “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

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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.

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

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

1.64 “Program” has the meaning set forth in Section 2.1(a).

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

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

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

1.68 “Regulatory Approval Application Milestone Event” means for a given Oragenics Product, the first to occur of (a) the filing by Oragenics, an Affiliate thereof, or a permitted sublicensee thereof, of an FDA New Product Application with the FDA seeking approval of such Oragenics Product, or (b) the filing of an equivalent approval or marketing application for such Oragenics Product with an equivalent regulatory authority in a foreign jurisdiction.

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

1.70 “Reverse Merger” means the sale of Oragenics, 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 Third Parties on an arm’s length basis, pursuant to which such Third Party or Third Parties acquire(s) via merger more than fifty percent (50%) of Oragenics’ common stock in a form of transaction wherein Oragenics is the surviving entity.

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

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

1.73 “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 Oragenics 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 Oragenics 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 Oragenics 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 Oragenics

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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 Oragenics Product underlying the Sublicensing Revenue, (d) subject to the waiver provisions of Section 5.2(c), any payments received by Oragenics from permitted sublicensees for the achievement 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 Oragenics Product sales that are included in Net Sales and for which Intrexon receives revenue sharing payments under Section 5.4(a). For clarity, Sublicensing Revenue includes milestone payments for Oragenics Products received by Oragenics from a sublicensee of Oragenics (including a Product Sublicensee) for (i) the achievement by the Oragenics sublicensee of any milestone event that is not the same as, or substantially similar to, a Commercialization Milestone Event, (ii) the achievement by the Oragenics sublicensee of the second or subsequent occurrence of the same (or substantially similar) Commercialization Milestone Event, irrespective of whether the first occurrence of the Commercialization Milestone Event in question was achieved by Oragenics, or its Affiliate or a sublicensee, and (iii) the achievement by a permitted sublicensee of Oragenics of the first occurrence of the same (or substantially similar) Commercialization Milestone Event where Intrexon elects to share such milestone payment as Sublicensing Revenue in accord with Section 5.2(c).

1.74 “Sublicensing Revenue Rate” means a percentage of Sublicensing Revenue applicable to a proposed sublicense by Oragenics as follows: (a) with respect to any sublicense of an AG013 Oragenics Product (including new indications thereof), any revenues Oragenics receives from a Product Sublicensee under a Product Sublicense that are not a percentage of Product Sublicensee’s Net Sales of Oragenics Products, and any amounts recovered under Section 6.3(f), the Sublicensing Revenue Rate shall be fifty percent (50%); and (b) with respect to any other sublicense, the Sublicensing Revenue Rate shall be determined in accordance with Section 3.2.

1.75 “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 Oragenics or others) at such time for the indication and (ii) those therapies that are being actively developed by Oragenics 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.

1.76 “Supplemental FDA Application” means a “Supplemental New Drug Application” or a “Supplemental Biologics License Application” (as both of such are defined according to relevant FDA guidelines and regulations establishing the mechanisms for the submission of data in support of the FDA granting approval for new, amended, and/or expanded label indications for a prior-approved drug product in the United States of America).

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- 1.77 “**Supplemental In-Licensed Third Party IP**” has the meaning set forth in Section 3.8(a).
- 1.78 “**Support Memorandum**” has the meaning set forth in Section 11.2.
- 1.79 “**Technology Access Fee**” has the meaning set forth in Section 5.1.
- 1.80 “**Term**” has the meaning set forth in Section 10.1.
- 1.81 “**Territory**” means the entire world.
- 1.82 “**Third Party**” means any individual or entity other than the Parties or their respective Affiliates.
- 1.83 “**Third Security**” means Third Security, LLC.
- 1.84 “**US GAAP**” means generally accepted accounting principles in the United States.
- 1.85 “**Work Plan**” has the meaning set forth in Section 2.1(c).

ARTICLE 2

SCOPE OF CHANNEL COLLABORATION; MANAGEMENT

2.1 Direction of the Program.

(a) Generally. 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, including the continued development and Commercialization of AG013 (collectively, the “**Program**”). As provided below, the JSC shall establish, monitor, and govern projects for the Program. Either Party may propose other potential projects in the Field for review and consideration by the JSC.

(b) Advancement of AG013; the Initial Study. The Parties have concluded that the Program would benefit from the Initial Study being conducted before further other clinical activity is pursued for AG013, and, as such, have agreed that the Initial Study shall be conducted by Intrexon and/or Actobiotics under Section 4.7 immediately following the Effective Date. Exhibit A contains a general description of the Initial Study, and Intrexon shall supply to Orogenics a complete study plan, in agreement with the parameters (including timing, budget, data evaluation criteria, and resulting implications with respect to subsequent AG013 clinical activity) set forth in Exhibit A, for the Initial Study prior to commencement of the study. Following the completion of the Initial Study, the JSC will promptly meet and review the data produced under the Initial Study and apply the criteria set forth in Exhibit A, with the purpose of determining the immediate clinical path forward for AG013 under the Program.

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(c) Management via Work Plan. The Parties shall mutually draft and finalize at the JSC, within thirty (30) days following completion of the Initial Study an initial version of a Program-wide work plan describing the development of Oragenics Products, including advancement of AG013 as an Oragenics Product, in the Field (“**Work Plan**”), which Work Plan shall be adopted by the JSC. The Work Plan shall serve as a basis for the operation of the Program on a going-forward basis, and may be modified by the JSC subject to the rest of this Article 2, including to introduce parallel research projects for the collaborative pursuit of new indications for AG013 and/or of new Oragenics Products in the Field. Notwithstanding the foregoing, the Parties (i) agree to conduct the Initial Study under the Program beginning immediately after the Effective Date, and (ii) commit to have the JSC meet regularly prior to the finalization of the Work Plan in order to conduct and monitor, and to review the results of, the Initial Study in accord with Section 2.1(b) above and to discuss other issues of relevance to the Program.

2.2 Committees.

(a) Generally. The Parties desire to establish several committees (collectively, “**Committees**”) to oversee the 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 JSC and the IPC, and, optionally, create one or more of the other Committees listed in the chart below. Each Committee shall have the purpose indicated in the chart. To the extent that after conferring both Parties agree to not create a Committee (other than the JSC and the IPC), the creation of such Committee shall be deferred 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 promptly schedule a meeting of such Committee within a reasonable time.

<u>Committee</u>	<u>Purpose</u>
Joint Steering Committee (“ JSC ”)	Establish projects for the 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 Program.

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<u>Committee</u>	<u>Purpose</u>
Clinical/Regulatory Committee (“ CRC ”)	Review and approve all research and development plans and projects, including clinical projects, associated with any necessary regulatory approvals, all associated publications, and all regulatory filings and correspondence relating to gaining regulatory approval under the Program; and 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 Program.
Intellectual Property Committee (“ IPC ”)	Evaluate intellectual property issues in connection with the 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 (1) 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 Oragenics 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.

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(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 Orogenics 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. Additionally, no member of any Committee shall be able to vote in such Committee and thereby bind its respective Party on any material matter except as otherwise properly authorized, approved, or delegated by such Party in accord with Section 2.5.

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 Orogenics shall have the authority to finally resolve such dispute.

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(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.

2.5 Authorization of Committee Representatives. Each representative serving on a Committee shall be responsible for ensuring that he or she acts only as duly authorized by its respective Party and obtains any advance approvals, delegations, or other authorizations from his or her respective Party in advance of making any Committee votes. Any Committee representative shall only be able to bind its respective appointing Party via any Committee vote

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or other material Committee activity to the extent such vote or other activity has been previously approved by the Party, is within the authority duly delegated to the representative by the respective Party, or is otherwise authorized by its respective Party as may be required by that Party's corporate charter or bylaws, or by its board of directors. Any action or vote taken without valid authority shall be considered null and void and shall be without effect unless subsequently approved by a vote in accord with this Section 2.5.

ARTICLE 3

LICENSE GRANTS

3.1 Licenses to Orogenics.

(a) Subject to the terms and conditions of this Agreement, Intrexon and Actobiotics hereby grant to Orogenics a license under the Intrexon IP and the Actobiotics 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 and Actobiotics) 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 and Actobiotics hereby grant to Orogenics a non-exclusive, royalty-free license to use and display the Intrexon Trademarks and Actobiotics 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.

(c) Subject to the terms and conditions of this Agreement, Intrexon and Actobiotics hereby grant to Orogenics an exclusive license in the Field under the AG013 Regulatory Rights, including an exclusive right in the Field to make reference to for purposes of conducting clinical trials and obtaining regulatory approval for AG013 as an Orogenics Product.

3.2 Sublicensing. Except as provided in this Section 3.2, 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. The parties shall agree, in connection with any such sublicense not covered under Sections 3.2(a) through 3.2(c) below, on the applicable Sublicensing Revenue Rate with respect to such sublicense. Notwithstanding the foregoing, Orogenics (and its Product Sublicensees only to the extent set forth in Section 3.2(a) below) 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 and after providing Intrexon with reasonable advance notice thereof, Intrexon Materials that are or that produce Orogenics Products to a Third Party contractor performing contract manufacturing

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responsibilities for Orogenics Products, and may in connection therewith grant limited sublicenses necessary to enable such Third Party to perform such activities. If Orogenics transfers any Intrexon Materials under this Section 3.2(a), Orogenics will remain obligated to ensure that the rights of Intrexon in and to the Intrexon Materials and Intrexon IP and under the provisions of Articles 6 and 7 of this Agreement are not violated by any such Third Party contractor. A Product Sublicensee of Orogenics may transfer, to the extent reasonably necessary and upon the consent of Intrexon, which consent shall not be unreasonably withheld, Intrexon Materials that are or that produce ingredients for the Orogenics Product sublicensed by the Product Sublicensee to a Third Party contractor performing on behalf of that Product Sublicensee contract manufacturing responsibilities for Orogenics Products, and may in connection therewith grant limited sublicenses to the extent necessary to enable such Third Party to perform such activities. Orogenics will require and ensure that if any Product Sublicensee transfers any Intrexon Materials under this Section 3.2(a), that such Product Sublicensee, after obtaining Intrexon's consent, will take commercially reasonable steps, including contractually obligating any such Third Party contractors, to ensure that the rights of Intrexon in and to the Intrexon Materials and Intrexon IP and under the provisions of Articles 6 and 7 of this Agreement are not violated by any Third Party contractors of such Product Sublicensees.

(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 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 (and not including a right to sublicense under this Section 3.2(c)) to a Third Party licensee of any Orogenics Product that is the subject of an effective Investigational New Drug Application or equivalent application or investigational exemption with a foreign regulatory body (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) such Product Sublicensee 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 6, 7, and 10, (v) the Product Sublicense is presented in full to the JSC by Orogenics before execution by Orogenics 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.

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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, Actobiotics 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, Actobiotics, nor its Affiliates shall make the Intrexon Channel Technology, Intrexon Materials or Actobiotics IP 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 Program. Further, other than Oragenics' activities within the 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.

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 3.4 or 3.5, 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 3.5, 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 3.5, 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 biological materials used in an Oragenics Product), and Intrexon IP available to Third Party channel partners or collaborators for use in fields outside the Field.

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3.8 Rights to Clinical and Regulatory Data. With the exception of the AG013 Regulatory Rights, Oragenics shall own and control all clinical data and regulatory filings relating to Commercialization of Oragenics Products (except to the extent such become Reverted Products). Oragenics shall provide (or shall cause any applicable Product Sublicensee to 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 shall cause any applicable Product Sublicensee to provide) to Intrexon upon Intrexon's request copies of the portions of such data, reports, filings, and communications that relate to Oragenics Products. Subject to its ongoing obligations of exclusivity under Section 3.5, 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, at its sole expense, 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 reasonably necessary for [****] to conduct genetic and cell engineering and related analytic activities under JSC established plans for the Program (but excluding intellectual property directed to any specific target genes, cells lines or genetic transformation methodologies) ("**Supplemental In-Licensed Third Party IP**"). Other than with respect to Supplemental In-Licensed Third Party IP, [****] shall be solely responsible for obtaining [****] 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 ("**Complementary In-Licensed Third Party IP**"). Supplemental In-Licensed Third Party IP and Complementary In-Licensed Third Party IP are collectively referred to as "**In-Licensed Program IP**".

(b) In the event that either Party desires to license from a Third Party any Supplemental In-Licensed Third Party IP or Complementary In-Licensed Third Party IP, such Party shall so notify the other Party, and the IPC shall discuss such In-Licensed Program 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 Supplemental In-Licensed Third Party IP, and [****] hereby covenants that it shall not itself directly license such Supplemental In-Licensed Third Party IP at any time, provided that [****] may (but shall

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not be obligated to) obtain such a license directly if the Third Party owner or licensee of such Supplemental In-Licensed Third Party IP brings an infringement action against [*****] or its Affiliates or threatens to bring such action (solely to the extent such threats would reasonably be considered to subject the Third Party owner or licensee to declaratory judgment action jurisdiction) and, after written notice to [*****] of such action, [*****] fails to obtain a license to such Supplemental In-Licensed Third Party IP using Diligent Efforts within ninety (90) days after such notice. Following the IPC's discussion of any Complementary In-Licensed Third Party IP, subject to Section 3.9(c), [*****] shall have the right to pursue a license under Complementary In-Licensed Third Party IP, at [*****] sole expense. For the avoidance of doubt, [*****] may at any time obtain a license under Complementary In-Licensed 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 Complementary In-Licensed Third Party IP and the final version of the definitive license agreement for any Complementary In-Licensed 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 Supplemental In-Licensed Third Party IP, [*****] shall provide the final version of the definitive license agreement for such Supplemental In-Licensed Third Party IP to the IPC. If [*****] acquires rights under any In-Licensed Program IP outside the Field, it will do so on a non-exclusive basis unless it obtains the prior written consent of [*****] for such license outside the Field to be exclusive. Any Party that is pursuing a license to any In-Licensed Program 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 [*****] in obtaining and maintaining licenses to Supplemental In-Licensed Third Party IP shall be borne solely by [*****], and (ii) any costs incurred by [*****] in obtaining and maintaining licenses to Complementary In-Licensed Third Party IP (and, to the limited extent provided in subsection (b), Supplemental In-Licensed 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)).

(e) The licenses granted to Oragenics 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 Oragenics or shall disclose in writing to Oragenics all of such terms and conditions that are applicable to Oragenics.

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Oragenics 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 Oragenics 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, Oragenics hereby grants to Intrexon a non-exclusive, worldwide, fully-paid, royalty-free license, under any applicable Patents or other intellectual property Controlled by Oragenics 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 Intrexon subcontractors as permitted in accord with Section 4.6 or as otherwise permitted to be used by Intrexon in conjunction with support services under Section 4.7 (subject to JSC research plan approval)

3.11 Restrictions Relating to Intrexon Materials. Oragenics and its permitted sublicensees shall use the Intrexon Materials solely for purposes of the 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, Oragenics shall not, and shall ensure that Oragenics personnel and permitted sublicensees do not, except as otherwise expressly permitted under this Agreement, (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, Oragenics shall be solely responsible for the development and Commercialization of Oragenics Products in the Field. Oragenics shall be responsible for all costs incurred in connection with the 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 an Oragenics 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

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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 clause (a) of the previous sentence shall include the scale-up of Intrexon Materials for generating data for regulatory approval submissions 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.

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 or product safety event, receipt of regulatory approval or commercial launch, and manufacturing costs and pricing information. 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 Program with respect to the Intrexon Channel Technology and Intrexon Materials. Unless otherwise provided herein or directed by the JSC in accord with Section 4.2 above, such disclosures by Orogenics and Intrexon will be coordinated by the JSC and made in connection with 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

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safety information generated by Oragenics, 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 Oragenics 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 Oragenics, except with respect to Product Specific Program Patents, which will be mutually determined by the Parties.

4.5 Diligence.

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

(b) Without limiting the generality of the foregoing, Intrexon may, from time to time, notify Oragenics that it believes it has identified a Superior Therapy, and in such case Intrexon shall provide to Oragenics its then-available information about such therapy and reasonable written support for its conclusion that the therapy constitutes a Superior Therapy. Oragenics shall have the following obligations with respect to such proposed Superior Therapy: (i) within sixty (60) days after such notification, Oragenics shall prepare and deliver to the JSC for review and approval a development plan detailing how Oragenics will pursue the Superior Therapy (including a proposed budget); (ii) Oragenics shall revise the development plan as directed by the JSC; and (iii) following approval of the development plan by the JSC, Oragenics shall use Diligent Efforts to pursue the development of the Superior Therapy under the Program in accordance with such development plan. If Oragenics fails to comply with the foregoing obligations, or if Oragenics 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 Program that relate to the Intrexon Materials, including through the use of a suitable Third Party contract manufacturer. To the extent that Intrexon so elects, Intrexon may request that Oragenics and Intrexon establish and execute a separate manufacturing and supply agreement, which

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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 (a) 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 (b) 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. 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, including any Product Sublicensee, or any 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. The study plan produced by Intrexon under Section 1.2(b) and the Work Plan shall describe tasks by which Intrexon (by itself, through its Affiliates (including Actobiotics), or through designated Third Parties) will provide support services to Oragenics for the research and development of Oragenics Products under the Program, which tasks may be updated or amended from time to time by the JSC. Oragenics will compensate Intrexon for such support services with cash payments equal to Intrexon's Fully Loaded Cost in connection with such services. Additionally, from time to time, on an ongoing basis, Oragenics shall request, or Intrexon may propose, that Intrexon (by itself, through its Affiliates (including Actobiotics), or through designated Third Parties) perform certain additional support services with respect to the Program. To the extent that the Parties mutually agree that Intrexon (or its Affiliates (including Actobiotics) should perform such additional services, the Parties shall negotiate in good faith the terms under which services would be performed, it being understood that Intrexon and/or Actobiotics (as appropriate) would be compensated for such services by cash payments equal to their Fully Loaded Cost in connection with such services.

4.8 Compliance with Law. Each Party shall comply, and shall ensure that its Affiliates, (sub)licensees and Third Party contractors comply, with all applicable laws, regulations, and guidelines applicable to the 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, as appropriate, 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

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Orogenics Products, or their respective packaging or accompanying literature as appropriate, bear applicable and appropriate patent markings for Intrexon Patent numbers. Orogenics 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. Orogenics' use of the Intrexon Trademarks and patent markings shall be subject to prior review and approval of the IPC. Orogenics acknowledges Intrexon's sole ownership of the Intrexon Trademarks and agrees not to take any action inconsistent with such ownership. Orogenics covenants that it shall not use any trademark confusingly similar to any Intrexon Trademarks in connection with any products (including any Orogenics Product). From time to time during the Term, Intrexon shall have the right to obtain from Orogenics samples of Orogenics Product sold by Orogenics 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 Orogenics 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 Orogenics in writing thereafter. Orogenics shall comply with reasonable policies provided by Intrexon from time-to-time to maintain the goodwill and value of the Intrexon Trademarks.

4.10 Reporting Compliance. During the Term, in the event that Intrexon notifies Orogenics that Intrexon has reasonably concluded, after consultation with its outside advisors, that Intrexon will be required to consolidate Orogenics' financial statements with its own or otherwise incorporate summary financial information of Orogenics in one of or more of Intrexon's financial reports and filings as required by US GAAP or SEC requirements, Orogenics shall comply with the additional obligations set forth below in this Section 4.10.

(a) Orogenics shall keep its books and records consistent with US GAAP.

(b) Orogenics shall provide to Intrexon a complete set of draft basic financial statements and a draft of Orogenics' Form 10-Q within twenty-eight (28) days after the end of the calendar quarter. Such financial statements may be unaudited and should be prepared in accordance with SEC and US GAAP requirements. Additionally, if not otherwise disclosed in any such draft Form 10-Q of Orogenics, Orogenics shall provide Intrexon with its anticipated cash dry date concurrent with providing the draft Form 10-Q.

(c) Orogenics shall provide to Intrexon a complete set of draft audited financial statements, including accompanying footnotes, as of and for the end of each fiscal year and a draft of Orogenics' Form 10-K within sixty (60) days after the end of such fiscal year. Such financial statements must be prepared in accordance with SEC and US GAAP requirements. Additionally, if not otherwise disclosed in any such Form 10-K of Orogenics, Orogenics shall provide Intrexon with its anticipated cash dry date concurrent with providing the draft Form 10-K.

(d) Orogenics shall communicate in writing as soon as practical to Intrexon any material weaknesses or significant deficiencies in internal accounting controls as well as context regarding the cause and planned disposition of such material weakness or significant deficiencies.

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(e) Orogenics shall communicate in writing as soon as practical to Intrexon any adverse event which may result in a material adjustment to the carrying value of Intrexon's holdings in Orogenics securities.

(f) Orogenics shall provide to Intrexon, within a reasonable time frame, any other items related to Orogenics operations that may be reasonably requested by Intrexon to meet its compliance requirements under applicable laws and regulations, including filing requirements with the SEC and any other regulators.

(g) Orogenics shall work with its external auditors to cause any necessary auditor consents or other items needed from such external auditors to be provided timely to Intrexon in order for Intrexon to meet any SEC filing requirements or other compliance requirements under applicable laws and regulations.

4.11 Modification of Deadlines. The parties agree that the delivery deadlines in Section 4.10 will be modified to the extent necessary to ensure that such deliverables are provided by Orogenics in a reasonable time frame prior to the date necessary for Intrexon to meet any disclosure obligation under rules or regulations to which Intrexon may be or become subject from time to time. Intrexon will provide Orogenics with notice as promptly as practicable regarding any changes in Intrexon's disclosure obligations that would require a change in delivery deadlines or cure periods per this Section 4.11.

4.12 Transfer of Information. Promptly following the Effective Date and in order to support timely adoption of the Work Plan by the JSC, Intrexon shall promptly provide to Orogenics copies of relevant data, regulatory approvals and regulatory filings that relate to the development and clinical testing of AG013. Thereafter, as additional projects are included in the Program, the JSC shall develop a plan and protocol for each such project relating to the transfer of relevant data and Intrexon Materials.

ARTICLE 5

COMPENSATION

5.1 Technology Access Fee. In partial consideration for Orogenics' appointment as an exclusive channel collaborator in the Field and the other rights granted to Orogenics hereunder, contemporaneously with the execution of this Agreement Orogenics shall deliver to Intrexon a note in the amount of five million United States dollars (\$5,000,000) (the "**Technology Access Fee**") to Intrexon, all in accordance with the terms and conditions of that certain Stock Issuance Agreement of even date herewith (the "**Equity Agreement**"). Provided that all closing conditions for the full payment of the fee under this Section 5.1 to Intrexon as set forth in the Equity Agreement that are within the reasonable control of Intrexon have been satisfied or waived, the full payment to Intrexon of the Technology Access Fee (including the final issuance of any shares by Orogenics as payment therefor per the terms and conditions set forth in the Equity Agreement) is a condition subsequent to the effectiveness of this Agreement.

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5.2 Milestones.

(a) Oragenics Commercialization Milestones. Upon the 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 pay Intrexon milestone payments as set forth in this Section 5.2. The milestone payments are each payable, at Oragenics' election but subject to Sections 5.2(b) through 5.2(d), either in cash or in shares of Oragenics' common stock (using Fair Market Value, as defined in the Equity Agreement, to calculate the number of shares to be issued to Intrexon in lieu of cash). The specific milestone payments due to Intrexon upon achievement of each of the Commercialization Milestone Events are set forth in Sections 5.2(a)(i) through 5.3(a)(vi) below.

(i) Oragenics shall pay Intrexon a milestone payment of two million United States dollars (\$2,000,000) within thirty (30) days of each achievement of the Phase II Milestone Event for each different Oragenics Product, said payment being made, at Oragenics' option but subject to Sections 5.2(b) through 5.2(d), either in cash or in shares of Oragenics' common stock. A second or a subsequent occurrence of the Phase II Milestone Event shall only give rise to an obligation upon Oragenics to make the payment to Intrexon under this Section 5.2(a)(i) if such respective second or subsequent occurrence of the Phase II Milestone Event occurs after the FDA has granted an approval to an FDA New Product Application for at least one Oragenics Product under the Program.

(ii) Oragenics shall pay Intrexon a milestone payment of five million United States dollars (\$5,000,000) within thirty (30) days of each achievement of the Phase IIb/III Milestone Event for each different Oragenics Product, said payment being made, at Oragenics' option but subject to Sections 5.2(b) through 5.2(d), either in cash or in shares of Oragenics' common stock. A second or a subsequent occurrence of the Phase IIb/III Milestone Event shall only give rise to an obligation upon Oragenics to make the payment to Intrexon under this Section 5.2(a)(ii) if such respective second or subsequent occurrence of the Phase IIb/III Milestone Event occurs after the FDA has granted an approval to an FDA New Product Application for at least one Oragenics Product under the Program.

(iii) Oragenics shall pay Intrexon a milestone payment of five million United States dollars (\$5,000,000) within thirty (30) days of each achievement of the Regulatory Approval Application Milestone Event for each different Oragenics Product, said payment being made, at Oragenics' option but subject to Sections 5.2(b) through 5.2(d), either in cash or in shares of Oragenics' common stock. A second or a subsequent occurrence of the Regulatory Approval Application Milestone Event shall only give rise to an obligation upon Oragenics to make the payment to Intrexon under this Section 5.2(a)(iii) if such respective second or subsequent occurrence of the Regulatory Approval Application Milestone Event occurs after the FDA has granted an approval to an FDA New Product Application for at least one Oragenics Product under the Program.

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(iv) Oragenics shall pay Intrexon a milestone payment of ten million United States dollars (\$10,000,000) within thirty (30) days of each achievement of the Approval Milestone Event for each different Oragenics Product, said payment being made, at Oragenics' option but subject to Sections 5.2(b) through 5.2(d), either in cash or in shares of Oragenics' common stock.

(v) Oragenics shall pay Intrexon a one-time milestone payment of five million United States dollars (\$5,000,000) within thirty (30) days of the first instance of the achievement of the New Indication Milestone Event, said payment being made, at Oragenics' option but subject to Sections 5.2(b) through 5.2(d), either in cash or in shares of Oragenics' common stock.

(vi) Oragenics shall pay Intrexon a one-time milestone payment of five million United States dollars (\$5,000,000) within thirty (30) days of the first instance of the achievement of the New Product Milestone Event, said payment being made, at Oragenics' option but subject to Sections 5.2(b) through 5.2(d), either in cash or in shares of Oragenics' common stock.

For purposes of subsections (i) through (iv) above in this Section 5.2(a), a later Oragenics Product shall be deemed to be a "different" Oragenics Product from an earlier Oragenics Product (and thus trigger a subsequent occurrence of the respective milestone payment obligation under any one of subsections (i) through (iv)) if regulatory approval of the later Oragenics Products must be obtained from the FDA under a different FDA New Product Application than the earlier Oragenics Product. Conversely and for clarity, a later Oragenics Product shall not be deemed "different" from an earlier Oragenics Product for these milestones if the respective Commercialization Milestone Event occurs in support of a supplemental FDA New Drug Product Application that was being pursued to obtain labeling approval for new, added, expanded, or amended indications for an earlier Oragenics Product that had already obtained FDA approval (i.e., the respective milestone shall not be triggered a second time in these instances of Oragenics pursuing new indications for pre-existing and pre-approved Oragenics Products). Notwithstanding anything in this Agreement to the contrary, but subject to its obligation under Section 4.5(a), Oragenics shall have sole and exclusive control over clinical trials (including patient dosing) and regulatory filings (including the jurisdictions in which such filings are made) for the purpose of the Commercialization Milestones in Section 5.2(a)(i)-(vi) as applicable.

(b) Milestones After Company Sale or After Reverse Merger. In the event that Oragenics consummates a Company Sale prior to paying to Intrexon any one or more of the respective milestone payments set forth in Sections 5.2(a)(i) through 5.2(a)(vi) and this Agreement is transferred or assigned to the buyer in connection with such Company Sale, then all subsequent payments for Commercialization Milestone Events shall thereafter each be

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payable only in cash to Intrexon. In the event that Oragenics consummates a Reverse Merger, subsequent milestone payments to Intrexon set forth in Sections 5.2(a)(i) through 5.2(a)(vi), shall be payable, at Intrexon's option (and not Oragenics' option), in cash only, in Oragenics common stock only, or in combinations thereof to Intrexon.

(c) Product Sublicense Milestones. If (A) a Commercialization Milestone Event occurs that gives rise to a right for Intrexon to receive a payment from Oragenics under Section 5.2(a), (B) that Commercialization 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) Commercialization Milestone Event by the sublicensed Oragenics Product under the respective Product Sublicense, then Intrexon may elect at its own discretion to waive that particular 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 achievement of that same (or substantially similar) Commercialization 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(c), 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 make a payment for the waived 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 milestone payment otherwise due from Oragenics under Section 5.2(a). Oragenics will pay Intrexon any amount due under this Section 5.2(c) within the later of (i) thirty (30) days from underlying Commercialization Milestone Event, or (ii) ten (10) days following the date stipulated in the underlying Product Sublicense for Oragenics to receive the milestone payment.

(d) Consolidation. The Parties agree that Oragenics' option to pay any milestone payments that come due for achievement of Commercialization Milestone Events under this Agreement in equity shall in no event require Intrexon to accept equity of Oragenics as payment if, upon Intrexon's reasonable conclusion after consultation with its outside advisors, receipt of such equity payment by Intrexon would cause Intrexon to have to consolidate Oragenics' financial statements with Intrexon's financial statements. To this end, upon each achievement of any Commercialization Milestone Event that triggers a milestone payment being due by Oragenics to Intrexon under Section 5.2(a) above, Oragenics shall notify Intrexon as soon as possible if Oragenics intends to elect to pay the specific milestone payment in equity, such notification being in writing and delivered to Intrexon in no event less than ten (10) business days from the date of achievement of the respective Commercialization Milestone Event. If Oragenics does not so-notify Intrexon within the time frame set forth in the prior sentence, such specific Commercialization Milestone payment shall become payable to Intrexon solely in cash. Additionally, upon receiving any notice from Oragenics under the second sentence of this Section 5.2(d) of Oragenics' intent to pay a particular Commercialization Milestone payment in equity, Intrexon will therefrom have five (5) business days to consult with its outside advisors to

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conclude whether the expected payment of Oragenics equity to Intrexon is reasonably likely to cause Intrexon to be required to consolidate Oragenics' financial statements with its own. If Intrexon reasonably concludes, after consultation with its outside advisors, that payment of the respective amount in Oragenics equity would cause consolidation, (i) Intrexon may notify Oragenics of this conclusion within such five (5) business days from Intrexon's receipt of Oragenics' notice under this subsection, and (ii) upon Intrexon so-notifying Oragenics, the payment due for achievement of the respective Commercialization Milestone Event shall be payable by Oragenics solely in cash, provided, however, that in the event Oragenics reasonably concludes that such cash payment would have an adverse effect on its working capital needs over the next twelve (12) months then such cash payment shall be in the form of an interest bearing (under Section 5.9) promissory note with a maturity date of less than twelve (12) months and including other conventional market terms that would not be expected to unreasonably have an adverse effect on Oragenics working capital needs over such next twelve (12) months.

5.3 Equity Agreement Controls. All issuances of stock to Intrexon 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 Net Sales arising from the sale of any Oragenics Product in the Field in the Territory, Oragenics shall pay a royalty to Intrexon of twelve percent (12%) of such Net Sales, on an Oragenics Product-by-Oragenics Product basis. Commencing with the Effective Date, in the event that no Net Sales occur for a particular Oragenics Product in any calendar quarter, neither Oragenics nor Intrexon shall owe any payments hereunder with respect to such Oragenics Product.

(b) No later than thirty (30) days after each calendar quarter in which Oragenics or any Oragenics Affiliate receives Sublicensing Revenue, Oragenics shall pay to Intrexon a percentage of such Sublicensing Revenue equal to the applicable Sublicensing Revenue Rate.

(c) Intrexon and Actobiotics shall be responsible for determining how any revenue sharing payments from Oragenics due under Section 5.4(a) and 5.4(b) above are distributed among Intrexon and Actobiotics.

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 (or banks as otherwise set forth in Section 5.8) 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 a Commercialization Milestone Event has been achieved or a payment for such is made or due, Oragenics shall deliver to Intrexon a written report that shall contain at a minimum for the applicable calendar quarter:

(a) gross sales of each Oragenics Product (on a country-by-country basis);

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- (b) itemized calculation of Net Sales, showing all applicable deductions and calculations;
- (c) itemized calculation of Sublicensing Revenue, including any offsets claimed for Third Party license costs;
- (d) the amount of the payment (if any) due pursuant to Section 5.4(a) and/or 5.4(b);
- (e) the amount of the payment (if any) made or made due by the achievement of an applicable Commercialization Milestone Event during the present calendar quarter;
- (f) the amount of taxes, if any, withheld to comply with any applicable law; and
- (g) the exchange rates used in any of the foregoing calculations.

For three (3) years after each sale or other commercial use of Oragenics Product, after incurring any component item Oragenics incorporated into its calculation of Sublicensing Revenues, payments in accord with Section 5.2(b), or Net Sales as reported to Intrexon, Oragenics shall keep (and shall ensure that its Affiliates and, if applicable, (sub)licensees shall keep) complete and accurate records of such sales, commercial use, or component item in sufficient detail to confirm the accuracy of the payment calculations hereunder.

5.7 Audits.

(a) Upon the written request of Intrexon, Oragenics shall permit an independent certified public accounting firm of internationally recognized standing selected by Intrexon, and reasonably acceptable to Oragenics, 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 Oragenics and its Affiliates to verify the accuracy and timeliness of the reports and payments made by Oragenics 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

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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. Additionally, Intrexon may on an Oragenics Product-by-Oragenics Product basis, and acting upon reasonable advice of outside tax and/or accounting advisors, request in writing that Oragenics make all of, or a percentage of, any payment that becomes due under Section 5.2 or Section 5.4 above to Intrexon's Affiliate directly (instead of to Intrexon), to the extent that such Affiliate has contributed intellectual property to the respective Oragenics Product. To the extent that Oragenics has received such a request from Intrexon under the prior sentence at least thirty (30) days prior to the time that the payment is due, Oragenics shall honor the request to make the applicable payments (in whole or in part, as applicable) to the Intrexon Affiliate.

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.

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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 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.

(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 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 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 Program, Actobiotics IP, Intrexon Channel Technology, Intrexon IP or Intrexon Materials, shall be owned by and remain the property of Oragenics (the "**Oragenics Independent IP**").

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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) As used herein, "**Prosecuting Party**" means Intrexon in the case of Intrexon Patents and Oragenics in the case of Oragenics Program Patents. 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);

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(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.

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 exercises the foregoing right, Intrexon agrees to be named in any such action if required. 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.

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(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 compromise any action under this Section 6.3 in a way that diminishes the rights or interests of Oragenics in the Field or adversely affects any Intrexon Patent with respect to the Field without Oragenics' 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 Oragenics pursuant to Section 6.3(b), [*****]. In any action initiated by Intrexon or Oragenics pursuant to Section 6.3(c), the enforcing Party shall retain one hundred percent (100%) of any Recovery.

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

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(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.

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 request or demand for 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.

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7.3 Publicity; Publications. The Parties agree that the public announcement of the execution of this Agreement shall be substantially in the form of a press release (the form of which shall be mutually agreed to by the Parties) and/or the filing of a Form 8-K by one or both of the Parties (to the extent required by relevant laws or regulations relating to required disclosure of material information to public markets and/or the SEC). Each Party will provide the other Party with the opportunity to review and comment, prior to submission or presentation, on external reports, securities filings, publications and presentations (e.g., press releases, reports to government agencies, abstracts, posters, manuscripts and oral presentations) that refer to the Program, Oragenics Products, 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. In the case of a Form 8-K filing, such shall be provided to the non-filing Party by the filing party as soon as practicable prior to filing for review and comment. For reports and manuscripts, the disclosing Party will provide the other Party at least thirty (30) 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, subject to restrictions imposed by applicable laws.

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Any examination or inspection hereunder shall require five (5) business days written notice from Intrexon to Orogenics. Orogenics 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 Orogenics 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 Orogenics to Intrexon. Intrexon will make itself and the pertinent employees and/or agents available, on a reasonable basis, to Orogenics for the aforementioned compliance review.

(c) In view of the Intrexon Confidential Information, Intrexon Know-How, and Intrexon Materials transferred to Orogenics hereunder, Intrexon from time-to-time, but no more than quarterly, may request that Orogenics 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 Orogenics' receipt of any such written request, Orogenics shall provide the written report to Intrexon.

7.6 Intrexon and Actobiotics Commitment. Intrexon and Actobiotics shall use reasonable efforts to obtain an agreement with its other licensees and channel partners or collaborators to enable Orogenics 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, Orogenics Products, in a manner consistent with the provisions of Section 7.2(b).

ARTICLE 8

REPRESENTATIONS AND WARRANTIES

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

(a) **Corporate Power.** Orogenics 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.** Orogenics is duly authorized to execute and deliver this Agreement and to perform its obligations hereunder, and the person executing this Agreement on Orogenics' 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 Orogenics and enforceable in accordance with its terms, except as such

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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 and Actobiotics. Intrexon and Actobiotics hereby represent and warrant to Oragenics that, as of the Effective Date:

(a) Corporate Power. Intrexon and Actobiotics are duly organized and validly existing under the laws of the jurisdiction of its organization and have full corporate power and authority to enter into this Agreement and to carry out the provisions hereof.

(b) Due Authorization. Intrexon and Actobiotics are duly authorized to execute and deliver this Agreement and to perform its obligations hereunder, and the person executing this Agreement on Intrexon's and Actobiotics'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 Actobiotics 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 and Actobiotics 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 and Actobiotics possesses sufficient rights to enable them to grant all rights and licenses it purports to grant to Oragenics with respect to the Intrexon IP and Actobiotics IP under this Agreement;

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

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

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(iv) There is no pending litigation, and neither Intrexon nor Actobiotics has received any written notice of any claims or litigation, seeking to invalidate or otherwise challenge the Intrexon IP or Intrexon's rights therein or the Actobiotics IP or Actobiotics's rights therein;

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

(vi) All of the Intrexon Patents and Actobiotics 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 and Actobiotics have 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 and Actobiotics's products and technology providing Intrexon and Actobiotics, 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 or contract with Intrexon or Actobiotics (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 neither Intrexon nor Actobiotics is aware that any of its employees or consultants is in material violation thereof;

(viii) To Intrexon's and/or Actobiotics's knowledge, there is no infringement, misappropriation or violation by Third Parties of any Intrexon Channel Technology, Intrexon IP, or Actobiotics IP in the Field;

(ix) There is no pending or, to Intrexon's and/or Actobiotics'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, Intrexon IP, and Actobiotics IP, and neither Intrexon nor Actobiotics has received any written notice of such claim;

(x) To Intrexon's and/or Actobiotics's knowledge, no employee of Intrexon or Actobiotics 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 Actobiotics or actions undertaken by the employee while employed with Intrexon or Actobiotics and (B) where such violation is relevant to the use of the Intrexon Channel Technology or Actobiotics IP in the Field;

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(xi) None of the Patents in the Actobiotics IP or Intrexon IP, and, to Intrexon's and/or Actobiotics's knowledge, none of the Patents licensed in the Actobiotics IP or Intrexon IP 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 and/or Actobiotics'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 Orogenics, Intrexon and Actobiotics: (A) are 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 and Actobiotics 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, 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

(xiii) Prior to the Effective Date, Intrexon and Actobiotics have provided Orogenics with copies of all material correspondence, communications, and filings with the FDA and other regulatory authorities regarding AG013 and its pre-clinical and clinical testing, and associated underlying reports and data.

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except, in each of (ix) through (xiii), 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 or Actobiotics'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 or materials that are Actobiotics IP, by Intrexon or its Affiliates, licensees (other than Oragenics) or sublicensees; or (c) breach by Intrexon or Actobiotics 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

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employees or agents; (b) the use, handling, storage, or transport of Intrexon Materials or materials that are Actobiotics IP by 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 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.

9.5 Insurance. Immediately prior to, and during marketing of Oragenics Products, Oragenics shall maintain, and shall cause its permitted sublicensees to 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, and shall cause any relevant permitted sublicensees to maintain, in effect and good standing a clinical trials liability insurance policy issued by a

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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 non-breaching 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 the Technology Access Fee has not been paid in accordance with the terms and conditions of this Agreement and the Equity Agreement, including if the full principal on the Note (as defined in the Equity Agreement) has not been paid within the timeframes set forth in the Note (including the issuance to Intrexon of any shares in payment thereof).

(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) Intrexon hereby acknowledges that Oragenics will need to raise additional capital in order to carry out its obligations under this Agreement and during the sixteen (16) month period commencing on the Effective Date (the "**Initial Financing Period**") Intrexon shall not have the right during the Initial Financing Period (i) to terminate this Agreement under Section 10.2(a) based on the failure of a Party to use Diligent Efforts or to comply with any other diligence obligations hereunder (including Section 4.5), or (ii) to terminate this Agreement under Section 10.2(c). Notwithstanding the foregoing, (i) the Parties shall pursue the Initial Study in accord with the terms and conditions of this Agreement with Diligent Efforts during the Initial Financing Period, and (ii) the Parties, for clarity, shall only be absolved of failing to advance the

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Program (other than the Initial Study) with Diligent Efforts during the Initial Financing Period to the extent that any such failure to use Diligent Efforts is due to Oragenics working capital and financing considerations. Additionally, Intrexon agrees to reasonably cooperate to assist Oragenics in its undertaking to seek financing during the Initial Financing Period, and agrees to participate in any financing to the extent necessary for Oragenics to obtain financing necessary to support research and development activities for collaborative Intrexon and Oragenics programs during the Initial Financing Period (including for the Initial Study) [*****]. Notwithstanding the foregoing, Intrexon's agreement to participate in financing under the prior sentence shall not obligate Intrexon to participate in any such financing to the extent that such financing occurs or closes after a Reverse Merger.

10.3 Termination by Oragenics. Following the full payment of the Technology Access Fee to Intrexon in full satisfaction of the terms of the Equity Agreement, Oragenics shall have the right to voluntarily terminate this Agreement in its entirety upon ninety (90) days written notice to Intrexon.

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. Oragenics shall be permitted to continue the clinical development and Commercialization in the Field of any product resulting from the Program that, at the time of any termination, satisfies at least one of the following criteria (a "**Retained Product**"):

(i) the particular product is an Oragenics Product that is being sold by Oragenics (or, as may be permitted in accord with this Agreement, its Affiliates or sublicensees) triggering profit sharing payments therefor under Sections 5.4(a) or 5.4(b) of this Agreement,

(ii) the particular product is an Oragenics Product has received regulatory approval,

(iii) the particular product is an Oragenics Product that is the subject of an application for regulatory approval in the Field that is pending before the applicable regulatory authority,

(iv) the particular product is the specific Oragenics Product AG013, and such Oragenics Product has been the subject of at least one completed phase II clinical trial (as such is defined by relevant FDA guidelines) during the Term, or

(v) the particular product is an Oragenics Product other than AG013, and such Oragenics Product is the subject of at least an ongoing phase I, phase II or phase III clinical trial in the Field (in the case of a termination by Intrexon due to an Oragenics uncured breach pursuant to Section 10.2(a) or a termination by Oragenics pursuant to Section 10.3).

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Such rights to continue development and Commercialization under this Section 10.4(a) shall be subject to Oragenics' full compliance with the payment provisions in Article 5, a continuing obligation for Oragenics 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 Oragenics 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 Oragenics under this Agreement shall terminate and shall revert to Intrexon without further action by either Intrexon or Oragenics. Oragenics' 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 Oragenics Products other than the Retained Products shall be referred to herein as the "**Reverted Products.**" Oragenics 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 Oragenics 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. Oragenics 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. Oragenics shall promptly return, or at Intrexon's request, destroy, any Intrexon Materials in Oragenics' 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, exclusive (even as to Oragenics and its Affiliates), 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

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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, as appropriate, (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 final products 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.

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(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 (only as to any pre-termination period), 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), 4.10, 4.11, 7.1, 7.2, 7.4, 7.5, 10.4, and 10.5; Articles 9 (excluding 9.5), 11, and 12; and any relevant definitions in Article 1. Further, Article 7 and Sections 4.5(a), 4.5(c), 5.2 through 5.9, and 9.5 will survive termination of this Agreement only to the extent there are any 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.

CONFIDENTIAL TREATMENT REQUESTED BY ORAGENICS, INC.

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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.

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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

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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 law or regulation and in press releases accompanying quarterly and annual earnings reports approved by the Audit Committee of the issuer's Board of Directors, and (b) Oragenics may use the Intrexon Trademarks in accord with the licenses 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.

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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 and/or Actobiotics: Intrexon Corporation
20374 Seneca Meadows Parkway
Germantown, MD 20876
Attention: Senior Vice President, Health Sector
Fax: (301) 556-9901

with a copy to: Intrexon Corporation
20374 Seneca Meadows Parkway
Germantown, MD 20876
Attention: Legal Department
Fax: (301) 556-9902

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

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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 within 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.

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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 Further Assurances. Intrexon shall cause Actobiotics to take such actions and do such things as may be reasonably necessary to carry out the provisions of this Agreement applicable to Actobiotics and Intrexon shall refrain from taking any action that would reasonably be expected to cause Actobiotics to be unable to take such actions and do such things as may be reasonably necessary to carry out the provisions of this Agreement applicable to Actobiotics.

12.14 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.]

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

INTREXON CORPORATION

By: /s/ Gregory Frost, PhD

Name: Gregory Frost, PhD

Title: Senior Vice President, Health Sector

ORAGENICS, INC.

BY: /s/ Michael Sullivan

Name: Michael Sullivan

Title: Chief Financial Officer

INTREXON ACTOBIOTICS NV

By: /s/ Pieter Rottiers

Name: Pieter Rottiers

Title: Chief Executive Officer

[SIGNATURE PAGE FOR EXCLUSIVE CHANNEL COLLABORATION AGREEMENT]

STOCK ISSUANCE AGREEMENT

THIS STOCK ISSUANCE AGREEMENT (“Agreement”) is made and entered into as of June 9, 2015 (the “**Effective Date**”), by and among Oragenics, Inc., a Florida corporation (the “**Company**”) and Intrexon Corporation, a Virginia corporation (“**Intrexon**”).

A. Subject to the terms and conditions set forth in this Agreement and pursuant to applicable exemptions from registration under the Securities Act of 1933, the Company desires to issue to Intrexon, and Intrexon desires to receive from the Company shares of the Company’s common stock, par value \$0.001 per share (“**Common Stock**”) as set forth herein;

B. Concurrently with the execution of this Agreement, the Company is entering into an Exclusive Channel Collaboration Agreement with Intrexon and its wholly owned subsidiary Intrexon Actobiotics NV (the “**Channel Agreement**”) dated as of the Effective Date, pursuant to which Intrexon and Intrexon Actobiotics NV (“**Actobiotics**”) is licensing the rights to certain technology to the Company; and

C. In consideration of Intrexon’s and Actobiotics’ license to the Company under the Channel Agreement, the Company has agreed to issue to Intrexon certain shares of the Company’s Common Stock in accordance with the terms and conditions of the Channel Agreement and 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. PURCHASE AND SALE OF SHARES; AUTHORIZATION OF ISSUANCE OF SHARES.

1.1 Payment of Technology Access Fee. Subject to the terms and conditions of the Channel Agreement and this Agreement, the Company has authorized the issuance to Intrexon at the Closing (as hereinafter defined) of a Convertible Promissory Note with a principal value of \$5,000,000 in the form attached hereto As Exhibit A (the “**Technology Access Fee Consideration**”).

1.2 Issuance of Shares upon Achievement of Commercialization Milestone Event. Subject to the terms and conditions of this Agreement and the Channel Agreement, upon the first attainment of Commercialization Milestone Event (as defined in the Channel Agreement), the Company has agreed to make certain milestone payments (each a “**Milestone Payment**” and together “**Milestone Payments**”), at the Company’s option either in the form of shares of Company Common Stock (based upon the Fair Market Value of the shares). In the event that the Company so elects to pay any one or more of the Milestone Payments in shares of Company Common Stock instead of in cash the terms of this Section 1.2 shall govern.

(a) In the event that the Company so elects in accord with Section 5.2 of the Channel Agreement to pay a Milestone Payment due for the attainment of a Phase II Milestone Event (as defined in the Channel Agreement) in shares of Company Common Stock, then Company shall in accord with Sections 2.3 and 2.4 hereof issue to Intrexon, and/or to

Intrexon's wholly-owned subsidiary ("Subsidiary") in whole or in part upon request by Intrexon in accord with Section 5.2 of the Channel Agreement, that number of shares of Company Common Stock having a Fair Market Value of two (2) million United States dollars (\$2,000,000).

(b) In the event that the Company so elects in accord with Section 5.2 of the Channel Agreement to pay a Milestone Payment due for the attainment of a Phase IIb/III Milestone Event (as defined in the Channel Agreement) in shares of Company Common Stock, then Company shall in accord with Sections 2.3 and 2.4 hereof issue to Intrexon, and/or to Subsidiary in whole or in part upon request by Intrexon in accord with Section 5.2 of the Channel Agreement, that number of shares of Company Common Stock having a Fair Market Value of five (5) million United States dollars (\$5,000,000).

(c) In the event that the Company so elects in accord with Section 5.2 of the Channel Agreement to pay a Milestone Payment due for the attainment of a Regulatory Approval Application Milestone Event (as defined in the Channel Agreement) in shares of Company Common Stock, then Company shall in accord with Sections 2.3 and 2.4 hereof issue to Intrexon, and/or to Subsidiary in whole or in part upon request by Intrexon in accord with Section 5.2 of the Channel Agreement, that number of shares of Company Common Stock having a Fair Market Value of five (5) million United States dollars (\$5,000,000).

(d) In the event that the Company so elects in accord with Section 5.2 of the Channel Agreement to pay a Milestone Payment due for the attainment of an Approval Milestone Event (as defined in the Channel Agreement) in shares of Company Common Stock, then Company shall in accord with Sections 2.3 and 2.4 hereof issue to Intrexon, and/or to Subsidiary in whole or in part upon request by Intrexon in accord with Section 5.2 of the Channel Agreement, that number of shares of Company Common Stock having a Fair Market Value of ten (10) million United States dollars (\$10,000,000).

(e) In the event that the Company so elects in accord with Section 5.2 of the Channel Agreement to pay a Milestone Payment due for the first attainment of a New Indication Milestone Event (as defined in the Channel Agreement) in shares of Company Common Stock, then Company shall in accord with Sections 2.3 and 2.4 hereof issue to Intrexon, and/or to Subsidiary in whole or in part upon request by Intrexon in accord with Section 5.2 of the Channel Agreement, that number of shares of Company Common Stock having a Fair Market Value of five (5) million United States dollars (\$5,000,000).

(f) In the event that the Company so elects in accord with Section 5.2 of the Channel Agreement to pay a Milestone Payment due for the first attainment of a New Product Milestone Event (as defined in the Channel Agreement) in shares of Company Common Stock, then Company shall in accord with Sections 2.3 and 2.4 hereof issue to Intrexon, and/or to Subsidiary in whole or in part upon request by Intrexon in accord with Section 5.2 of the Channel Agreement, that number of shares of Company Common Stock having a Fair Market Value of five (5) million United States dollars (\$5,000,000).

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 hereafter each generically shall be a “**Milestone Event**” and together generically, the “**Milestone Events**.” For clarity, shares issued under subsections (a) through (e) of this Section 1.2 may be issued entirely to Intrexon, entirely to Subsidiary, or in combination to Intrexon and Subsidiary; however, when issued in combination to Intrexon and Subsidiary, the total and collective number of shares issued to Intrexon and Subsidiary for the respective Milestone Event shall not exceed the amount that would have been issued to Intrexon (or to Subsidiary) singly.

Defined terms not otherwise defined herein shall have the meaning set forth in the Channel Agreement.

1.3 Determination of Fair Market Value for Milestones. “**Fair Market Value**” as used in this Agreement with respect to the payments to Intrexon made under Sections 1.2(a) through 1.2(e) means the value of the issued shares of Company’s Common Stock using published market data of the share price for Company’s Common Stock at the close of market on the business day immediately preceding the date of public announcement of attainment of the Milestone Event in question.

SECTION 2. CLOSING AND DELIVERY

2.1 Issuance of Technology Access Fee Consideration. 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 Consideration. 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 Consideration issued hereunder.

2.2 Closing. The Closing of the Technology Access Fee Consideration shall occur simultaneously with the execution of this Agreement and the Channel Agreement remotely via the exchange of documents and signatures (the “**Closing**”).

2.3 Milestone Event Closings. In the event shares are to be issued in the case of the achievement of a Milestone Event, each closing for the respective Milestone Payments shall occur on the earlier of (i) the thirtieth day following the respective triggering Milestone Event as set forth in sections 1.2(a) through 1.2(c) above, and (ii) such other date as Intrexon and the Company may agree (singularly, a “**Subsequent Closing**,” or collectively, the “**Subsequent Closings**”).

2.5 Delivery of the Shares. Promptly following any Subsequent Closing, the Company shall deliver to Intrexon certificate(s) representing the shares required to be issued at the Closing or respective Subsequent Closing, registered in the name of Intrexon (and/or Subsidiary, as appropriate).

SECTION 3. REPRESENTATIONS AND WARRANTIES OF THE COMPANY.

Subject to and except as set forth in the SEC Documents, 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. 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 Consideration.

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, there are 38,378,944 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, or pursuant to the New York Stock Exchange rules and regulations as applicable, prior to or subsequent to the Closing).

3.5 SEC 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 SEC 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. To the Company's knowledge, 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, 2014, 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 SEC Documents, since December 31, 2014, 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 SEC Documents, since December 31, 2014, 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 SEC Documents. Except as described in the SEC 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 SEC 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 SEC 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, 2014: (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 December 31, 2014, and except to the extent disclosed in the SEC 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 NYSE MKT 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 NYSE MKT.

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. 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, Intrexon and its affiliates beneficially own 9,839,221 shares (Intrexon - 8,838,666 shares, NRM VII Holdings I, LLC - 1,000,555 shares) of Common Stock of the Company.

4.6 Stock Legends. Intrexon acknowledges that certificates evidencing any 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 obtained by operation of the Channel Agreement and held by Intrexon and its Subsidiaries and (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 on behalf of Intrexon and/or Subsidiary. 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 that it and Subsidiary shall 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 and Subsidiary by operation of the Channel Agreement 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 collective total number of Intrexon’s and/or Subsidiary’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 and Subsidiary, 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 and/or Subsidiary furnished in writing to the Company by Intrexon and/or Subsidiary 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 Subsidiary, or to Intrexon's or Subsidiary's proposed method of distribution of shares and was furnished in writing by Intrexon and/or Subsidiary expressly for use therein. Notwithstanding anything to the contrary contained herein, in no event shall the liability of Intrexon under this Section 5.5 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 Consideration and shall terminate eighteen (18) months after the 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 Consideration 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 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 (including subsidiaries) 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 7.3 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 7.1; 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 7.1 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 7.1(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 7.1;

(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 7.1(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 7.1;

(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; and

(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 7.1(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.

(c) Intrexon's rights and the Company's obligations under this Section 7.1 shall terminate upon the termination of the Channel Agreement.

7.2 Intrexon Proposals. Notwithstanding any of the foregoing provisions of Section 7.1, 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.

7.3 Further Assurances. Each of the Company, Intrexon and its affiliates, including but not limited to Actobiotics, 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. 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.
4902 Eisenhower Boulevard, Suite 125,
Tampa, FL 33634
Attention: Chief Executive Officer
Fax No.: (813) 286-7904

If to Intrexon: Intrexon Corporation
20374 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 9. MISCELLANEOUS.

9.1 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.

9.2 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.

9.3 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.

9.4 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.

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

9.6 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.

9.7 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 Section 7.1 shall not be assignable.

9.8 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.

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

9.10 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. Notwithstanding the foregoing, nothing in this Agreement shall alter the rights of the Parties under that certain Stock Issuance Agreement, dated June 5, 2012, or that certain Stock Purchase and Issuance Agreement dated September 30, 2013, or that certain First Amendment to the Stock Purchase and Issuance Agreement dated September 30, 2013, all three of which by and between Intrexon and Oragenics.

9.11 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.

9.12 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.

[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 Effective Date.

ORAGENICS, INC.

By: /s/ Michael Sullivan
Name: Michael Sullivan
Title: Chief Financial Officer

INTREXON CORPORATION

By: /s/ Donald P. Lehr
Name: Donald P. Lehr
Title: Chief Legal Officer

[Signature page of Stock Issuance Agreement]

THIS SECURITY HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR ANY APPLICABLE STATE SECURITIES LAWS. IT MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED OR HYPOTHECATED IN THE ABSENCE OF A REGISTRATION STATEMENT IN EFFECT WITH RESPECT TO THE SECURITY UNDER SUCH ACT OR AN OPINION OF COUNSEL SATISFACTORY TO BORROWER THAT SUCH REGISTRATION IS NOT REQUIRED.

ORAGENICS, INC.

CONVERTIBLE PROMISSORY NOTE

\$5,000,000

June 9, 2015

FOR VALUE RECEIVED, the undersigned, Oragenics, Inc., a Florida corporation, with an address of 4209 Eisenhower Boulevard, Suite 125, Tampa, FL 33634 (together with its successors and permitted assigns, the "Maker"), hereby promises to pay to the order of Intrexon Corporation, a Virginia corporation (together with its successors and assigns, the "Holder"), at 20374 Seneca Meadows Parkway, Germantown, MD, 20876, or at such other place as may be designated from time to time in writing by the Holder, without setoff, the principal sum of \$5,000,000, or such lesser amount as may remain outstanding from time to time, together with simple interest thereon at the rate provided below, all in accordance with the following terms and provisions:

1. Definitions. The following terms, unless the context otherwise requires, have the following meanings:

- (a) "Act" has the meaning set forth in the legend to this Note.
- (b) "Conversion Price" shall equal the closing price per share on the last trading day immediately prior to the date of conversion.
- (c) "Conversion Cash Balance" has the meaning set forth in Section 8(d) of this Note.
- (d) "Conversion Closing Date" means the date of receipt by Holder of the Conversion Notice.
- (e) "Conversion Notice" has the meaning set forth in Section 8(d) of this Note.
- (f) "Conversion Shares" has the meaning set forth in Section 8(a) of this Note.
- (g) "Event of Default" has the meaning set forth in Section 14 of this Note.

(h) “Exclusive Channel Collaboration Agreement” or “ECC” means the Exclusive Channel Collaboration Agreement dated of even date herewith by and between the Maker and the Holder.

(i) “Holder” has the meaning set forth in the preamble to this Note.

(j) “Indebtedness” means, as to any Person, (i) all obligations of such Person for borrowed money (including, without limitation, reimbursement and all other obligations with respect to surety bonds, letters of credit and bankers’ acceptances, whether or not matured), (ii) all obligations of such Person evidenced by notes, bonds, debentures or similar instruments, (iii) all obligations of such Person to pay the deferred purchase price of property or services, except trade accounts payable and accrued commercial or trade liabilities arising in the ordinary course of business, (iv) all interest rate and currency swaps, caps, collars and similar agreements or hedging devices under which payments are obligated to be made by such Person, whether periodically or upon the happening of a contingency, (v) all indebtedness created or arising under any conditional sale or other title retention agreement with respect to property acquired by such Person (even though the rights and remedies of the seller or lender under such agreement in the event of default are limited to repossession or sale of such property), (vi) all obligations of such Person under leases which have been or should be, in accordance with GAAP, recorded as capital leases and (vii) all indebtedness secured by any Lien (other than Liens in favor of lessors under leases other than leases included in clause (vi) above) on any property or asset owned or held by that Person regardless of whether the indebtedness secured thereby shall have been assumed by that Person or its non-recourse to the credit of that Person.

(k) “Maker” has the meaning set forth in the preamble to this Note.

(l) “Maturity Date” shall mean December 31, 2015, or such later date as may be agreed by the Holder with the Holder’s prior written consent.

(m) “Note” means this Convertible Promissory Note in accordance with all the terms and provisions set forth herein.

(n) “Stock Issuance Agreement” means the Stock Issuance Agreement, dated of even date herewith, by and between the Maker and the Holder, as amended.

2. Stock Issuance Agreement. This Note has been executed and delivered by the Maker pursuant to the terms and conditions of the Stock Issuance Agreement. This Note represents payment of the technology access fee to be paid by Maker to Holder under the ECC Agreement in exchange for certain license rights and other good and valuable consideration.

3. Interest Rate. The unpaid principal balance of this Note outstanding from time to time shall bear interest at a simple rate of interest equal to three percent (3%) per annum. After the occurrence and during the continuance of an Event of Default, interest shall accrue on all amounts due hereunder at a simple rate of interest equal to five percent (5%) per annum. Interest shall be calculated on the basis of actual number of days elapsed over a year of three hundred sixty (360) days.

4. Interest Payments. Without the prior written consent of the Holder, the Maker shall not be permitted to make a payment of interest under this Note prior to the Maturity Date or such earlier date that this Note is repaid pursuant to Section 6 or Section 8 of this Note.

5. Principal Payments. If not sooner paid, the entire unpaid principal balance of this Note and all unpaid accrued interest thereon shall be due and payable on the Maturity Date.

6. Prepayment. This Note may be prepaid in whole or in part at any time at the election of the Maker.

7. Application of Payments. Payments made by the Maker pursuant to the terms of this Note shall be applied as follows: first, to any unpaid accrued collection costs and expenses; second, to any unpaid accrued interest; and third, to the principal balance of this Note.

8. Conversion.

(a) Conversion Election. Prior to the Maturity Date and subject to the restrictions set forth in this Section 8, the Maker shall have the right to convert the outstanding principal and interest of this Note, in whole or in part, into a number of shares of the Maker's common stock (the "Conversion Shares"). The number of Conversion Shares to be issued upon such conversion under this Section 8(a) shall be equal to the quotient obtained by dividing (i) the principal balance of the Note outstanding at the time of conversion by (ii) the Conversion Price (as adjusted for stock splits, stock dividends, recapitalizations and similar adjustments of the Common Stock), with the caveat that in no event will Maker be entitled to convert such outstanding principal and interest into a number of shares that would cause the Holder and its affiliates to hold and/or beneficially own collectively more than 34.5% of the number of shares of Common Stock of the Company that is issued and outstanding. For clarity, the number of Shares held collectively by Holder and its affiliates per the prior sentence would include, without limitation, the Conversion Shares plus (i) any other Shares issued to, acquired by, or otherwise held by Holder on the Conversion Closing Date (including under the ECC Agreement, the Stock Issuance Agreement, or any other prior Agreement between Holder and Maker), and (ii) any Shares held by affiliates of Holder on the Conversion Closing Date (including the Shares held by Third Security, LCC and/or NRM VII Holdings I, LLC, such as those identified in Section 4.5 of the Stock Issuance Agreement).

(b) Shareholder Approval. Prior to exercising its right to convert this Note, the Maker shall take such actions as are reasonably necessary and advisable to permit the conversion of this Note into the Conversion Shares, including without limitation soliciting the requisite NYSE required shareholder approval to authorize the issuance of such Conversion Shares. The Maker agrees that, prior to receipt of the requisite NYSE required shareholder approval, it shall not have the right to convert this Note or to issue the Conversion Shares. Holder and its affiliates shall fully cooperate with Maker in connection with its seeking shareholder approval and Holder shall take any and all such actions necessary to ensure that its affiliates fully cooperate with Maker in connection with seeking shareholder approval, including but not limited to, executing any stockholder consent for any and all shares beneficially owned and held by Holder and its

affiliates or voting in favor of any proposals submitted to shareholders in any Proxy Statement filed by Maker, to authorize and approve the issuance of the Conversion Shares.

(c) Conversion Procedure.

(i) Conversion Notice. If this Note is converted pursuant to Section 8(a), the Maker shall give written notice to the Holder, notifying the Holder of its election to convert this Note and specifying the amount of the outstanding principal and interest and the amount thereof to be converted (the "Conversion Notice"). In the event that the Conversion Shares, valued at the Conversion Price, do not satisfy the full outstanding principal of this Note, such Conversion Notice shall also specify the remaining principal balance of the Note that will be paid in cash by Maker to Holder (the "Conversion Cash Balance"). Upon receipt of such notice, the Holder shall surrender this Note at the Maker's principal executive office, or, if this Note has been lost, stolen, destroyed or mutilated, then, in the case of loss, theft or destruction, the Holder shall deliver an indemnity agreement reasonably satisfactory in form and substance to the Maker or, in the case of mutilation, the Holder shall surrender and cancel this Note. The Maker shall, as soon as practicable thereafter, issue and deliver to the Holder, at the address requested by the Holder, a certificate or certificates for the Conversion Shares to which the Holder shall be entitled upon such conversion (bearing any such legends as are required by applicable state and federal securities laws in the opinion of counsel to the Maker). Such conversion shall be deemed to have been made immediately prior to the close of business on the date of receipt by Holder of the notice of conversion, and on and after such date the Person entitled to receive the shares issuable upon such conversion shall be treated for all purposes as the record holder of such shares.

(ii) Condition to Conversion. It shall be a condition to the conversion of the Note in accordance with this Section 8 that the Maker obtain the requisite NYSE required shareholder approval to issue the Conversion Shares issuable upon conversion of the Notes.

(iii) Fractional Shares. No fractional shares shall be issued upon conversion of this Note. In lieu of the Maker issuing any fractional shares to the Holder upon the conversion of this Note, the Maker shall pay to the Holder in cash the amount of the unconverted principal balance of this Note that would otherwise be converted into such fractional share as part of the Conversion Cash Balance.

(iv) Payment of Conversion Cash Balance. Upon conversion of the Note, the Conversion Cash Balance (if any) shall be paid from Maker to Holder, by wire in United States dollars to a bank account specified by Holder. Such payment shall be made within five (5) business days of the Conversion Closing Date, but in no event later than the Maturity Date.

(v) Effect of Conversion. Upon conversion of this Note and issuance of the Conversion Shares and payment of the Conversion Cash Balance (if any) in accord with this Section 8, the Maker shall be forever released from all of its obligations and liabilities under this Note.

9. Assignment. Subject to the restrictions on transfer described in Section 11 of this Note, the rights and obligations of the Maker and the Holder shall be binding upon and inure to the benefit of the permitted successors, assigns, heirs, administrators and transferees of the parties hereto.

10. Amendment. Any provision of this Note may be amended or modified with the prior written consent of both the Holder and the Maker.

11. Transfer of this Note. Subject to applicable securities laws, the Holder may assign this Note or any of its rights hereunder to any of its Affiliates; provided that, for the avoidance of doubt, the Holder may not assign this Note or any of its rights hereunder to any Person that is not an affiliate of the Holder without the prior written consent of the Maker. With respect to any such transfer of this Note, the Holder will give written notice to the Maker prior thereto, describing briefly the manner thereof, together with a written opinion of such Holder's counsel, in a form reasonably satisfactory to the Maker, to the effect that such offer, sales or other distribution may be effected without registration or qualification under any federal or state law then in effect. Promptly upon receiving such written notice and opinion of counsel, the Maker, as promptly as practicable but in no event later than five (5) Business Days after receipt of such notice and opinion, shall notify the Holder that the Holder may sell or otherwise dispose of this Note in accordance with the terms of the notice delivered to the Maker, subject to any additional applicable restrictions. If a determination has been made pursuant to this Section 11 that the opinion of counsel for the Holder is not reasonably satisfactory to the Maker, the Maker shall so notify the Holder promptly after such determination has been made. This Note thus transferred shall bear a legend as to the applicable restrictions on transferability in order to ensure compliance with the Act, unless in the opinion of counsel for the Maker such legend is not required, in order to ensure compliance with the registration or qualification requirement of any federal or state law then in effect. The Maker may issue stop transfer instructions to its transfer agent in connection with such restrictions.

12. Shareholder Status. The Holder currently owns certain capital stock of Maker. Nothing contained in this Note shall be construed as conferring upon the Holder (prior to conversion in accordance with Section 8 of this Note) any additional rights to vote or to receive dividends or to consent or to receive notice as a shareholder in respect of any meeting of shareholders for the election of directors of the Maker or of any other matter, or any rights whatsoever as a shareholder of the Maker.

13. Negative Covenants. So long as there remains any outstanding and unpaid principal or interest under this Note, the Maker hereby agrees to abide by the restriction and negative covenant set forth in this Section 13, unless the Maker first obtains the written consent of Holder to permit the Maker to take the action that would otherwise result in a breach of this Section 13.

(a) Obligations Under this Note. The Maker shall not, by amendment of its organizational documents or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Note, but shall at all times in good faith assist in the carrying out of all such terms and in the taking of all such actions as may be necessary or appropriate in order to protect the rights of the Holder hereunder.

14. Default and Remedies. If any of the events specified in this Section 14 shall occur (herein individually referred to as an “Event of Default”), the Holder shall, so long as such condition exists (after giving effect to any applicable cure period set forth below), declare the entire outstanding principal balance and unpaid accrued interest hereon immediately due and payable, by notice in writing to the Maker.

- (a) Default in the payment of the principal or unpaid accrued interest on this Note when due and payable if such default is not cured by the Maker within fifteen (15) Business Days after the Maker receives written notice of such default.
- (b) A material default in the observance or performance of any other covenant or agreement contained in this Note, which default continues for a period of fifteen (15) Business Days after the Maker receives written notice specifying the default.
- (c) Termination of the ECC Agreement other than as a result of Holder’s material breach of the ECC Agreement.
- (d) The institution by the Maker of proceedings to be adjudicated as bankrupt or insolvent, or the consent by it to institution of bankruptcy or insolvency proceedings against it or the filing by it of a petition or answer or consent seeking reorganization or release under Title 11 of the United States Code, or any other applicable federal or state law, or the consent by it to the filing of any such petition or the appointment of a receiver, liquidator, assignee, trustee or other similar official of the Maker, or of any substantial part of its property, or the making by it of an assignment for the benefit of creditors, which action is not dismissed within sixty (60) days of the commencement thereof.
- (e) If, within sixty (60) days after the commencement of an action against the Maker (and service of process in connection therewith on the Maker) seeking any bankruptcy, insolvency, reorganization, liquidation, dissolution or similar relief under any present or future statute, law or regulation, such action shall not have been resolved in favor of the Maker or all orders or proceedings thereunder affecting the operations or the business of the Maker stayed, or if the stay of any such order or proceeding shall thereafter be set aside, or if, within sixty (60) days after the appointment without the consent or acquiescence of the Maker of any trustee, receiver or liquidator of the Maker or of all or any substantial part of the properties of the Maker, such appointment shall not have been vacated.
- (f) The decision by the board of directors of the Maker to cease or substantially cease its operations or wind up the affairs of the Maker.

15. Allocation of Costs. If this Note is not paid in accordance with its terms, the Maker shall pay to the Holder, in addition to principal and accrued interest thereon, all costs of collection of the principal and accrued interest, including, but not limited to, reasonable attorneys' fees, court costs and other costs for the enforcement of payment of this Note.

16. Waiver. No waiver of any obligation of the Maker under this Note shall be effective unless it is in a writing signed by the Holder. A waiver by the Holder of any right or remedy under this Note on any occasion shall not be a bar to exercise of the same right or remedy on any subsequent occasion or of any other right or remedy at any time. The Maker hereby expressly waives presentment, demand, and protest, notice of demand, dishonor and nonpayment of this Note, and all other notices or demands of any kind in connection with the delivery, acceptance, performance, default or enforcement hereof, except as expressly provided for herein, and hereby consents to any delays, extensions of time, renewals or waivers that may be granted or consented to by the Holder hereof with respect to the time of payment or any other provision hereof.

17. Notices. All notices, demands and other communications provided for or permitted hereunder shall be made in writing and shall be by registered or certified first-class mail, return receipt requested, facsimile, electronic mail, courier service or personal delivery to the addresses listed in the Stock Issuance Agreement. All such notices and communications shall be deemed to have been duly given when delivered by hand, if personally delivered; when delivered by courier, if delivered by commercial courier service, five (5) Business Days after being deposited in the mail, postage prepaid, if mailed; and upon receipt if sent via facsimile or electronic mail.

18. Governing Law. This Note is delivered in and shall be enforceable in accordance with the laws of the State of Florida (other than its conflict of laws principles) and shall be construed in accordance therewith, and shall have the effect of a sealed instrument.

19. Severability. In the event any one or more of the provisions of this Note shall for any reason be held to be invalid, illegal or unenforceable, in whole or in part or in any respect, or in the event that any one or more of the provisions of this Note operate or would prospectively operate to invalidate this Note, then and in any such event, such provision(s) only shall be deemed null and void and shall not affect any other provision of this Note and the remaining provisions of this Note shall remain operative and in full force and effect and in no way shall be affected, prejudiced or disturbed thereby.

20. No Personal Liability. Neither the officers, the directors or the shareholders of the Maker nor any Person executing this Note on behalf of the Maker shall be liable personally or be subject to any personal liability or accountability with respect to the obligations of this Note or the Stock Issuance Agreement by reason of the issuance hereof.

[remainder of page intentionally blank]

IN WITNESS WHEREOF, the Maker has executed and delivered this Note as a sealed instrument as of the date first above written.

Oragenics, Inc.

By: /s/ Michael Sullivan

Name: Michael Sullivan

Title: Chief Financial Officer

IN WITNESS WHEREOF, the Holder has accepted and agreed to the terms of this Note as of the date first above written.

Intrexon Corporation

By: /s/ Donald P. Lehr

Name: Donald P. Lehr

Title: Chief Legal Officer

[SIGNATURE PAGE TO CONVERTIBLE PROMISSORY NOTE]

The logo for Intrexon, featuring the word "INTREXON" in a bold, blue, sans-serif font. The letter "X" is highlighted in orange.The logo for Oragenics, featuring the word "ORAGENICS" in a blue, sans-serif font. The letter "G" is enclosed within a green circular graphic.

**Intrexon and Oragenics Expand Collaboration to Pursue Development
of Biotherapeutics for the Oral Cavity**

*Companies to Progress ActoBiotic™ AG013 for Treatment of Oral Mucositis
Oragenics Now A Clinical Stage Company*

GERMANTOWN, MD, and TAMPA, FL, June 10, 2015 – Intrexon Corporation (NYSE: XON), a leader in synthetic biology, and Oragenics (NYSE:MKT - OGEN), today announced a new Exclusive Channel Collaboration (ECC) to pursue development of biotherapeutics for oral mucositis (OM) and other diseases and conditions of the oral cavity, throat, and esophagus, including clinical advancement of the ActoBiotic™ AG013 for the treatment of OM. OM results in the painful inflammation and ulceration of the membranes lining the oral cavity, throat, and esophagus and is among the most frequently reported adverse events associated with cancer therapy affecting up to 500,000 patients annually. At present there is no drug approved to prevent the condition broadly and therapies are primarily palliative, alleviating symptoms without addressing the underlying pathology, resulting in a significant unmet medical need.

“We are eager to advance therapeutic programs through the established clinical foundations of the ActoBiotics™ platform, and moving forward in the clinic with AG013 is a natural fit for our focus on the treatment of oral cavity diseases with innovative biopharmaceuticals,” said Frederick Telling, Ph.D., Chairman of the Board of Oragenics. “Work continues under our current collaboration with Intrexon centered on the development of a novel class of antibiotics known as lantibiotics, and we are excited to build on this relationship in the field of oral health to realize the promise of microbial approaches in the generation of efficacious new medicines.”

“I am pleased that this new collaboration provides an opportunity for continued development of AG013 as an intervention for oral mucositis,” said Stephen T. Sonis, DMD, DMSc, Senior Surgeon, Divisions of Oral Medicine, Brigham and Women’s Hospital and the Dana-Farber Cancer Institute. “AG013’s successful attenuation of chemotherapy-induced oral mucositis in the Phase 1B trial suggests that this innovative delivery platform may offer a new approach to the treatment of this important unmet clinical need.”

Through the molecular engineering of food-grade microbes (*Lactococcus lactis*), biologically-contained ActoBiotics™ allow for *in situ* expression and secretion of novel biotherapeutic proteins and peptides. AG013 is formulated as a convenient oral rinsing solution and designed to deliver the therapeutic molecule Trefoil Factor 1 (TFF1) to the mucosal tissues in the oral cavity. TFFs are a class of peptides that are involved in protection of the gastrointestinal tissues against mucosal damage and have an important role in subsequent repair.

A phase 1B clinical trial with AG013 in 25 cancer patients with OM across 5 cancer referral centers showed that AG013 was safe and well tolerated. Data published in the journal Cancer showed a 35% reduction of the duration of ulcerative OM in the AG013-treated patients versus the placebo-treated patients. Furthermore, close to 30% of the patients treated with AG013 were full responders while all placebo-treated patients developed ulcerative OM. Additionally, a phase 1 pharmacokinetic (PK) study in 10 healthy volunteers showed that live AG013 bacteria adhere to the buccal mucosa and actively secrete protein locally, resulting in homogeneous exposure to the entire mucosal surface up to 24 hours after administration of a rinse. AG013 has already been granted Orphan Drug status in the European Union and has potential eligibility for Biologic License Application exclusivity as well as Fast Track designation with the United States Food and Drug Administration.

Under the terms of the agreement, Oragenics will have access to Intrexon's technologies and expertise to develop products for the treatment of oral mucositis or products containing genetically modified *Lactococcus lactis* expressing trefoil factors in the oral cavity, throat, and esophagus for a technology access fee and will reimburse Intrexon for the research and development costs. The agreement also provides for commercial and regulatory milestone payments to Intrexon, as well as a low double-digit percentage royalty based on the net sales from collaboration products.

"AG013 represents a promising product from a truly innovative platform for the prevention of oral mucositis in cancer patients," commented Gregory Frost, Ph.D., Senior Vice President and Head of Intrexon's Health Sector. "We are very pleased with the expanded collaboration with Oragenics, especially given their unique experience in the field of oral health using novel approaches. This ECC will further the clinical development of AG013 in the hope of providing cancer patients with a much needed adjunctive therapy for oral mucositis, a challenging side effect that can become a treatment-limiting toxicity for effective cancer therapy."

About Intrexon Corporation

Intrexon Corporation (NYSE: XON) is Powering the Bioindustrial Revolution with Better DNA™ to create biologically-based products that improve the quality of life and the health of the planet. The Company's integrated technology suite provides its partners across diverse markets with industrial-scale design and development of complex biological systems delivering unprecedented control, quality, function, and performance of living cells. We call our synthetic biology approach Better DNA®, and we invite you to discover more at www.dna.com.

About Oragenics, Inc.

Oragenics, Inc. is focused on becoming the world leader in novel antibiotics against infectious disease and probiotics for oral health in humans and pets. Oragenics, Inc. has previously established two exclusive worldwide channel collaborations with Intrexon Corporation Inc. (XON), a synthetic biology company. The collaborations will allow Oragenics access to Intrexon's proprietary technologies with the idea of accelerating the development of much needed new antibiotics that will work against resistant strains of bacteria and new therapeutic probiotics designed to alleviate symptoms from oral diseases. Oragenics also develops, markets and sells proprietary OTC probiotics specifically designed to enhance oral health for humans and pets, under the brand names Evora and ProBiora both in the United States and through the use of distributors in locations outside of the United States.

Trademarks

Intrexon, UltraVector, and Better DNA are trademarks of Intrexon and/or its affiliates. Other names may be trademarks of their respective owners.

Safe Harbor Statement

Some of the statements made in this press release are forward-looking statements. These forward-looking statements are based upon our current expectations and projections about future events and generally relate to our plans, objectives and expectations for the development of our business. Although management believes that the plans and objectives reflected in or suggested by these forward-looking statements are reasonable, all forward-looking statements involve risks and uncertainties and actual future results may be materially different from the plans, objectives and expectations expressed in this press release.

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