**As confidentially submitted to the Securities and Exchange Commission on May 31, 2013**
**as Amendment No.1 to the confidential submission.**
**This draft registration statement has not been publicly filed with the Securities and Exchange Commission**
**and all information herein remains strictly confidential**

**Registration No. 333-**

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

# FORM S-1
## REGISTRATION STATEMENT
## UNDER THE SECURITIES ACT OF 1933

# Intrexon Corporation
(Exact name of registrant as specified in its charter)

| **Virginia** | **8731** | **26-0084895** |
|---|---|---|
| (State or other jurisdiction of incorporation or organization) | (Primary Standard Industrial Classification Code Number) | (I.R.S. Employer Identification Number) |

**20374 Seneca Meadows Parkway**
**Germantown, Maryland 20876**
**Telephone: (301) 556-9900**
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

**Randal J. Kirk**
**Chairman of the Board, President and Chief Executive Officer**
**Intrexon Corporation**
**2875 South Ocean Boulevard**
**Suite 215**
**Palm Beach, Florida 33480**
**Telephone: (561) 855-7831**
(Name, address, including zip code, and telephone number, including area code, of agent for service)

| **John Owen Gwathmey**<br>**David I. Meyers**<br>**Troutman Sanders LLP**<br>**1001 Haxall Point**<br>**Richmond, Virginia 23219**<br>**Telephone: (804) 697-1200** | ***Copies to:***<br>**Donald P. Lehr**<br>**Chief Legal Officer**<br>**Intrexon Corporation**<br>**20374 Seneca Meadows Parkway**<br>**Germantown, Maryland 20876**<br>**Telephone: (301) 556-9809** | **Mitchell S. Bloom**<br>**Michael H. Bison**<br>**Michael D. Maline**<br>**Goodwin Procter LLP**<br>**Exchange Place**<br>**Boston, Massachusetts 02109**<br>**Telephone: (617) 570-1000** |
|---|---|---|

**Approximate date of commencement of proposed sale to the public**: As soon as practicable after this Registration Statement becomes effective.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, as amended (the "Securities Act"), check the following box. ☐

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

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

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

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

| | | | |
|---|---|---|---|
| Large accelerated filer | ☐ | Accelerated filer | ☐ |
| Non-accelerated filer | ☒ (Do not check if a smaller reporting company) | Smaller reporting company | ☐ |

**CALCULATION OF REGISTRATION FEE**

| **Title of Each Class of Securities to be Registered** | **Proposed Maximum Aggregate Offering Price(1)(2)** | **Amount of Registration Fee** |
|---|---|---|
| Common Stock, no par value per share | $ | $ |

(1) Includes shares that may be purchased by the underwriters upon exercise of their option to purchase additional shares of common stock.
(2) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o) under the Securities Act of 1933.

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

# Explanatory note

This Amendment No. 1 is being submitted for the purpose of submitting Exhibits 10.3 through 10.13 and Exhibit 21.1. Other than (i) changes to sections (ix) and (x) of Item 15 of Part II, (ii) changes to Item 16 of Part II, (iii) the deletion of a reference in the Exhibit index in Part II to former Exhibit 10.6, “Exclusive Research Collaboration Agreement, dated as of August 1, 2012, between the Company and BioLife Cell Bank, Inc.,” and (iv) a modification of the description of Exhibit 10.1 in the Exhibit index in Part II, no changes or additions are being made hereby to the Prospectus constituting Part I of the Registration Statement (not included herein) or to Part II of the Registration Statement.

# Part II
# Information not required in prospectus

## Item 13. Other expenses of issuance and distribution.

The following table indicates the expenses to be incurred in connection with this offering described in this Registration Statement, other than underwriting discounts and commissions, all of which will be paid by us. All amounts are estimated except the Securities and Exchange Commission registration fee and the FINRA filing fee.

| | | Amount to be paid |
|---|---|---|
| SEC registration fee | $ | * |
| FINRA filing fee | | * |
| filing fee | | * |
| Printing and engraving expenses | | * |
| Legal fees and expenses | | * |
| Accounting fees and expenses | | * |
| Transfer agent and registrar fees and expenses | | * |
| Miscellaneous expenses | | * |
| Total | $ | * |

* To be provided by amendment.

## Item 14. Indemnification of directors and officers.

Article 10 of Chapter 9 of Title 13.1 of the Code of Virginia, as amended, or the Virginia Stock Corporation Act, permits a Virginia corporation to indemnify any director or officer for reasonable expenses incurred in any legal proceeding in advance of final disposition of the proceeding, if the director or officer furnishes the corporation a written statement of his or her good faith belief that he or she has met the standard of conduct prescribed by the Virginia Stock Corporation Act and furnishes the corporation with a written undertaking to repay any funds advanced if it is ultimately determined that the director has not met the relevant standard of conduct. In addition, a corporation is permitted to indemnify a director or officer against liability incurred in a proceeding if a determination has been made by the disinterested members of the board of directors, special legal counsel or shareholders that the director or officer conducted himself or herself in good faith and otherwise met the required standard of conduct. In a proceeding by or in the right of the corporation, no indemnification shall be made in respect of any matter as to which a director or officer is adjudged to be liable to the corporation, except for reasonable expenses incurred in connection with the proceeding if it is determined that the director or officer has met the relevant standard of conduct. In any other proceeding, no indemnification shall be made if the director or officer is adjudged liable to the corporation on the basis that he or she improperly received a personal benefit. Corporations are given the power to make any other or further indemnity, including advance of expenses, to any director or officer that may be authorized by the articles of incorporation or any bylaw made by the shareholders, or any resolution adopted, before or after the event, by the shareholders, except an indemnity against willful misconduct or a knowing violation of the criminal law. Unless limited by its articles of incorporation, indemnification against the reasonable expenses incurred by a director or officer is mandatory when he or she entirely prevails in the defense of any proceeding to which he or she is a party because he or she is or was a director or officer.

We are a Virginia corporation. Our Amended and Restated Articles of Incorporation contain provisions indemnifying our directors and officers to the extent not prohibited by Virginia law.

## Item 15. Recent sales of unregistered securities.

Set forth below is information regarding shares of common stock and preferred stock issued, and options and warrants granted, by us within the past three years that were not registered under the Securities Act of 1933, as amended, or the Securities Act. Included is the consideration, if any, we received for such shares, options and warrants and information relating to the section of the Securities Act, or rule of the Securities and Exchange Commission, under which exemption from registration was claimed.

(a) Issuances of convertible preferred stock

(i) On or about February 19, 2010, we sold 5,250,083 shares of our Series D preferred stock at a purchase price per share of $3.38 for an aggregate purchase price of $17,745,281.

(ii) On or about October 29, 2010, we sold 5,990,711 shares of our Series D preferred stock at a purchase price per share of $3.38 for an aggregate purchase price of $20,248,603.

(iii) On or about January 6, 2011, we sold 5,313,629 shares of our Series D preferred stock at a purchase price per share of $3.38 for an aggregate purchase price of $17,960,074.

(iv) Between February 18, 2011 and February 25, 2011, we sold 3,249,262 shares of our Series D preferred stock at a purchase price per share of $3.38 for an aggregate purchase price of $10,982,502.

(v) On or about May 26, 2011, we sold 19,047,619 shares of our Series E preferred stock at a purchase price per share of $5.25 for an aggregate purchase price of $100,000,000 *less* $2,617,235 paid to Perella Weinberg Partners as placement agent.

(vi) On or about January 10, 2012, we sold 9,523,810 shares of our Series E preferred stock at a purchase price per share of $5.25 for an aggregate purchase price of $50,000,000.

(vii) On or about April 12, 2012, we sold 4,761,905 shares of our Series E preferred stock at a purchase price per share of $5.25 for an aggregate purchase price of $25,000,001.

(viii) Between October 26, 2012 and November 13, 2012, we sold 4,761,905 shares of our Series E preferred stock at a purchase price per share of $5.25 for an aggregate purchase price of $25,000,001.

(ix) On or about March 1, 2013, we sold 8,178,964 shares of our Series F preferred stock at a purchase price per share of $7.88 for an aggregate purchase price of $64,409,342 *less* $1,199,433 paid to Barclays as placement agent and $300,000 to White Rock Capital, Inc. as client referral fees.

(x) On or about April 30, 2013, we sold 10,868,655 shares of our Series F preferred stock at a purchase price per share of $7.88 for an aggregate purchase price of $85,590,658 *less* $100,000 paid to Griffin Securities, Inc. as placement agent and $1,500,000 to White Rock Capital, Inc. as client referral fees.

Other than the placement agents identified above, no underwriters were involved in the foregoing sales of securities. The securities described in this section (a) of Item 15 were issued to investors in reliance upon the exemption from the registration requirements of the Securities Act, as set forth in Section 4(2) under the Securities Act and Regulation D promulgated thereunder relative to transactions by an issuer not involving any public offering, to the extent

an exemption from such registration was required. All purchasers of shares of convertible preferred stock described above represented to us in connection with their purchase that they were accredited investors and were acquiring the shares for their own account for investment purposes only and not with a view to, or for sale in connection with, any distribution thereof and that they could bear the risks of the investment and could hold the securities for an indefinite period of time. The purchasers received written disclosures that the securities had not been registered under the Securities Act and that any resale must be made pursuant to a registration statement or an available exemption from such registration.

(b) Stock option grants

Between January 1, 2010 and April 30, 2013, we granted options to purchase an aggregate of 5,985,447 shares of common stock, with exercise prices ranging from $1.88 to $4.07 per share, to employees, directors and consultants pursuant to our 2008 Equity Incentive Plan. Between January 1, 2010 and April 30**,** 2013, we issued an aggregate of 484,292 shares of common stock upon the exercise of options for aggregate consideration of $676,000.

The stock options, the common stock issuable upon the exercise of such options and the common stock issued in connection with awards of restricted stock as described in this section (b) of Item 15 were issued pursuant to written compensatory plans or arrangements with our employees and directors, in reliance on the exemption from the registration requirements of the Securities Act provided by Rule 701 promulgated under the Securities Act or the exemption set forth in Section 4(2) under the Securities Act and Regulation D promulgated thereunder relative to transactions by an issuer not involving any public offering. All recipients either received adequate information about us or had access, through employment or other relationships, to such information.

(c) Warrant issuances

On January 26, 2011, we issued warrants to purchase an aggregate of 740,234 shares of our common stock at a price of $0.45 per share to three individuals. On November 7, 2011, we issued warrants to purchase an aggregate of 154,189 shares of common stock at a price of $0.45 per share to the same three individuals.

The warrants described in this section (b) of Item 15 were issued to investors in reliance upon the exemption from the registration requirements of the Securities Act, as set forth in Section 4(2) under the Securities Act and Regulation D promulgated thereunder relative to transactions by an issuer not involving any public offering, to the extent an exemption from such registration was required. All persons who received warrants described above represented to us in connection with the issuance that they were accredited investors and were acquiring the warrants, and the common stock issuable upon exercise of the warrants, for their own account for investment purposes only and not with a view to, or for sale in connection with, any distribution thereof and that they could bear the risks of the investment and could hold the securities for an indefinite period of time. The persons received written disclosures that the securities had not been registered under the Securities Act and that any resale must be made pursuant to a registration statement or an available exemption from such registration.

All of the securities described in paragraphs (a), (b) and (c) of this Item 15 are deemed restricted securities for purposes of the Securities Act. All of the certificates representing such securities included appropriate legends setting forth that the securities have not been registered and the applicable restrictions on transfer.

## Item 16. Exhibits and financial statement schedules.

(a) Exhibits

The exhibits to the registration statement are listed in the Exhibit index attached hereto and incorporated by reference herein.

(b) Financial statement schedules

Schedules have been omitted because the information required to be set forth herein is not applicable or is shown in the financial statements or notes thereto.

## Item 17. Undertakings.

(a) The undersigned registrant hereby undertakes to provide to the underwriter at the closing specified in the underwriting agreements, certificates in such denominations and registered in such names as required by the underwriter to permit prompt delivery to each purchaser.

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

(c) The undersigned registrant hereby undertakes that:

- For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.
- For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

# Signatures

Pursuant to the requirements of the Securities Act of 1933, the Registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Blacksburg, Commonwealth of Virginia, on .

**INTREXON CORPORATION**

By: _____

Randal J. Kirk
*Chief Executive Officer and Chairman of the Board of Directors*

# Power of attorney

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Randal J. Kirk, Rick Sterling and Donald P. Lehr and each of them, as his or her true and lawful attorneys-in-fact and agent, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign the Registration Statement on Form S-1 of Intrexon Corporation, and any or all amendments (including post-effective amendments) thereto and any new registration statement with respect to the offering contemplated thereby filed pursuant to Rule 462(b) of the Securities Act of 1933, as amended, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents full power and authority to do and perform each and every act and thing requisite or necessary to be done in and about the premises hereby ratifying and confirming all that said attorneys-in-fact and agent, or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

| Signature | Title | Date |
|---|---|---|
| Randal J. Kirk | Chief Executive Officer and Chairman of the Board of Directors (Principal Executive Officer) | |
| Rick Sterling | Chief Financial Officer (Principal Accounting and Financial Officer) | |
| Cesar L. Alvarez | Director | |
| Steven Frank | Director | |
| Larry D. Horner | Director | |
| Jeffrey B. Kindler | Director | |
| Dean J. Mitchell | Director | |
| Robert B. Shapiro | Director | |

# Exhibit index

| Exhibit number | Description of exhibit |
|---|---|
| 1.1* | Form of Underwriting Agreement |
| 3.1* | Amended and Restated Articles of Incorporation of the Company |
| 3.2* | Bylaws of the Company |
| 4.1* | Specimen certificate evidencing shares of common stock |
| 4.2* | Warrants to purchase shares of common stock |
| 4.3* | Eighth Amended and Restated Investors' Rights Agreement, dated March 1, 2013, by and among the Company and the holders of the Company's series preferred and certain holders of the Company's common stock |
| 5.1* | Opinion of Troutman Sanders LLP |
| 10.1*† | Intrexon Corporation Amended and Restated 2008 Equity Incentive Plan and Form of Incentive Stock Option Agreement |
| 10.2*† | Intrexon Corporation 2013 Equity and Cash Incentive Plan and Forms of Award Agreements |
| 10.3# | Exclusive Channel Partner Agreement, dated as of January 6, 2011, between the Company and ZIOPHARM Oncology, Inc., as amended |
| 10.4 | Stock Purchase Agreeement, dated as of January 6, 2011, between the Company and ZIOPHARM Oncology, Inc. |
| 10.5# | Exclusive Channel Collaboration Agreement, dated as of November 28, 2011, between the Company and Elanco Animal Health, a division of Eli Lilly and Company |
| 10.6# | Exclusive Channel Collaboration Agreement, dated as of June 5, 2012, between the Company and Oragenics, Inc. |
| 10.7# | Exclusive Channel Collaboration Agreement, dated as of August 6, 2012, between the Company and Synthetic Biologics, Inc. |
| 10.8# | Exclusive Channel Collaboration Agreement, dated as of October 5, 2012, between the Company and Fibrocell Science, Inc. |
| 10.9# | Exclusive Channel Collaboration Agreement, dated as of February 14, 2013, between the Company and AquaBounty Technologies, Inc. |
| 10.10 | Relationship Agreement, dated as of December 5, 2012, between the Company and AquaBounty Technologies, Inc. |
| 10.11# | Exclusive Channel Collaboration Agreement, dated as of March 29, 2013, between the Company and Ampliphi Biosciences Corporation |
| 10.12# | Exclusive Channel Collaboration Agreement, dated as of March 29, 2013, between the Company and Genopaver, LLC |
| 10.13# | Exclusive Channel Collaboration Agreement, dated as of April 27, 2013, between the Company and Soligenix, Inc. |
| 10.14*#† | Second Amended and Restated Employment Agreement, dated as of August 31, 2006, between the Company and Thomas D. Reed |
| 21.1 | List of Subsidiaries of the Company |

| Exhibit number | Description of exhibit |
|---|---|
| 23.1* | Consent of PricewaterhouseCoopers LLP |
| 23.2* | Consent of PricewaterhouseCoopers LLP |
| 23.3* | Consent of PricewaterhouseCoopers LLP |
| 23.4* | Consent of Troutman Sanders LLP (included in Exhibit 5) |
| 24.1* | Power of Attorney (included on signature page) |

* To be filed by amendment.
† Indicates management contract or compensatory plan.
# Confidential treatment requested as to certain portions, which portions have been omitted and filed separately with the Securities and Exchange Commission.

**Exhibit 10.3**

**EXECUTION VERSION**
**CONFIDENTIAL**

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 PARTNER AGREEMENT

**THIS EXCLUSIVE CHANNEL PARTNER AGREEMENT** (the "**Agreement**") is made and entered into effective as of January 6, 2011 (the "**Effective Date**") by and between **INTREXON CORPORATION**, a Virginia corporation with offices at 20358 Seneca Meadows Parkway, Germantown, MD 20876 ("**Intrexon**"), and **ZIOPHARM ONCOLOGY, INC.**, a Delaware corporation having its principal place of business at 1180 Avenue of the Americas, 19th Floor, New York, NY 10036 ("**ZIOPHARM**"). Intrexon and ZIOPHARM may be referred to herein individually as a "**Party**", and collectively as the "**Parties**."

## RECITALS

**WHEREAS,** Intrexon has expertise in and owns or controls proprietary technology relating to the design and production of DNA vectors or their *in vivo* expression; and

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

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

## ARTICLE 1

## DEFINITIONS

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

**1.1** "**Affiliate**" means, with respect to a particular Party, any other person or entity that directly or indirectly controls, is controlled by, or is in common control with such Party. As used in this Section 1.1, the term "controls" (with correlative meanings for the terms "controlled by" and "under common control with") means the ownership, directly or indirectly, of more than fifty percent (50%) of the voting securities or other ownership interest of an entity, or the possession, directly or indirectly, of the power to direct the management or policies of an entity, whether through the ownership of voting securities, by contract, or otherwise. Notwithstanding the foregoing, except as set forth in Section 2.3(a), Third Security shall be deemed not to be an Affiliate of Intrexon, and any other person, corporation, partnership, or other entity that would be an Affiliate of Intrexon 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.

**1.2** "**Allowable Expenses**" means any of the following expenses incurred by ZIOPHARM or an Affiliate of ZIOPHARM after the First Commercial Sale in the Territory of a ZIOPHARM Product, in each case to the extent specifically attributable to such ZIOPHARM

Product and specifically attributable to the Commercialization of such ZIOPHARM Product: (a) Cost of Goods Sold, (b) Marketing Expenses, (c) Distribution Expenses, (d) Post-Launch Product R&D Expenses, and (e) Additional Commercialization Expenses, in each case as such terms are defined and calculated in this Article 1 and in Exhibit A.

**1.3** "**Applicable Laws**" has the meaning set forth in Section 8.2(d)(xiii).

**1.4** "**Authorizations**" has the meaning set forth in Section 8.2(d)(xiii).

**1.5** "**Blocking Third Party IP**" has the meaning set forth in Section 3.7(a).

**1.6** "**Cancer Program**" has the meaning set forth in Section 2.1.

**1.7** "**CC**" has the meaning set forth in Section 2.2(b).

**1.8** "**Channel-Related Program IP**" has the meaning set forth in Section 6.1(c).

**1.9** "**Claims**" has the meaning set forth in Section 9.1.

**1.10** "**CMCC**" has the meaning set forth in Section 2.2(b).

**1.11** "**Committees**" has the meaning set forth in Section 2.2(a).

**1.12** "**Commercialize**" or "**Commercialization**" means any activities directed to marketing, promoting, distributing, importing for sale, offering to sell and/or selling ZIOPHARM Products.

**1.13** "**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, marketing, financial, personnel and other business information and plans, whether in oral, written, graphic or electronic form.

**1.14** "**Control**" means, with respect to a Patent or other intellectual property right, that a Party owns or has a license 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.

**1.15** "**CRC**" has the meaning set forth in Section 2.2(b).

**1.16** "**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) a ZIOPHARM 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.

**1.17** "**Equity Agreements**" has the meaning set forth in Section 5.1.

**1.18** "**Excess Product Liability Costs**" has the meaning set forth in Section 9.3.

**1.19** "**Executive Officer**" means the Chief Executive Officer of the applicable Party, or 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 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.

**1.20** "**Existing Cancer Programs**" has the meaning set forth in Section 2.1.

**1.21** "**FDA**" has the meaning set forth in Section 8.2(d)(xiii).

**1.22** "**Field Infringement**" has the meaning set forth in Section 6.3(b)

**1.23** "**Field**" means the use of DNA administered to humans for expression of anti-cancer effectors for the purpose of treatment or prophylaxis of cancer; provided, however, that the Field does not include any therapies or other medical interventions that are directed toward the treatment or prophylaxis of a non-cancer disease or condition (e.g., infectious disease) unless the primary reason for such treatment or prophylaxis is to prevent cancer. For the avoidance of doubt, the Field excludes (a) the treatment or prophylaxis of cancer in non-human animals and (b) the amelioration of symptoms or complications of cancer, including side effects of other cancer treatments (as opposed to the treatment of the cancer itself).

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

**1.25** "**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.

**1.26** "**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.

**1.27** "**Infringement**" has the meaning set forth in Section 6.3(a).

**1.28** "**Intrexon Channel Technology**" means Intrexon's technology directed towards in vivo expression of effectors, including without limitation the technology embodied in the Intrexon Materials and the Intrexon IP.

**1.29** "**Intrexon Indemnitees**" has the meaning set forth in Section 9.2.

**1.30** "**Intrexon IP**" means the Intrexon Patents and Intrexon Know-How.

**1.31** "**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 ZIOPHARM to conduct the Cancer Program. For the avoidance of doubt, the Intrexon Know-How shall include any Information (other than Intrexon Patents) in the Channel-Related Program IP.

**1.32** "**Intrexon Materials**" means the genetic code and associated gene constructs used alone or in combination and such other proprietary reagents including but not limited to plasmid vectors, virus stocks, and cells and cell lines (e.g., natural killer cells and dendritic cells), in each case that are reasonably required or provided to ZIOPHARM to conduct the Cancer Program.

**1.33** "**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 ZIOPHARM to conduct the Cancer Program. For the avoidance of doubt, the Intrexon Patents shall include any Patent in the Channel-Related Program IP.

**1.34** "**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.

**1.35** "**Inventions**" has the meaning set forth in Section 6.1(b).

**1.36** "**IPC**" has the meaning set forth in Section 2.2(b).

**1.37** "**JSC**" has the meaning set forth in Section 2.2(b).

**1.38** "**Losses**" has the meaning set forth in Section 9.1.

**1.39 "Net Sales"** means, with respect to any ZIOPHARM Product, the net sales of such ZIOPHARM Product by ZIOPHARM or an Affiliate of ZIOPHARM (including without limitation net sales of ZIOPHARM Product to a non-Affiliate sublicensee but not including net sales by such non-Affiliate sublicensee), as determined in accordance with US GAAP.

**1.40** "**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.

**1.41** "**Product Profit**" means Net Sales less Allowable Expenses.

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

**1.43** "**Proposed Terms**" has the meaning set forth in Section 11.2.

**1.44** "**Prosecuting Party**" has the meaning set forth in Section 6.2(c).

**1.45** "**Recovery**" has the meaning set forth in Section 6.3(f).

**1.46** "**Required Third Party IP**" has the meaning set forth in Section 3.7(a).

**1.47** "**Retained Product**" has the meaning set forth in Section 10.4(a).

**1.48** "**Reverted Product**" has the meaning set forth in Section 10.4(c).

**1.49** "**SEC**" means the United States Securities and Exchange Commission.

**1.50** "**Sublicensing Revenue**" means any cash consideration (including upfront payments, milestone payments, and royalties), and the cash equivalent of all other consideration, actually received by ZIOPHARM 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 ZIOPHARM 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 ZIOPHARM 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); or (c) amounts received from sublicensees in respect of any ZIOPHARM Product sales that are included in Net Sales.

**1.51** "**Superior Therapy**" means a cancer therapy in the Field that, based on the data then available, (a) demonstrably appears to offer superior efficacy, safety or cost, as compared with both (i) those therapies that are marketed (either by ZIOPHARM or others) at such time for a given cancer indication and (ii) those therapies that are being actively developed by

ZIOPHARM for such cancer 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.

**1.52** "**Support Memorandum**" has the meaning set forth in Section 11.2.

**1.53** "**Third Party**" means any individual or entity other than the Parties or their respective Affiliates.

**1.54** "**Third Party IP**" has the meaning set forth in Section 3.7(a).

**1.55** "**Third Security**" means Third Security, LLC.

**1.56** "**Territory**" means the entire world.

**1.57** "**US GAAP**" means generally accepted accounting principles in the United States.

**1.58** "**Working Group**" has the meaning set forth in Section 2.3(d).

**1.59** "**ZIOPHARM Indemnitees**" has the meaning set forth in Section 9.1.

**1.60** "**ZIOPHARM Product**" means any product in the Field that is created, produced, developed, or identified directly or indirectly by or on behalf of ZIOPHARM during the term of this Agreement, whether through use or practice of Intrexon Channel Technology or the Intrexon Materials or otherwise, including, without limitation, any products that are the subject of the Existing Cancer Programs.

**1.61** "**ZIOPHARM Program Patent**" has the meaning set forth in Section 6.2(b).

**1.62** "**ZIOPHARM Termination IP**" means all Patents or other intellectual property that ZIOPHARM 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.

## ARTICLE 2

## SCOPE OF CHANNEL PARTNERSHIP; MANAGEMENT

**2.1 General**. The general purpose of the channel partnership described in this Agreement will be to use the Intrexon Channel Technology (a) in connection with the following currently existing Intrexon programs in the Field: DC-RTS IL-12 Phase Ib clinical cancer program (IND #13565) and the AdV RTS-IL-12 cancer program (the "**Existing Cancer Programs**") and (b) generally to research, develop and commercialize products for use in the

Field (collectively, the "**Cancer Program**"). As provided below, the JSC shall establish projects for the Cancer Program. Either Party may propose potential projects in the Field for review and consideration by the JSC.

**2.2 Committees**.

**(a) Generally**. The Parties desire to establish several committees (collectively, "**Committees**") to oversee the Cancer 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 create the Committees listed in the chart below, each of which shall have the purpose indicated in the chart.

| Committee | Purpose |
|---|---|
| Joint Steering Committee ("**JSC**") | Establish projects for the Cancer Program and establish the priorities for such projects. |
| Chemistry, Manufacturing and Controls Committee ("**CMCC**") | Establish project plans and review and approve activities and budgets for chemistry, manufacturing, and controls under the Cancer Program. |
| Clinical/Regulatory Committee ("**CRC**") | Review and approve all research and development plans, clinical projects and publications, and regulatory filings and correspondence under the Cancer Program; review and approve itemized budgets with respect to the foregoing. |
| Commercialization Committee ("**CC**") | Establish project plans and review and approve activities and budgets for commercialization activities under the Cancer Program. |
| Intellectual Property Committee ("**IPC**") | Evaluate intellectual property issues in connection with the Cancer 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 who are employees of such Party or an Affiliate of such Party (not to exceed three (3) for each Party) with appropriate expertise to serve as members of such Committee (and Third Security shall be deemed to be an Affiliate of Intrexon solely for purposes of this Section 2.3). Each representative may serve on more than one Committee as appropriate in view of the individual's expertise. Each Party may replace its Committee representatives at any time upon written notice to the other Party. Each Committee shall have a chairperson; the chairperson of each committee shall serve for a two-year term and the right to designate which representative to the Committee will act as chairperson shall alternate between the Parties, with ZIOPHARM 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 thirty (30) days thereafter.

**(b) Meetings**. Each Committee shall hold meetings at such times as it elects to do so, but in no event shall such meetings be held less frequently than once every six (6) months. 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 ZIOPHARM 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 (including without limitation in any Working Group).

**(c) Meeting Agendas**. Each Party will disclose to the other proposed agenda items along with appropriate information at least seven (7) 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) Working Groups**. From time to time, each Committee may establish and delegate duties to other committees, sub-committees or directed teams (each, a "**Working Group**") on an "as-needed" basis to oversee particular projects or activities. Each such Working Group shall be constituted and shall operate as the applicable Committee determines; provided, that each Working Group shall have equal representation from each Party. Each Working Group and its activities shall be subject to the oversight, review and approval of, and shall report to, the Committee that established such Working Group. In no event shall the authority of the Working Group exceed that specified for the relevant Committee in this Article 2.

**(e) 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 by the mutual consent of the Parties and shall not be a substitute for the rights of the Parties. Without

limiting the generality of the foregoing, no Committee shall have any power to amend this Agreement. Any amendment to the terms and conditions of this Agreement shall be implemented pursuant to Section 12.7 below.

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

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

**(b) Casting Vote at CMCC**. If a dispute at the CMCC is not resolved pursuant to Section 2.4 above, then (i) in the case of any disputes relating to the Intrexon Materials, the manufacture of a ZIOPHARM Product active pharmaceutical ingredient, or the manufacturing of other components of ZIOPHARM 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 ZIOPHARM 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 ZIOPHARM 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 ZIOPHARM 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 is formed, then the Parties shall, at the time of such formation, agree on which Party shall have the authority to finally resolve a dispute that is not resolved pursuant to Section 2.4 above.

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

## ARTICLE 3

## LICENSE GRANTS

**3.1 Licenses to ZIOPHARM**.

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

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

**3.2 Sublicensing**. Except as provided below, ZIOPHARM 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 ZIOPHARM Products, in each case except with Intrexon's written consent, which written consent may be withheld in Intrexon's sole discretion. Notwithstanding the foregoing, ZIOPHARM may transfer, to the extent reasonably necessary, Intrexon Materials to a Third Party contractor performing post-API fill/finish responsibilities for ZIOPHARM Products, and may grant any sublicenses necessary to enable such Third Party to perform such activities. In addition, ZIOPHARM shall not sublicense the rights granted under Section 3.1 to an Affiliate, or transfer the Intrexon Materials to any Affiliate, or otherwise grant any Affiliate the right to research, develop, use, or commercialize ZIOPHARM Products, in each case except with Intrexon's written consent, which written consent shall not be unreasonably withheld or delayed. In the event that Intrexon consents to any such grant or transfer to an Affiliate, ZIOPHARM 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 ZIOPHARM), including any payment obligations owed to Intrexon hereunder. None of the enforcement rights under the Intrexon Patents that are

granted to ZIOPHARM 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.

**3.3 No Non-Permitted Use**. ZIOPHARM 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.

**3.4 Exclusivity**. Intrexon and ZIOPHARM mutually agree that, under the channel partnership established by this Agreement, it is intended that the Parties will be exclusive to each other in the Field. To this end, neither Intrexon nor its Affiliates shall make the Intrexon Channel Technology or Intrexon Materials available to any Third Party for the purpose of developing or commercializing products in the Field, and neither Intrexon nor any Affiliate shall pursue (either by itself or with a Third Party or Affiliate) the research, development or commercialization of any product for purpose of sale in the Field, outside of the Cancer Program. Further, neither ZIOPHARM nor its Affiliates 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 Cancer Program.

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

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

**3.7 Third Party Licenses**.

**(a)** [*****] shall obtain [*****] any licenses from Third Parties that are required in order to practice the Intrexon Channel Technology in the Field where the licensed

intellectual property is directed to Intrexon's *in vivo* expression system or the specific effector molecule used in the Existing Cancer Programs as of the Effective Date (but excluding intellectual property directed to any other specific effector molecules) ("**Required Third Party IP**"). Other than with respect to Required 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 ZIOPHARM Products ("**Blocking Third Party IP**"). Required Third Party IP and Blocking Third Party IP are collectively referred to as "**Third Party IP**").

**(b)** In the event that either Party desires to license from a Third Party any Required Third Party IP or Blocking Third Party IP, such Party shall so notify the other Party in writing, and the IPC shall discuss such Third Party IP and its applicability to the ZIOPHARM Products and to the Field. As provided above in Section 3.7(a), [*****] shall have the sole right and responsibility to pursue a license under Required Third Party IP, and [*****] hereby covenants that it shall not itself directly license such Required Third Party IP at any time, provided that [*****] may (but shall not be obligated to) obtain such a license directly if the Third Party owner or licensee of such Required Third Party IP brings an infringement action against [*****] or its Affiliates and, after written notice to [*****] of such action, [*****] fails to obtain a license to such Required Third Party IP within ninety (90) days after such notice. Following the IPC's discussion of any Blocking Third Party IP, subject to Section 3.7(c), [*****] shall have the right to pursue a license under Blocking Third Party IP [*****]. For the avoidance of doubt, [*****] may at any time obtain a license under Blocking Third Party IP outside the Field [*****] 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 Blocking Third Party IP and the final version of the definitive license agreement for any Blocking 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 Required Third Party IP, [*****] shall provide the final version of the definitive license agreement for such Required Third Party IP to the IPC. If [*****] acquires rights under any Third Party IP outside the Field, it will do so on a non-exclusive basis unless it obtains the prior written consent of [*****] for such license outside the Field to be exclusive. Any Party that is pursuing a license to any Third Party IP with respect to the Field under this Section 3.7 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 Required Third Party IP shall be borne solely by [*****] and shall not be included as an Allowable Expense, and (ii) any costs incurred by [*****] in obtaining and maintaining licenses to Blocking Third Party IP (and, to the limited extent provided in subsection (b), Required Third Party IP) shall be treated as [*****].

**(d)** For any Third Party license under which ZIOPHARM 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 ZIOPHARM Products, ZIOPHARM shall use commercially reasonable efforts to ensure that ZIOPHARM 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 ZIOPHARM 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 3.7(c), provided that Intrexon shall either provide unredacted copies of such upstream license agreements to ZIOPHARM or shall disclose in writing to ZIOPHARM all of such terms and conditions that are applicable to ZIOPHARM. ZIOPHARM 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 ZIOPHARM as provided in the preceding sentence.

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

**3.9 Restrictions Relating to Intrexon Materials.** ZIOPHARM shall use the Intrexon Materials solely for purposes of the Cancer 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, ZIOPHARM shall not, and shall ensure that ZIOPHARM personnel do not (a) distribute, sell, lend or otherwise transfer such Intrexon Materials to any Third Party; (b) co-mingle such Intrexon Materials with any other proprietary biological or chemical materials without Intrexon's written consent; or (c) analyze such Intrexon Materials or in any way attempt to reverse engineer or sequence such Intrexon Materials.

## ARTICLE 4

## OTHER RIGHTS AND OBLIGATIONS

**4.1 Development and Commercialization**. Subject to Sections 4.6 and 4.7, ZIOPHARM shall be solely responsible for the performance of the Cancer Program and the development and commercialization of ZIOPHARM Products in the Field. ZIOPHARM shall be responsible for all costs incurred in connection with the Cancer 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 ZIOPHARM 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 discovery-stage research with respect to the Intrexon Channel Technology and Intrexon Materials (i.e., platform improvements) (but, for clarity, excluding

research described in Section 4.7); (c) [*****]; and (d) costs of filing, prosecution and maintenance of Intrexon Patents. The costs encompassed within subsection (a) above shall include the scale-up of Intrexon Materials and API for clinical trials and commercialization of ZIOPHARM 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 ZIOPHARM (with Intrexon's consent).

**4.2 Transfer of Existing Cancer Programs**. Promptly following the Effective Date, Intrexon shall promptly assign to ZIOPHARM, and will provide full copies of, all regulatory approvals and regulatory filings that relate to the Existing Cancer Programs. Intrexon shall also (a) make available to ZIOPHARM all Intrexon Materials associated with the conduct of the Existing Cancer Programs, and (b) take such actions and execute such other instruments, assignments and documents as may be necessary to effect the transfer of rights thereunder to ZIOPHARM. No later than sixty (60) days after the Effective Date (or as soon thereafter as practicable), Intrexon shall provide to ZIOPHARM 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 Intrexon or its Affiliates in connection with the Existing Cancer Programs. Thereafter, as additional projects are included in the Cancer Program, the JSC shall develop a plan and protocol for each such project relating to the transfer of relevant data and Intrexon Materials.

**4.3 Information and Reporting**. ZIOPHARM will keep Intrexon informed about ZIOPHARM's efforts to develop and commercialize ZIOPHARM Products, including reasonable and accurate summaries of ZIOPHARM's (and its Affiliates' and, if applicable, (sub)licensees') global development plans (as updated), 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 ZIOPHARM Products, including initiation or completion of a clinical trial, submission of a United States or international regulatory filing, receipt of a response to such United States or international regulatory filing, clinical safety event, receipt of Regulatory Approval, or commercial launch. Intrexon will keep ZIOPHARM informed about Intrexon's efforts (a) to establish manufacturing capabilities and facilities for ZIOPHARM 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 Cancer Program with respect to the Intrexon Channel Technology and Intrexon Materials. Such disclosures by ZIOPHARM and Intrexon will be made in the course of JSC meetings at least once every six (6) months while ZIOPHARM 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, ZIOPHARM shall own and maintain, at its own cost, all regulatory filings and Regulatory Approvals for ZIOPHARM Products that ZIOPHARM is developing or Commercializing pursuant to this Agreement. As such, ZIOPHARM shall be responsible for reporting all adverse events related to such ZIOPHARM Products to the appropriate regulatory authorities in the relevant countries, in accordance with the applicable laws and regulations of such countries. The decision to list or not

list Patents in any regulatory filing for a ZIOPHARM Product (for example, as required by 21 C.F.R. § 314.53(b)), or add or delete a Patent from a regulatory filing shall be determined by Intrexon, after consultation with ZIOPHARM, except with respect to Product Specific Program Patents, which will be mutually determined by the Parties.

**4.5 Diligence**.

**(a)** ZIOPHARM shall use Diligent Efforts to develop and commercialize ZIOPHARM Products.

**(b)** Without limiting the generality of the foregoing, Intrexon may, from time to time, notify ZIOPHARM that it believes it has identified a Superior Therapy, and in such case shall provide to ZIOPHARM its then-available information about such therapy. ZIOPHARM shall have the following obligations with respect to such proposed Superior Therapy: (i) within sixty (60) days after such notification, ZIOPHARM shall prepare and deliver to the JSC for review and approval a development plan detailing how ZIOPHARM will pursue the Superior Therapy (including a proposed budget); (ii) ZIOPHARM shall revise the development plan as directed by the JSC; and (iii) following approval of the development plan by the JSC, ZIOPHARM shall use Diligent Efforts to pursue the development of the Superior Therapy under the Cancer Program in accordance with such development plan. If ZIOPHARM fails to comply with the foregoing obligations, or if ZIOPHARM 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(b) (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 ZIOPHARM's Affiliates and any permitted sublicensees shall be attributed to ZIOPHARM for the purposes of evaluating ZIOPHARM's fulfillment of the obligations set forth in this Section 4.5.

**4.6 Manufacturing**. Intrexon shall use Diligent Efforts to perform any manufacturing activities in connection with the Cancer Program that relate to the Intrexon Materials, the manufacture of bulk drug product, the manufacturing of bulk quantities of other components of ZIOPHARM Products, or any earlier steps in the manufacturing process for ZIOPHARM Products. 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 qualities of other components of ZIOPHARM Products, then Intrexon shall provide to ZIOPHARM or a contract manufacturer selected by ZIOPHARM and approved by Intrexon all Information Controlled by Intrexon that is related to the

manufacturing of such Intrexon Materials, bulk drug product or bulk qualities of other components of ZIOPHARM Products, for use in the Field and is reasonably necessary to enable ZIOPHARM 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 ZIOPHARM Products, in each case as manufactured by Intrexon. The costs and expenses incurred by Intrexon in carrying out such transfer shall be borne by Intrexon. Any manufacturing Information transferred hereunder to ZIOPHARM or its contract manufacturer shall not be further transferred to any Third Party or ZIOPHARM Affiliate without the prior written consent of Intrexon; provided, however, that Intrexon shall not unreasonably withhold such consent if necessary to permit ZIOPHARM to switch manufacturers.

**4.7 Support Services**. From time to time, on an ongoing basis, ZIOPHARM shall request, or Intrexon may propose, that Intrexon perform certain support services with respect to the Cancer Program, such services including but not limited to, pre-clinical or clinical activities relating to transition of the Cancer Program to ZIOPHARM. To the extent that the Parties mutually agree that Intrexon should perform such services, the Parties shall negotiate in good faith the terms under which services would be performed, it being understood that Intrexon would be compensated for such services by cash payments equal to Intrexon's Fully Loaded Cost in connection with such services.

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

**4.9 Trademarks.** To the extent permitted by applicable law and regulations, ZIOPHARM shall, and shall ensure that the packaging, promotional materials, and labeling for ZIOPHARM Products shall carry, in a conspicuous location, the applicable Intrexon Trademark(s), subject to ZIOPHARM's reasonable approval of the size, position, and location thereof. ZIOPHARM shall provide Intrexon with copies of any materials containing the Intrexon Trademarks prior to using or disseminating such materials, in order to obtain ZIOPHARM's approval thereof. ZIOPHARM's use of the Intrexon Trademarks shall be subject to prior review and approval of the IPC. ZIOPHARM acknowledges Intrexon's sole ownership of the Intrexon Trademarks and agrees not to take any action inconsistent with such ownership. ZIOPHARM covenants that it shall not use any trademark confusingly similar to any Intrexon Trademarks in connection with any products (including any ZIOPHARM Product). From time to time during the Term, Intrexon shall have the right to obtain from ZIOPHARM samples of ZIOPHARM Product sold by ZIOPHARM or its Affiliates or sublicensees for the purpose of inspecting the quality of such ZIOPHARM Products and use of the Intrexon Trademark(s). In the event that Intrexon inspects the quality of such ZIOPHARM Products and use of the Intrexon Trademark, Intrexon shall notify the result of such inspection to ZIOPHARM in writing thereafter. ZIOPHARM shall comply with reasonable policies provided by Intrexon from time-to-time to maintain the goodwill and value of the Intrexon Trademarks.

## ARTICLE 5

### COMPENSATION

**5.1 Equity**. In partial consideration for ZIOPHARM's appointment as an exclusive channel partner and the other rights granted to ZIOPHARM hereunder, ZIOPHARM has agreed to issue to Intrexon certain shares of ZIOPHARM's common stock, in accordance with the terms and conditions of that certain Stock Purchase Agreement and Registration Rights Agreement, each of even date herewith (the "**Equity Agreements**"). Pursuant to the Equity Agreements, Intrexon has also agreed to purchase certain shares of the Company's common stock for cash consideration, subject to the terms and conditions therein. Provided that all closing conditions for the First Tranche Closing (as defined in the Equity Agreements) that are within the reasonable control of Intrexon have been satisfied or waived, the issuance of the First Tranche Shares (as defined in the Equity Agreements) is a condition subsequent to the effectiveness of this Agreement.

**5.2 Profit-Share**.

**(a)** No later than thirty (30) days after each calendar quarter in which there is positive Product Profit arising from the sale of ZIOPHARM Product in the Field in the Territory, ZIOPHARM shall pay to Intrexon fifty percent (50%) of such Product Profit, on a ZIOPHARM Product-by-ZIOPHARM Product basis. In the event of negative Product Profit for a particular ZIOPHARM Product in any calendar quarter, neither ZIOPHARM nor Intrexon shall owe any payments hereunder with respect to such ZIOPHARM Product. Any negative Product Profit that results from Excess Product Liability Costs, and Third Party Blocking IP Costs (as defined in Exhibit A) may be carried forward to future quarters and offset against positive Product Profit in such future quarters for the same ZIOPHARM Product. Except as set forth in the preceding sentence, ZIOPHARM shall not be permitted to carry forward any negative Product Profits to subsequent quarters.

**(b)** No later than thirty (30) days after each calendar quarter in which ZIOPHARM or any ZIOPHARM Affiliate receives Sublicensing Revenue, ZIOPHARM shall pay to Intrexon fifty percent (50%) of such Sublicensing Revenue. As set forth in Section 3.2, sublicensing shall require Intrexon's prior written consent. Nevertheless, this Section 5.2(b) shall apply to Sublicensing Revenue received by ZIOPHARM or any ZIOPHARM Affiliate, even if rights were granted to the applicable sublicensee in violation of this Agreement. For purposes of clarity, sales of ZIOPHARM Products by approved sublicensees shall not constitute Net Sales.

**5.3 Method of Payment**. All payments due to Intrexon under this Agreement shall be paid in United States dollars by wire transfer to a bank in the United States designated in writing by Intrexon. All references to "dollars" or "$" herein shall refer to United States dollars.

**5.4 Payment Reports and Records Retention**. Within thirty (30) days after the end of each calendar quarter during which Net Sales have been generated or Allowable Expenses been incurred, ZIOPHARM shall deliver to Intrexon a written report that shall contain at a minimum for the applicable calendar quarter:

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

**(b)** itemized calculation of Net Sales, showing all applicable deductions;

**(c)** itemized calculation of Allowable Expenses and Sublicensing Revenue;

**(d)** the amount of the payment (if any) due pursuant to Section 5.2(a) and/or 5.2(b);

**(e)** the amount of taxes, if any, withheld to comply with any applicable law; and

**(f)** the exchange rates used in any of the foregoing calculations.

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

**5.5 Audits**.

**(a)** Upon the written request of Intrexon, ZIOPHARM shall permit an independent certified public accounting firm of internationally recognized standing selected by Intrexon, and reasonably acceptable to ZIOPHARM, 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 ZIOPHARM and its Affiliates to verify the accuracy and timeliness of the reports and payments made by ZIOPHARM 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, ZIOPHARM shall pay additional amounts, with interest from the date originally due as set forth in Section 5.7, 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 ZIOPHARM 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 such credit cannot be applied to reduce the amounts payable by ZIOPHARM to Intrexon for any particular calendar quarter by more than twenty-five percent (25%) of the amount otherwise due to Intrexon.

**(c)** Intrexon shall (i) treat all information that it receives under this Section 5.5 in accordance with the confidentiality provisions of Article 7 and (ii) cause its accounting firm to enter into an acceptable confidentiality agreement with ZIOPHARM 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.

**5.6 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. ZIOPHARM 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 ZIOPHARM or the appropriate governmental authority (with the assistance of ZIOPHARM 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 ZIOPHARM of its obligation to withhold tax, and ZIOPHARM shall apply the reduced rate of withholding tax, or dispense with withholding tax, as the case may be, provided that ZIOPHARM 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, ZIOPHARM withholds any amount, it shall make timely payment to the proper taxing authority of the withheld amount, and send to Intrexon proof of such payment within forty-five (45) days following that latter payment.

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

## ARTICLE 6

## INTELLECTUAL PROPERTY

**6.1 Ownership**.

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

**(b)** ZIOPHARM 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 Cancer 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.

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.

**(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**"). ZIOPHARM hereby assigns all of its right, title and interest in and to the Channel-Related Program IP to Intrexon. ZIOPHARM 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 ZIOPHARM 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. ZIOPHARM shall be under appropriate written agreements with each of its employees or agents working on the Cancer Program, pursuant to which such person shall grant all rights in the Inventions to ZIOPHARM (so that ZIOPHARM may convey certain of such rights to Intrexon, as provided herein).

**6.2 Patent Prosecution**.

**(a)** Intrexon shall have the sole right, but not the obligation, to conduct and control the filing, prosecution and maintenance of the Intrexon Patents. At the reasonable request of Intrexon, ZIOPHARM shall cooperate with Intrexon in connection with such filing, prosecution, and maintenance, at Intrexon's expense. Under no circumstances shall ZIOPHARM (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 or 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.

**(b)** ZIOPHARM 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 ZIOPHARM or its Affiliates and not assigned to Intrexon under Section 6.1(c) ( "**ZIOPHARM Program Patents**"). At the reasonable request of ZIOPHARM, Intrexon shall cooperate with ZIOPHARM in connection with such filing, prosecution, and maintenance, at ZIOPHARM's expense.

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

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

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

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

As used above "**Prosecuting Party**" means Intrexon in the case of Intrexon Patents and ZIOPHARM in the case of ZIOPHARM Program Patents.

**6.3 Infringement of Patents by Third Parties**.

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

**(b)** Notwithstanding the foregoing, ZIOPHARM 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 ZIOPHARM 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.

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.

**(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 reasonable 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) [*****]. Intrexon and ZIOPHARM shall bear the costs and expenses of such enforcement equally. 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 ZIOPHARM on such determination. For the avoidance of doubt, Intrexon has no obligations under this Agreement to enforce any Intrexon Patents against, or otherwise abate, any Infringement that is not a Field Infringement.

**(d)** In the event a Party pursues an action under this Section 6.3, the other Party shall reasonably cooperate with the enforcing Party with respect to the investigation and prosecution of any alleged, threatened, or actual Infringement, at the enforcing Party's expense (except with respect to an action under Section 6.3(c), where all costs and expenses will be shared equally in accordance with terms thereof).

**(e)** ZIOPHARM 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 ZIOPHARM in the Field or adversely affects any Intrexon Patent with respect to the Field without ZIOPHARM's 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 ZIOPHARM pursuant to Section 6.3(b), ZIOPHARM shall retain one hundred percent (100%) of any Recovery, but such Recovery shall be shared with Intrexon as Sublicensing Revenue. In any action initiated by Intrexon or ZIOPHARM pursuant to Section 6.3(c), the Parties shall share the Recovery equally, and such Recovery shall not be deemed to constitute Sublicensing Revenue.

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

## ARTICLE 7

### CONFIDENTIALITY

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

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

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

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

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

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

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

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

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

**(b)** to regulatory authorities in order to seek or obtain approval to conduct clinical trials, or to gain regulatory approval, of ZIOPHARM Products or any products being developed by Intrexon or its other licensees and/or channel partners, 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 who agree to be bound by obligations of confidentiality and non-use at least equivalent in scope to those set forth in this Article 7.

**7.3 Publicity**. The Parties agree that the public announcement of the execution of this Agreement shall be substantially in the form of the press release attached as Exhibit B.

**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 Audits.**

**(a)** For the purpose of confirming compliance with the Field-limited licenses granted in Article 3 and the confidentiality obligations under Article 7, ZIOPHARM acknowledges that Intrexon's authorized representative(s), during regular business hours may (i) examine and inspect ZIOPHARM'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 Intrexon to ZIOPHARM. ZIOPHARM will make itself and the pertinent employees and/or agents available, on a reasonable basis, to Intrexon for the aforementioned compliance review.

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

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

## ARTICLE 8

### REPRESENTATIONS AND WARRANTIES

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

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

**(b) Due Authorization**. ZIOPHARM is duly authorized to execute and deliver this Agreement and to perform its obligations hereunder, and the person executing this Agreement on ZIOPHARM'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 ZIOPHARM 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 ZIOPHARM 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. ZIOPHARM is aware of no action, suit or inquiry or investigation instituted by any governmental agency which questions or threatens the validity of this Agreement.

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

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

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

**(c) Binding Agreement**. This Agreement is a legal and valid obligation binding upon Intrexon and enforceable in accordance with its terms, except as such enforcement may be limited by applicable bankruptcy, insolvency, reorganization, arrangement, moratorium or other similar laws affecting creditors' rights, and subject to general equity principles and to limitations on availability of equitable relief, including specific performance. The execution, delivery and performance of this Agreement by Intrexon does not conflict with any agreement, instrument or understanding, oral or written, to which it is a party or by which it may be bound. Intrexon is aware of no action, suit or inquiry or investigation instituted by any governmental agency which questions or threatens the validity of this Agreement.

**(d) Additional Intellectual Property Representations**.

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

(ii) The Intrexon Patents existing as of the Effective Date constitute all of the Patents Controlled by Intrexon as of such date that are necessary for the development, manufacture or Commercialization of ZIOPHARM Products;

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

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

(v) To Intrexon's knowledge, except as otherwise disclosed to ZIOPHARM prior to the Effective Date, the use of the Intrexon Materials in connection with the Existing Cancer Programs as of the Effective Date and the conduct of the Existing Cancer Programs as contemplated as of the Effective Date, does not (A) infringe any claims of any Patents of any Third Party, or (b) misappropriate any Information of any Third Party;

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

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

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

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

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

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

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

(xiii) Except as otherwise disclosed in writing to ZIOPHARM, Intrexon: (A) is in material compliance with all statutes, rules or regulations applicable to the ownership, testing, development, manufacture, packaging, processing, use, distribution, marketing, labeling, promotion, sale, offer for sale, storage, import, export or disposal of any product that is under

development, manufactured or distributed by Intrexon in the Field ("**Applicable Laws**"); (B) has not received any FDA Form 483, notice of adverse finding, warning letter, untitled letter or other correspondence or notice from the United States Food and Drug Administration (the "**FDA**") or any other federal, state, local or foreign governmental or regulatory authority alleging or asserting material noncompliance with any Applicable Laws or any licenses, certificates, approvals, clearances, authorizations, permits and supplements or amendments thereto required by any such Applicable Laws ("**Authorizations**"), which would not, individually or in the aggregate, result in a material adverse effect; (C) possesses all material Authorizations necessary for the operation of its business as described in the Field and such Authorizations are valid and in full force and effect and Intrexon is not in material violation of any term of any such Authorizations; and (D) since January 1, 2008, (1) has not received notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from the FDA or any other federal, state, local or foreign governmental or regulatory authority or third party alleging that any product operation or activity is in material violation of any Applicable Laws or Authorizations and has no knowledge that the FDA or any other federal, state, local or foreign governmental or regulatory authority or third party is considering any such claim, litigation, arbitration, action, suit investigation or proceeding; (2) has not received notice that the FDA or any other federal, state, local or foreign governmental or regulatory authority has taken, is taking or intends to take action to limit, suspend, modify or revoke any material Authorizations and has no knowledge that the FDA or any other federal, state, local or foreign governmental or regulatory authority is considering such action; (3) has filed, obtained, maintained or submitted all material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Applicable Laws or Authorizations and that all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were materially complete and correct on the date filed (or were corrected or supplemented by a subsequent submission); and (4) has not, either voluntarily or involuntarily, initiated, conducted, or issued or caused to be initiated, conducted or issued, any recall, market withdrawal or replacement, safety alert, post sale warning, "dear doctor" letter, or other notice or action relating to the alleged lack of safety or efficacy of any product or any alleged product defect or violation and, to Intrexon's knowledge, no third party has initiated, conducted or intends to initiate any such notice or action. Except to the extent disclosed in writing to ZIOPHARM, since January 1, 2008, Intrexon 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 Intrexon.

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 ZIOPHARM hereunder or Intrexon's ability to perform its obligations hereunder.

**8.3 Warranty Disclaimer**. EXCEPT FOR THE EXPRESS WARRANTIES PROVIDED IN THIS ARTICLE 8 OR IN THE EQUITY AGREEMENTS, 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 ZIOPHARM and its Affiliates and their respective directors, officers, employees, and agents (collectively, the "**ZIOPHARM 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 gross negligence or willful misconduct of Intrexon or any of its Affiliates, or their respective employees or agents, (b) the use, handling, storage or transport of Intrexon Materials by or on behalf of Intrexon or its Affiliates, licensees (other than ZIOPHARM) or sublicensees; or (c) breach by Intrexon of any representation, warranty or covenant in this Agreement. Notwithstanding the foregoing, Intrexon shall not have any obligation to indemnify the ZIOPHARM Indemnitees to the extent that a Claim arises from (i) the gross negligence or willful misconduct of ZIOPHARM or any of its Affiliates, licensees, or sublicensees, or their respective employees or agents; or (ii) a breach by ZIOPHARM of a representation, warranty, or covenant of this Agreement.

**9.2 Indemnification by ZIOPHARM**. ZIOPHARM 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 gross negligence or willful misconduct of ZIOPHARM or any of its Affiliates or their respective employees or agents; (b) the use, handling, storage, or transport of Intrexon Materials by or on behalf of ZIOPHARM or its Affiliates, licensees, or sublicensees; (c) breach by ZIOPHARM or any 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 ZIOPHARM Product by or on behalf of ZIOPHARM or its Affiliates, licensees, or sublicensees. Notwithstanding the foregoing, ZIOPHARM shall not have any obligation to indemnify the Intrexon Indemnitees to the extent that a Claim arises from (i) the gross 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 ZIOPHARM 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 [*****] and shared by the Parties as Allowable Expenses for purposes of calculating Cumulative Product Profit, 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, its 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**. During the term of this Agreement, ZIOPHARM shall maintain in effect and good standing a product liability insurance policy issued by a reputable insurance company in amounts considered standard for the industry. At Intrexon's reasonable request, ZIOPHARM shall provide Intrexon with all details regarding such policy, including without limitation copies of the applicable liability insurance contracts. ZIOPHARM shall use reasonable efforts to include Intrexon as an additional insured on any such policy.

## 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.

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

**(a)** Either Party shall have the right to terminate this Agreement upon written notice to the other Party if the other Party commits any material breach of this Agreement that such breaching Party fails to cure within sixty (60) days following written notice from the nonbreaching Party specifying such breach.

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

**(c)** Intrexon shall have the right to terminate this Agreement under the circumstances set forth in Section 12.8 upon written notice to ZIOPHARM, such termination to become effective immediately upon such written notice.

**(d)** Notwithstanding the foregoing, during the twenty-four (24) month period commencing on the Effective Date, neither Party shall have the right to terminate this Agreement under Section 10.2(a) based on the failure of the other Party to use Diligent Efforts or to comply with any other diligence obligations hereunder (including Section 4.5), nor shall Intrexon have the right to terminate this Agreement under Section 4.5(b).

**10.3 Termination by ZIOPHARM**. ZIOPHARM shall have the right to voluntarily terminate this Agreement in its entirety upon ninety (90) days written notice to Intrexon at any time, provided that such notice may not be given during the twenty four (24) month period commencing on the Effective Date.

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

**(a) Retained Products**. ZIOPHARM shall be permitted to continue the development and commercialization of any ZIOPHARM Product that, at the time of termination, satisfies at least one of the following criteria (a "**Retained Product**"):

(i) is being Commercialized by ZIOPHARM,

(ii) has received regulatory approval,

(iii) is a subject of an application for regulatory approval in the Field that is pending before the applicable regulatory authority, or

(iv) is the subject of at least

(A) an ongoing Phase 2 clinical trial in the Field (in the case of a termination by Intrexon due to a ZIOPHARM uncured breach pursuant to Section 10.2(a) or a termination by ZIOPHARM pursuant to Section 10.3), or

(B) an ongoing Phase 1 clinical trial in the Field (in the case of a termination by ZIOPHARM due to an Intrexon uncured breach pursuant to Section 10.2(a) or a termination by Intrexon pursuant to Section 10.2(b) or 10.2(c)).

Such right to continue development and commercialization shall be subject to ZIOPHARM's full compliance with the payment provisions in Article 5 and all other provisions of this Agreement that survive termination.

**(b) Termination of Licenses**. Except as necessary for ZIOPHARM to continue to develop and commercialize the Retained Products as permitted by Section 10.4(a), all rights and licenses granted by Intrexon to ZIOPHARM under this Agreement shall terminate and shall revert to Intrexon without further action by either Intrexon or ZIOPHARM. ZIOPHARM's 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 ZIOPHARM Products other than the Retained Products shall be referred to herein as the "**Reverted Products**." ZIOPHARM 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 ZIOPHARM 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. ZIOPHARM shall immediately discontinue making any representation regarding its status as a licensee or channel partner of Intrexon with respect to the Reverted Products.

**(d) Intrexon Materials**. ZIOPHARM shall promptly return, or at Intrexon's request, destroy, any Intrexon Materials in ZIOPHARM's possession or control at the time of termination, or other than any Intrexon Materials necessary for the continued development and commercialization of the Retained Products.

**(e) Licenses to Intrexon**. ZIOPHARM is automatically deemed to grant to Intrexon a worldwide, fully paid, royalty-free, exclusive (even as to ZIOPHARM and its Affiliates), irrevocable, license (with full rights to sublicense) under the ZIOPHARM 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 ZIOPHARM in Reverted Products pursuant to Section 10.4(c). ZIOPHARM shall also take such actions and execute such other instruments and documents as may be necessary to document such license to Intrexon.

**(f) Regulatory Filings**. ZIOPHARM 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. ZIOPHARM 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, ZIOPHARM shall provide copies of the portions of such regulatory filings that relate to Reverted Products and shall reasonably cooperate to assist Intrexon in obtaining the benefits of such regulatory approvals with respect to the Reverted Products.

**(g) Data Disclosure**. ZIOPHARM 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 ZIOPHARM 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, ZIOPHARM shall promptly provide to Intrexon copies of all Third-Party agreements under which ZIOPHARM 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, ZIOPHARM shall promptly: (x) with respect to such Third Party licenses relating solely to the applicable Reverted Products, immediately assign (or cause to be assigned), such agreements to Intrexon, and (y) with respect to all other Third Party licenses, at ZIOPHARM's option either assign the agreement or grant (or cause to be granted) to Intrexon a sublicense thereunder of a scope equivalent to that described in Section 10.4(e), provided ZIOPHARM has the ability to assign such agreement to Intrexon or grant a sublicense to Intrexon thereunder. In any case, thereafter Intrexon shall be fully responsible for all obligations due for its actions under the Third Party agreements. Notwithstanding the above, if Intrexon does not wish to assume any financial or other obligations associated with a particular assignment or sublicense, then Intrexon shall so notify ZIOPHARM and ZIOPHARM 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, ZIOPHARM shall transfer to Intrexon, all quantities of Reverted Product (including API or work-in-process) in the possession of ZIOPHARM or its Affiliates. ZIOPHARM 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, ZIOPHARM shall promptly provide to Intrexon copies of all agreements between ZIOPHARM 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, ZIOPHARM shall promptly: (x) with respect to such Third Party agreements relating solely to the applicable Reverted Products, immediately assign (or cause to be assigned), such agreements to Intrexon, and (y) with respect to all other such Third Party agreements, ZIOPHARM shall reasonably cooperate to assist Intrexon in obtaining the benefits of such agreements. ZIOPHARM 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 ZIOPHARM's breach. For the avoidance of doubt, Intrexon shall have no obligation to assume any of ZIOPHARM's obligations under any Third Party agreement.

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

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.

**(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 ZIOPHARM) 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 ZIOPHARM 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 5.5, 5.7, 6.1, 6.2 (with subsection (c) surviving only to the extent relating to Intrexon Patents that are relevant to Retained Products that, to Intrexon's knowledge, are being developed or commercialized at such time, if any), 10.4, and 10.5; Articles 7, 9, 11, and 12; and any relevant definitions in Article 1.

## ARTICLE 11

### DISPUTE RESOLUTION

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

**11.2 Arbitration**. Any dispute, controversy, difference or claim which may arise between the Parties and not from a Committee, out of or in relation to or in connection with this Agreement (including, without limitation, arising out of or relating to the validity, construction, interpretation, enforceability, breach, performance, application or termination of this Agreement) that is not resolved pursuant to Section 11.1 shall, subject to Section 11.10, be settled by binding "baseball arbitration" as follows. Either Party, following the end of the thirty (30) day period referenced in Section 11.1, may refer such issue to arbitration by submitting a written notice of such request to the other Party. Promptly following receipt of such notice, the Parties shall meet and discuss in good faith and seek to agree on an arbitrator to resolve the issue, which arbitrator shall be neutral and independent of both Parties and all of their respective Affiliates, shall have significant experience and expertise in licensing and partnering agreements in the pharmaceutical and biotechnology industries, and shall have some experience in mediating or arbitrating issues relating to such agreements. If the Parties cannot agree on a single arbitrator within fifteen (15) days of request by a Party for arbitration, then each Party shall select an arbitrator meeting the foregoing criteria and the two (2) arbitrators so selected shall select a third arbitrator meeting the foregoing criteria. Within fifteen (15) days after an arbitrator(s) is selected (in the case of the three-person panel, when the third arbitrator is selected), each Party will deliver to both the arbitrator(s) and the other Party a detailed written proposal setting forth its proposed terms for the resolution for the matter at issue (the "**Proposed Terms**" of the Party) and a memorandum (the "**Support Memorandum**") in support thereof. The Parties will also provide the arbitrator(s) a copy of this Agreement, as it may be amended at such time. Within fifteen (15) days after receipt of the other Party's Proposed Terms and Support Memorandum, each Party may submit to the arbitrator(s) (with a copy to the other Party) a response to the other Party's Support Memorandum. Neither Party may have any other communications (either written or oral) with the arbitrator(s) other than for the sole purpose of engaging the arbitrator or as expressly permitted in this Section 11.2; provided that, the arbitrator(s) may convene a hearing if the arbitrator(s) so chooses to ask questions of the Parties and hear oral argument and discussion regarding each Party's Proposed Terms. Within sixty (60) days after the arbitrator's appointment, the arbitrator(s) will select one of the two Proposed Terms (without modification) provided by the Parties that he or she believes is most consistent with the intention underlying and agreed principles set forth in this Agreement. The decision of the arbitrator(s) shall be final, binding, and unappealable. For clarity, the arbitrator(s) must select as the only method to resolve the matter at issue one of the two sets of Proposed Terms, and may not combine elements of both Proposed Terms or award any other relief or take any other action.

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

**11.4 Award**. Any award to be paid by one Party to the other Party as determined by the arbitrator(s) as set forth above under Section 11.2 shall be promptly paid in United States dollars free of any tax, deduction or offset; and any costs, fees or taxes incident to enforcing the award shall, to the maximum extent permitted by law, be charged against the losing Party. Each Party agrees to abide by the award rendered in any arbitration conducted pursuant to this Article

11, and agrees that, subject to the United States Federal Arbitration Act, 9 U.S.C. §§ 1-16, judgment may be entered upon the final award in any United States District Court located in New York and that other courts may award full faith and credit to such judgment in order to enforce such award. The award shall include interest from the date of any damages incurred for breach of the Agreement, and from the date of the award until paid in full, at a rate fixed by the arbitrator(s). With respect to money damages, nothing contained herein shall be construed to permit the arbitrator(s) or any court or any other forum to award consequential, incidental, special, punitive or exemplary damages. By entering into this agreement to arbitrate, the Parties expressly waive any claim for consequential, incidental, special, punitive or exemplary damages. The only damages recoverable under this Agreement are direct compensatory damages.

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

**11.6 Injunctive Relief**. Nothing in this Article 11 will preclude either Party from seeking equitable relief or interim or provisional relief from a court of competent jurisdiction, including a temporary restraining order, preliminary injunction or other interim equitable relief, concerning a dispute either prior to or during any arbitration if necessary to protect the interests of such Party or to preserve the status quo pending the arbitration proceeding. Specifically, the Parties agree that a material breach by either Party of its obligations in 3.4 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, 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, and (b) such other and further equitable relief as the court may deem proper under the circumstances. For the avoidance of doubt, nothing in this Section 11.6 shall otherwise limit a breaching Party's opportunity to cure a material breach as permitted in accordance with Section 10.2.

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

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

**11.9 Jurisdiction**. For the purposes of this Article 11, the Parties acknowledge their diversity and agree to accept the jurisdiction of any United States District Court located in New

York for the purposes of enforcing or appealing any awards entered pursuant to this Article 11 and for enforcing the agreements reflected in this Article 11 and agree not to commence any action, suit or proceeding related thereto except in such courts.

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

## ARTICLE 12

## GENERAL PROVISIONS

**12.1 Use of Name**. No right, express or implied, is granted by this Agreement to either Party to use in any manner the name of the other or any other trade name or trademark of the other in connection with the performance of this Agreement.

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

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

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.

| | |
|---|---|
| If to Intrexon: | Intrexon Corporation<br>20358 Seneca Meadows Parkway<br>Germantown, MD 20876<br>Attention: Legal Department<br>Fax: (301) 556-9902 |
| with a copy to: | Cooley LLP<br>3175 Hanover St.<br>Palo Alto, CA 94304<br>Attention: Robert Jones<br>Fax: (650) 849-7400 |
| If to ZIOPHARM: | ZIOPHARM Oncology, Inc.<br>One First Avenue<br>Parris Building, 34<br>Navy Yard Plaza<br>Boston, MA 02129<br>Attention: Chief Executive Officer<br>Fax: (617) 241-2855 |
| with a copy to: | WilmerHale<br>60 State Street<br>Boston, MA 02109<br>Attention: Stuart Falber<br>Fax: (617) 526-5000 |

**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 and the exhibits attached hereto constitute the entire, final, complete and exclusive agreement between the Parties and supersede all previous agreements or representations, written or oral, with respect to the subject matter of this Agreement (including any prior confidentiality agreement between the Parties). All information of Intrexon or ZIOPHARM 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 Nonassignability; 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 nonassigning or nondelegating 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 hereto. Notwithstanding the foregoing, in the event that either Party assigns this Agreement to its successor in interest by way of merger, acquisition, 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)), (a) the intellectual property rights of such successor in interest or any of its affiliates shall be automatically excluded from the rights licensed to the other Party under this Agreement, and (b) such successor in interest may elect by written notice to have the restrictions set forth in Section 3.4 not apply to the activities of such successor in interest (but, for purposes of clarity, such restriction shall in any event continue to apply to the applicable Party and all other Affiliates of such Party not related to such successor in interest). In the event that a successor in interest to ZIOPHARM elects to have the restrictions set forth in Section 3.4 not apply to the activities of such successor in interest, Intrexon shall have the termination right set forth in Section 10.2(c).

**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 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.

**12.12 Counterparts**. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original and all of which shall constitute together the same instrument.

*[Remainder of page intentionally left blank.]*

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

| **INTREXON CORPORATION** | **ZIOPHARM ONCOLOGY, INC.** |
|---|---|
| By: /s/ Randal J. Kirk | By: /s/ Jonathan Lewis |
| Name: Randal J. Kirk | Name: Jonathan Lewis |
| Title: Chief Executive Officer | Title: Chief Executive Officer |

**EXHIBIT A**

**Financial Terms for Calculating Allowable Expenses**

As used herein, the term "operating unit" shall mean the smallest operating unit in which an operating profit and loss statement is prepared for management accounting purposes in the applicable Party's normal accounting procedures, consistently applied within and across its operating units. To the extent certain cost or expense items below are incurred with respect to multiple products and some of such products are not ZIOPHARM Products, then such cost or expense items shall be allocated on a *pro rata* basis based upon net sales of each respective product by the applicable operating unit during the most recent quarter.

**1. COST OF GOODS SOLD**

"**Cost of Goods Sold**" means all Manufacturing Costs that are directly and reasonably attributable to manufacturing of ZIOPHARM Product for commercial sale in the countries where such ZIOPHARM Product has been launched.

**1.1** "**Manufacturing Costs**" means, with respect to ZIOPHARM Products, the FTE costs (under a reasonable accounting mechanism to be agreed upon by the Parties and out-of-pocket costs of a Party or any of its Affiliates incurred in manufacturing such ZIOPHARM Products, including costs and expenses incurred in connection with (1) the development or validation of any manufacturing process, formulations or delivery systems, or improvements to the foregoing; (2) manufacturing scale-up; (3) in-process testing, stability testing and release testing; (4) quality assurance/quality control development; (5) internal and Third Party costs and expenses incurred in connection with qualification and validation of Third Party contract manufacturers, including scale up, process and equipment validation, and initial manufacturing licenses, approvals and inspections; (6) packaging development and final packaging and labeling; (7) shipping configurations and shipping studies; and (8) overseeing the conduct of any of the foregoing. "Manufacturing Costs" shall further include:

**(a)** to the extent that any such ZIOPHARM Product is Manufactured by a Third Party manufacturer, the out-of-pocket costs incurred by such Party or any of its Affiliates to the Third Party for the manufacture and supply (including packaging and labeling) thereof, and any reasonable out-of-pocket costs and direct labor costs incurred by such Party or any of its Affiliates in managing or overseeing the Third Party relationship determined in accordance with the books and records of such Party or its Affiliates maintained in accordance with US GAAP; and

**(b)** to the extent that any such ZIOPHARM Product is manufactured by such Party or any of its Affiliates, direct material and direct labor costs attributable to such ZIOPHARM Product, as well as reasonably allocable overhead expenses, determined in accordance with the books and records of such Party or its Affiliates maintained in accordance with US GAAP.

**2. MARKETING EXPENSES.**

"**Marketing Expenses**" means the sum of Selling Expenses, Marketing Management Expenses, Market and Consumer Research Expenses, Advertising Expenses, Trade Promotion Expenses, and Consumer Promotion Expenses, each of which is specified below, in each case to the extent directly and reasonably attributable to the sale, promotion or marketing of the applicable ZIOPHARM Products in the countries where such ZIOPHARM Product has been launched.

**2.1** "**Selling Expenses**" shall mean all reasonable costs and expenses directly associated with the efforts of field sales representatives with respect to ZIOPHARM Products in the Territory. The costs of detailing sales calls shall be allocated based on field force time at an accounting charge rate reasonably and consistently applied within and across its operating units and which is no less favorable to the ZIOPHARM Products than the internal charge rate used by ZIOPHARM for its own internal cost accounting purposes for products other than ZIOPHARM Products (excluding internal profit margins and markups).

**2.2** "**Marketing Management Expenses**" means all reasonable product management and sales promotion management compensation (including customary bonuses and benefits but excluding stock-based compensation) and departmental expenses, including product related public relations, relationships with opinion leaders and professional societies, health care economics studies, contract pricing and administration, market information systems, governmental affairs activities for reimbursement, formulary acceptance and other activities directly related to the ZIOPHARM Products in the Territory, management and administration of managed care and national accounts and other activities associated with developing overall sales and marketing strategies and planning for ZIOPHARM Products in the Territory.

**2.3** "**Market and Consumer Research Expenses**" means all reasonable compensation (including customary bonuses and benefits but excluding stock-based compensation) and departmental expenses for market and consumer research personnel and payments to Third Parties related to and to the extent use for conducting and monitoring professional and consumer appraisals of existing, new or proposed ZIOPHARM Products in the Territory such as market share services (e.g., IMS data), special research testing and focus groups.

**2.4** "**Advertising Expenses**" shall mean all reasonable costs reasonably incurred for the advertising and promotion of ZIOPHARM Products in the Territory.

**2.5** "**Trade Promotion Expenses**" means the actual and reasonable allowances given to retailers, brokers, distributors, hospital buying groups, etc. for purchasing, promoting, and distribution of ZIOPHARM Products in the Territory. This shall include purchasing, advertising, new distribution, and display allowances as well as free goods, wholesale allowances and reasonable field sales samples (at the out of pocket cost).

**2.6** "**Consumer Promotion Expenses**" means all reasonable expenses associated with programs to promote ZIOPHARM Products directly to the end user in the Territory. This category shall include expenses associated with promoting products directly to the professional community such as professional samples, professional literature, promotional material costs, patient aids and detailing aids.

**3. DISTRIBUTION EXPENSES.**

"**Distribution Expenses**" means the reasonable costs, excluding overhead, incurred by ZIOPHARM that are directly and reasonably allocable to the distribution of a ZIOPHARM Product with respect to a particular country where such ZIOPHARM Product has been launched, excluding any costs included as a deduction in calculating Net Sales.

**4. ADDITIONAL COMMERCIALIZATION EXPENSES.**

"**Additional Commercialization Expenses**" means the sum of Regulatory and Related Costs, Third Party Blocking IP Costs, Patent and Trademark Costs, Product Liability Costs, and Additional Approved Expenses, each of which is specified below, in each case to the extent directly and reasonably attributable to the commercialization of the applicable ZIOPHARM Products.

**4.1** "**Regulatory and Related Costs**" means all reasonable costs and expenses associated with the preparation and filing of marketing and pricing approval applications, and the maintenance of marketing approvals, for ZIOPHARM Products, including (i) fees paid to regulatory authorities directly related to NDAs and Marketing Approvals in the Field, (ii) costs of any regulatory interactions with respect to ZIOPHARM Products, (iii) costs incurred in securing reimbursement approvals from public and private payers, and (iv) costs to establish and maintain a global safety database.

**4.2** "**Third Party Blocking IP Costs**" means royalties, license fees or other payments, as applicable, reasonably allocable to the development, manufacture or Commercialization of ZIOPHARM Products paid or payable to Third Parties to license Blocking Third Party IP owned or controlled by such Third Parties.

**4.3** "**Patent and Trademark Costs**" means all reasonable costs and expenses incurred by ZIOPHARM or its Affiliates in connection with (i) the preparation, filing, prosecution, maintenance and enforcement of ZIOPHARM Program Patents, and (ii) establishing, maintaining and enforcing the Patents and trademarks for ZIOPHARM Products in the Territory.

**4.4** "**Product Liability Costs**" means the reasonable costs associated with (i) any recall in the Territory, including the cost of any investigations or corrective actions, (ii) any Excess Product Liability Costs, and (iii) product liability insurance premiums for policies covering the development, manufacture or Commercialization of ZIOPHARM Products (as described in Section 9.5).

**4.5** "**Additional Approved Expenses**" means any additional costs and/or expenses that are incurred in connection with the commercialization of ZIOPHARM Products and that are approved in advance, in writing, by the Intrexon representatives on the CC.

**5. POST-LAUNCH PRODUCT R&D EXPENSES.**

"**Post-Launch Product R&D Expenses**" means the reasonable costs, excluding administrative expenses and costs that are included within Costs of Goods Sold, of Phase 4

clinical trials and ongoing product support (including manufacturing and quality assurance technical support, and laboratory and clinical efforts directed toward the further understanding of product safety and efficacy) and medical affairs (including regulatory support necessary for product maintenance), in each case that are (a) specifically attributable to a ZIOPHARM Product in the countries of the Territory where such ZIOPHARM Product has been launched and (b) approved by both Parties in writing.

**6. NO DUPLICATION.** No item of cost shall be duplicated in any of the categories comprising Allowable Expenses or in the deductions permitted under Net Sales or Sublicensing Revenue.

**FIRST AMENDMENT TO EXCLUSIVE CHANNEL PARTNER AGREEMENT**

THIS FIRST AMENDMENT is entered into as of this 13th day of September, 2011 and serves to amend the Exclusive Channel Partner Agreement entered into by and between Intrexon Corporation ("Intrexon") and ZIOPHARM Oncology, Inc. ("ZIOPHARM"), on January 6, 2011 (the "Agreement").

WHEREAS, both Intrexon and ZIOPHARM have a mutual interest in amending the Agreement.

NOW, THEREFORE, the first sentence of Section 2.3(a) of the Agreement is hereby replaced in its entirety with the following:

"For the JSC, each Party shall designate an equal number of representatives who are employees of such Party or an Affiliate of such Party (not to exceed four (4) for each Party) with appropriate expertise to serve as members of the JSC. For Committees other than the JSC, each Party shall designate an equal number of representatives who are employees of such Party or an Affiliate of such Party (not to exceed three (3) for each Party) with appropriate expertise to serve as members of such Committee; provided, however, the Parties may, from time to time, increase the total number of representatives of one or more of such Committees by one (1) additional representative per Party (not to exceed four (4) for each Party) by agreement in writing, without further amendment of this Agreement. Third Security shall be deemed to be an Affiliate of Intrexon solely for purposes of this Section 2.3)."

All other terms and conditions of the Agreement remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have duly executed this First Amendment to Exclusive Channel Partner Agreement by authorized representative as of the date written above.

INTREXON CORPORATION

By: /s/ Glenn Nedwin
Name: Glenn Nedwin, Ph.D.
Title: President, Human Therapeutics Division

ZIOPHARM ONCOLOGY, INC.
By: /s/ Jonathan Lewis
Name: Jonathan Lewis, MD, PhD
Title: Chief Executive Officer

**Exhibit 10.4**

**EXECUTION VERSION**

# STOCK PURCHASE AGREEMENT

**THIS AGREEMENT** ("**Agreement**") is made and entered into as of January 6, 2011 (the "**Effective Date**"), by and among ZIOPHARM Oncology, Inc., a Delaware corporation (the "**Company**"), and Intrexon Corporation, a Virginia corporation ("**Intrexon**").

**A.** Concurrently with the execution of this Agreement, the Company is entering into a Channel Partner Agreement with Intrexon (the "**Channel Agreement**"), pursuant to which Intrexon is licensing the rights to certain technology to the Company; and

**B.** In partial consideration of Intrexon's license under the Channel Agreement, the Company has agreed to issue and sell to Intrexon certain shares of the Company's common stock in accordance with the terms and conditions of this Agreement.

**C.** In connection with the entry into the Channel Agreement, the Company has also agreed to issue and sell to Intrexon, and Intrexon has agreed to purchase from the Company, certain shares of the Company's common stock for cash consideration in accordance with the terms and conditions of this Agreement, namely the Upfront Purchase Shares (as defined herein) and up to an additional $50,000,000 in shares of the Company's common stock pursuant to the Equity Purchase Commitment (as hereinafter defined).

**D.** At the First Tranche Closing (as hereinafter defined), the parties have agreed to enter into a Registration Rights Agreement in the form attached hereto as Exhibit A (the "**Rights Agreement**").

## AGREEMENT

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

### SECTION 1. AUTHORIZATION OF SALE OF SHARES.

**1.1** Authorization. Subject to the terms and conditions of this Agreement, the Company has authorized the sale and issuance to Intrexon of up to the following number of shares (the "**Shares**") of the Company's common stock, par value $0.001 per share ("**Common Stock**"):

**(a)** that number of Shares (the "**First Tranche Shares**") equal to 7.495% of the number of shares of Common Stock issued and outstanding immediately prior to the First Tranche Closing (as hereinafter defined and, for purpose of clarity, excluding the Upfront Purchase Shares);

**(b)** that number of Shares (the "**Second Tranche Shares**") equal to the lesser of (i) the number of shares of Common Stock comprising the First Tranche Shares (subject to appropriate adjustment for stock splits, dividends, combinations, recapitalizations and the like affecting the Common Stock) (ii) subject to Section 6.8 hereof, the maximum number of Shares

that the Company may issue to Intrexon that will not result in the sum of the Upfront Purchase Shares, First Tranche Shares and Second Tranche Shares exceeding 19.99% of the number of shares of Common Stock of the Company issued and outstanding immediately prior to the First Tranche Closing or (iii) subject to Section 6.10 hereof, the maximum number of Shares that the Company may issue to Intrexon and its Affiliates (as defined in Section 405 of the Securities Act (as defined below)) that will not result in a change of control of the Company within the meaning of and in contravention to Rule 5635(b) of the Nasdaq Stock Market listing rules (or its successor); and

**(c)** that number of Shares (the "**Upfront Purchase Shares**") equal to 5.00% of the number of shares of Common Stock issued and outstanding immediately prior to the First Tranche Closing (and for purposes of clarity, excluding the First Tranche Shares).

The number of Shares to be issued under each of subsections (a), (b) and (c) of this Section 1.1 shall be rounded down to the nearest whole share.

**1.2** Capital Adjustments. If after the date hereof (i) the outstanding shares of the Company's Common Stock shall be subdivided or split into a greater number of shares or a dividend in Common Stock shall be paid in respect of such Common Stock or (ii) the outstanding shares of Common Stock are combined, then all share quantities in this Agreement not yet issued shall be appropriately adjusted to reflect such stock split, stock dividend or conjunction. If after the date hereof (i) the Company shall pay a dividend in securities of the Company (other than in Common Stock) or of other property (including cash) on the Common Stock, or (ii) there shall occur any merger, consolidation, capital reorganization or reclassification in which the Common Stock is converted or exchanged for securities, cash or other property, the class or series of stock constituting the Common Stock for purposes of this Agreement, shall be appropriately adjusted to reflect such other dividend, merger, consolidation, capital reorganization or reclassification. After any event referenced in clauses (i) through (ii) of the immediately preceding sentence is consummated, if applicable, all references herein to the Company's Common Stock shall be deemed to refer to the capital stock or property (including cash) into or for which the Common Stock was converted or exchanged, with the necessary changes in detail.

**1.3** Company Sale. In the event that the Company consummates a Company Sale (as defined below) prior to the Second Tranche Closing, Intrexon shall be entitled to receive, upon the Second Tranche Closing and as the Second Tranche Shares, the securities, cash or other property that it would have received upon conversion or exchange of the Second Tranche Shares if immediately prior to the consummation of the Company Sale the Company had calculated and issued the Second Tranche Shares to Intrexon under Sections 1.1(b) and 2.2(b).

**1.4** Second Tranche Adjustment. In the event the number of Second Tranche Shares issued by the Company at the Second Tranche Closing shall, in accordance with Section 1.1(b), be less than the number of shares of Common Stock comprising the First Tranche Shares (subject to appropriate adjustment for stock splits, dividends, combinations, recapitalizations and the like affecting the Common Stock) (with such shortfall being referred to herein as the "Second Tranche Shortfall"), and if within 18 months subsequent to the Second Tranche Closing the facts and circumstances applicable to such issuance have changed such that a greater number of

Second Tranche Shares would have been issuable in accordance with Section 1.1(b) had the Second Tranche Closing occurred at a later date within such 18 month period (including, without limitation, the receipt of stockholder approval for such issuance in accordance with Section 6.10), then the Company shall issue to Intrexon an additional number of shares equal to the number of shares comprising the Second Tranche Shortfall (subject to appropriate adjustment for stock splits, dividends, combinations, recapitalizations and the like affecting the Common Stock) or such lesser amount as may be permitted in accordance with Section 1.1(b), for the purchase price per share for the Second Tranche Shares specified in Section 2.1(b).

**SECTION 2. CLOSING AND DELIVERY**

**2.1** Sale and Purchase Price of Shares. Subject to the terms and conditions of this Agreement and in reliance upon the representations, warranties and agreements contained herein, the Company will issue and sell to Intrexon, and Intrexon will purchase from the Company, at each of the First Tranche Closing and the Second Tranche Closing, the applicable number of Shares, at a purchase price as follows:

**(a)** the purchase price per share for the First Tranche Shares shall be equal to the par value of each such share at such time, which price shall be deemed paid in partial consideration for the execution and delivery by Intrexon of the Channel Agreement;

**(b)** the purchase price per share for the Second Tranche Shares shall be equal to the par value of each such share at such time, which price shall be deemed paid in partial consideration for the execution and delivery by Intrexon of the Channel Agreement; and

**(c)** the purchase price per share for the Upfront Purchase Shares shall be $4.80 per share, which price shall be paid by Intrexon in cash and delivered by wire transfer of same day funds at the First Tranche Closing to an account designated by the Company.

**2.2** Closings. The closings of the purchase and sale of the Shares to be issued pursuant to this Agreement shall be held at the offices of WilmerHale, 60 State Street, Boston, Massachusetts 02109 or at such other place as the Company and Intrexon may agree, as follows:

**(a)** the closing of the purchase and sale of the First Tranche Shares and the Upfront Purchase Shares will occur, subject to the conditions set forth in Section 8 hereof and applicable to the First Tranche Closing, on the fourth business day following the date hereof or on such other date as Intrexon and the Company may agree upon (the "**First Tranche Closing**"); and

**(b)** the closing of the purchase and sale of the Second Tranche Shares will occur, subject to the conditions set forth in Section 8 hereof and applicable to the Second Tranche Closing, on the earlier of (i) the tenth business day following the dosing of the first patient in any Phase II Clinical Trial conducted by the Company of a ZIOPHARM Product (as defined in the Channel Agreement), and (ii) such other date as Intrexon and the Company may agree (the "**Second Tranche Closing**"). For the purposes of this Agreement, "**Phase II Clinical Trial**" shall mean a human clinical trial of a product candidate conducted in the United States, the principal purpose of which is to evaluate the effectiveness of such product candidate in the target patient population, as described in 21 C.F.R. § 312.21(b), or a similar clinical study as the Company and Intrexon may mutually agree upon that is prescribed by the applicable regulatory authority in a country other than the United States.

Each of the First Tranche Closing and the Second Tranche Closing are collectively hereinafter referred to as the "**Closings**" and individually as a "**Closing**".

**2.3** Delivery of the Shares. Promptly following a Closing, the Company shall deliver to Intrexon a certificate representing the number of Shares purchased at such Closing, registered in the name of Intrexon.

**SECTION 3. REPRESENTATIONS AND WARRANTIES OF THE COMPANY.**

Subject to and except as set forth in the SEC Documents or on the Schedule of Exceptions which is arranged in sections corresponding to the sub-section numbered provisions contained below in this Section, the Company hereby represents and warrants to, and covenants with, 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 Delaware 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. 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 and sell the Shares in accordance with the terms hereof. The execution, delivery and performance of this Agreement by the Company and the consummation by it of the transactions contemplated hereby have been duly and validly authorized by all necessary corporate action, and no further consent or authorization of the Company, its board of directors or stockholders is required, except pursuant to Section 7. 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 First Tranche Shares, Second Tranche Shares and Upfront Purchase Shares in a manner consistent with and that meets the requirements of Section 203(a)(1) of the Delaware General Corporation Law.

**3.3** Issuance of Shares. The Shares to be issued and sold hereunder have been duly authorized by all necessary corporate action and, when paid for and 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, 48,466,561 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 Amended and Restated Certificate of Incorporation or Bylaws, each as amended to date, (ii) conflict with, or constitute a default (or an event which with notice or lapse of time or both would become a default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, any agreement, mortgage, deed of trust, indenture, note, bond, license, lease agreement, instrument or obligation to which the Company is a party or by which the Company's properties or assets are bound, or (iii) result in a violation of any federal, state, local or foreign statute, rule, regulation, order, judgment or decree (including federal and state securities laws and regulations) applicable to the Company or by which any property or asset of the Company is bound or affected, except for such conflicts, defaults, terminations, amendments, acceleration, cancellations and violations as would not, individually or in the aggregate, have a Material Adverse Effect. The Company is not required under federal, state, foreign or local law, rule or regulation to obtain any consent, authorization or order of, or make any filing or registration with, any court or governmental agency in order for it to execute, deliver or perform any of its obligations under this Agreement or issue and sell the Shares in accordance with the terms hereof (other than any filings, consents and approvals which may be required to be made by the Company under applicable state and federal securities laws, rules or regulations prior to or subsequent to the Closing).

**3.5** Commission Documents, Financial Statements. The Common Stock of the Company is registered pursuant to Section 12(b) of the Exchange Act. During the two year period preceding the First Tranche Closing Date, 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 the date hereof, the Company meets the "registrant

eligibility" requirements set forth in the general instructions to Form S-3 to enable the registration of its Common Stock. As of their respective dates, the financial statements of the Company included in the Commission Documents complied in all material respects with applicable accounting requirements and the published rules and regulations of the Commission or other applicable rules and regulations with respect thereto. Such financial statements have been prepared in accordance with generally accepted accounting principles applied on a consistent basis during the periods involved (except (i) as may be otherwise indicated in such financial statements or the notes thereto or (ii) in the case of unaudited interim statements, to the extent they may not include footnotes or may be condensed or summary statements), and fairly present in all material respects the consolidated financial position of the Company as of the dates thereof and the results of operations and cash flows for the periods then ended (subject, in the case of unaudited statements, to normal year-end audit adjustments).

**3.6** Accountants. Caturano and Company, Inc. (formerly Caturano and Company, 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, 2009, 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**"). Except as described in the SEC Documents and as preapproved in accordance with the requirements set forth in Section 10A of the Exchange Act, to the Company's knowledge, Caturano and Company, Inc. has not engaged in any non-audit services prohibited by subsection (g) of Section 10A of the Exchange Act on behalf of the Company.

**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** Corporate Governance. The Company's board of directors meets the independence requirements of, and has established an audit committee that meets the independence requirements of, the rules and regulations of the Commission and the Nasdaq Capital Market. The Audit Committee has reviewed the adequacy of its charter within the past 12 months.

**3.9** 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.

**3.10** No Material Adverse Change. Except as disclosed in the Commission Documents, since December 31, 2009, 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.

**3.11** No Undisclosed Events or Circumstances. Except as disclosed in the Commission Documents, since December 31, 2009, 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.

**3.12** 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.

**3.13** 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, except in each case for such defaults or violations as would not have a Material Adverse Effect.

**3.14** Intellectual Property

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

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

**3.15** FDA Compliance.

**(a)** Except as described in the Commission Documents, the Company: (i) is in material compliance with all statutes, rules or regulations applicable to the ownership, testing, development, manufacture, packaging, processing, use, distribution, marketing, labeling, promotion, sale, offer for sale, storage, import, export or disposal of any product that is under development, manufactured or distributed by the Company ("*Applicable Laws*"); (ii) has not received any FDA Form 483, notice of adverse finding, warning letter, untitled letter or other correspondence or notice from the U.S. Food and Drug Administration (the "*FDA*") or any other federal, state, local or foreign governmental or regulatory authority alleging or asserting material noncompliance with any Applicable Laws or any licenses, certificates, approvals, clearances, authorizations, permits and supplements or amendments thereto required by any such Applicable Laws ("*Authorizations*"), which would not, individually or in the aggregate, result in a Material Adverse Effect; (iii) possesses all material Authorizations necessary for the operation of its business as described in the Commission Documents and such Authorizations are valid and in full force and effect and the Company is not in material violation of any term of any such Authorizations; and (iv) since January 1, 2008: (A) has not received notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from the FDA or any other federal, state, local or foreign governmental or regulatory authority or third party alleging that any product operation or activity is in material violation of any Applicable Laws or

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

**(b)** Since January 1, 2008, and except to the extent disclosed in the Commission Documents, the Company has not received any notices or correspondence from the FDA or any other federal, state, local or foreign governmental or regulatory authority requiring the termination, suspension or material modification of any studies, tests or preclinical or clinical trials conducted by or on behalf of the Company.

**3.16** 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.

**3.17** 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 Delaware. 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.

**3.18** Listing and Maintenance Requirements. The Company is in compliance with the requirements of the Nasdaq Capital Market for continued listing of the Company common stock thereon and has not received any notification that, and has no knowledge that Nasdaq Capital Market is contemplating terminating such listing. The issuance and sale of the Shares hereunder does not contravene the rules and regulations of the Nasdaq Capital Market in any material respect.

**3.19** 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 First Tranche Shares, Second Tranche Shares and Upfront Purchase 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 sale of the Shares by the Company to Intrexon pursuant to this Agreement will be exempt from the registration requirements of the Securities Act.

**3.20** No Manipulation of Stock. The Company has not taken and will not, in violation of applicable law, take, 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.

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

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

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

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.

**SECTION 5. 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 and sale to Intrexon of the Shares and shall terminate two years after the First Tranche Closing, provided, however, 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 Shares sold hereunder.

**SECTION 6. COVENANTS.**

**6.1** Notifications.

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

**(b)** During the period prior to the Second Tranche Closing, each party shall promptly notify the other of any action, suit or proceeding that is instituted or specifically threatened in writing against such party to restrain, prohibit or otherwise challenge the legality of any transaction contemplated by this Agreement.

**(c)** Information received by Intrexon pursuant to this Section 6.1 shall be considered "Confidential Information" as such term is defined in the Channel Agreement and Intrexon agrees to treat such information in accordance with the provisions of Article 7 of the Channel Agreement.

**6.2** Compliance. The Company shall use commercially reasonable best efforts to (i) cause the Common Stock to continue to be registered under the Exchange Act, file all periodic reports thereunder and continue the listing or trading of the Common Stock on the Nasdaq Capital Market or any successor market in good standing and to comply in all material respects with all applicable rules and regulations of the Commission and all reporting requirements under the rules and regulations of the Exchange Act and (ii) to satisfy the current public information requirement of Rule 144, in each case for so long as and at all times during which Intrexon holds any Shares.

**6.3** Use of Proceeds. The Company shall apply the proceeds from the sale of the Shares hereunder to ongoing operations, or for such other uses as determined by the Company's board of directors.

**6.4** Best Efforts. Each party will use its reasonable best efforts to satisfy in a timely fashion each of the conditions to be satisfied by it under Section 8 of this Agreement.

**6.5** Press Release. 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. The Company shall provide Intrexon with a reasonable opportunity to review and comment on the press release.

**6.6** Board Representation; Observer Rights.

**(a)** At or prior to the First Tranche Closing, the Company shall cause Randal J. Kirk to be appointed a director of the Company to fill the vacancy created on the Company's board of directors by the resignation of George B. Abercrombie (or, if such vacancy has otherwise been eliminated, shall create another vacancy by increasing the authorized size of the Company's board of directors, which vacancy Mr. Kirk shall instead be appointed to fill). The Company shall, at each annual or special meeting of stockholders of the Company at which directors are to be elected, nominate and recommend for election an individual designated by Intrexon to serve as a member of the board of directors of the Company (with Mr. Kirk being the initial designee); provided however that the Company shall only be obligated hereunder to nominate such individuals as the Company's Board of Directors determines, in its sole discretion and acting reasonably and in accordance with its fiduciary duties, to be a suitable candidate (it being understood and agreed that Mr. Kirk is a suitable candidate). Upon the death, disability, retirement, resignation or other removal of the director designated by Intrexon pursuant to this Section 6.6, the Company's board of directors shall as promptly as practicable elect and appoint another individual designated by Intrexon as a director to fill the vacancy so created; provided however that the Company shall only be obligated hereunder to nominate such individuals as the Company's Board of Directors determines, in its sole discretion and acting reasonably and in accordance with its fiduciary duties, to be a suitable candidate. If the individual designated by Intrexon and nominated by the Company to serve as a member of the Board of Directors of the Company is, for any reason, not elected to the Company's Board of Directors by the stockholders of the Company, then, at Intrexon's election, such designee shall be entitled to attend all meetings of the Company's Board of Directors and committees thereof as an observer (with no power to vote on any matter before the board of directors) and shall be entitled to

receive copies of all materials provided to members of the Company's Board of Directors; provided that such designee enters into a confidentiality agreement with the Company in a form reasonably satisfactory to the Company; and provided, further, that the Company reserves the right to (i) exclude such designee from access to any Board of Directors' material or meeting or portion thereof if the Company believes that such exclusion is reasonably necessary to preserve the attorney-client privilege, to protect highly confidential information or for other similar reasons, or if the Company believes in good faith that such designee has a conflict of interest, (ii) at the discretion of the applicable committee, exclude such designee from access to any meeting materials or meeting (or portion thereof) of the nominating committee of the Company's Board of Directors, compensation committee of the Company's Board of Directors, audit committee of the Company's Board of Directors and any other committee of the Company's Board of Directors performing similar functions or which the listing rules of the Nasdaq Stock Market require to have such discretion.

**(b)** If, and for so long as, Intrexon owns twenty percent or more of the issued and outstanding stock of the Company, Intrexon shall have the right to designate a second director for nomination and election to the Company's board of directors, provided such director shall not be an officer, director or employee of Intrexon or Third Security, LLC and shall qualify as an "independent director" under the listing standards of the Nasdaq Stock Market (or such other exchange on which the Company's stock may be listed); provided however that the Company shall only be obligated hereunder to nominate or elect such individual as the Company's Board of Directors determines, in its sole discretion and acting reasonably and in accordance with its fiduciary duties, to be a suitable candidate; and provided further, that such right to designate a second director for nomination and election to the Company's board of directors shall not apply to the extent that Intrexon's nominees under Section 6.6(a) and (b) would constitute nominations for more than one-third of the Company's authorized number of directors, it being acknowledged that nothing herein shall require the Company to increase the size of its board of directors for such purpose. Upon any such initial designation, the Company shall cause such designee to be appointed a director of the Company to fill an existing vacancy, or, if no vacancies exist on the Company's board of directors, the Company shall increase the authorized size of the Company's board of directors by one director and the Company shall then cause such designee to be appointed a director of the Company to fill such newly created vacancy. The Company shall, at each annual or special meeting of stockholders of the Company at which directors are to be elected, nominate and recommend for election such second individual designated by Intrexon to serve as a member of the board of directors of the Company. Upon the death, disability, retirement, resignation or other removal of the director designated by Intrexon pursuant to this Section 6.6(b), the Company's board of directors shall as promptly as practicable elect and appoint another individual designated by Intrexon as a director to fill the vacancy so created.

**(c)** Subject to Section 10.14, Intrexon's rights and the Company's obligations under this Section 6.6 shall terminate upon the termination of the Channel Agreement.

**6.7** No Poison Pill. The Company will not adopt any stockholder rights plan, "poison pill" or similar arrangement, or adopt any anti-takeover provisions under its Charter documents, that would trigger any right, obligation or event as a result of the issuance of the Shares hereunder to Intrexon or Intrexon's ownership of such Shares, or the accumulation of shares of Common Stock acquired in the market by Intrexon or its affiliates, provided that Intrexon complies with Section 6.9 below.

**6.8** No Reduction in Outstanding Number of Shares. Prior to the earlier of (i) the issuance of the Second Tranche Shares and (ii) the fifth year anniversary of the date hereof, the Company shall take no action that would reduce the number of its issued and outstanding shares of Common Stock (such as a repurchase or redemption thereof except in the context of a repurchase or forfeiture of restricted stock issued to an employee, officer, director, consultant or advisor) such that the sum of the First Tranche Shares, the Upfront Purchase Shares and 7.495% of the number of shares of Common Stock issued and outstanding immediately prior to the First Tranche Closing (which for clarity equals the number of First Tranche Shares) (subject to appropriate adjustment for stock splits, dividends, combinations, recapitalizations and the like affecting the Common Stock) would, at the time of the Second Tranche Closing, exceed 19.99% of the issued and outstanding number of shares of Common Stock of the Company, unless the Company had first obtained the approval of its stockholders for the issuance at the Second Tranche Closing of Shares in an amount equal to 7.495% of the number of shares of Common Stock issued and outstanding immediately prior to the First Tranche Closing (subject to appropriate adjustment for stock splits, dividends, combinations, recapitalizations and the like affecting the Common Stock) or such stockholder approval is not required under the Nasdaq Stock Market listing requirements in order to effect such full issuance in compliance therewith.

**6.9** Standstill Provision.

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

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

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

**(iii)** otherwise act, alone or in concert with others, to seek to control or influence the management, Board of Directors or policies of the Company (except as contemplated by Section 6.6 of this Agreement, and provided further that nothing herein shall limit the ability of the directors nominated to the Board of Directors by Intrexon from fully exercising their rights and duties as directors of the Company, which shall include the ability, in such capacity, to freely communicate with the executive management of the Company and its board of directors);

**(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 6.9; 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 6.9 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 6.9(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 6.9;

**(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 6.9(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 6.9;

**(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 6.9(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.

Notwithstanding any of the foregoing provisions of this Section 6.9, the Company further agrees that nothing herein shall limit the ability of Mr. Kirk (or, if not Mr. Kirk, Intrexon's designee to the Company's board of directors pursuant to Section 6.6(a)) 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 to the extent that such proposal and/or advocacy is made in his (or her) capacity as a director of the Company and in the exercise of his (or her) rights and duties as a director of the Company.

**6.10** Stockholder Approval and Subsequent Issuance. In the event the Company determines that a Second Tranche Shortfall will occur, then the Company shall (i) at its next annual meeting of stockholders after the date of such determination, hold a vote with respect to the issuance by the Company to Intrexon of an amount of Shares equal to the number of shares comprising the Second Tranche Shortfall (subject to appropriate adjustment for stock splits, dividends, combinations, recapitalizations and the like affecting the Common Stock); (ii) solicit the approval of its stockholders with respect to such issuance, (iii) recommend that its stockholders approve such issuance and, (iv) if requisite stockholder approval is obtained therefor in accordance with the Nasdaq Stock Market listing rules, effect such issuance in accordance with Section 1.4.

**SECTION 7. EQUITY PURCHASE COMMITMENT**

**7.1** Intrexon Commitment. Subject to Section 7.2, if requested by the Company, Intrexon will participate in each Qualified Financing (as hereinafter defined) conducted by Company and will purchase as part of, or in connection with, such Qualified Financing an amount of Common Stock or other Company securities equal to 19.99% of the number of shares of Common Stock (or other Company securities) issued and sold by the Company in the Qualified Financing (excluding the securities sold pursuant to this Section 7.1) or, in the case of a Qualified Financing that is completed following the two year anniversary of the date of the Channel Agreement, a lesser number of shares of Common Stock (or other Company securities) having a purchase price in such Qualified Financing equal to 50% of the Use of Proceeds Commitment Amount (as hereinafter defined) (collectively, the "**Equity Purchase Commitment**"), provided, however, that in no event shall Intrexon have any obligation to purchase more than a total of $50,000,000 of Common Stock or other Company securities pursuant to this Section 7. For the purposes of this Section 7, a "**Qualified Financing**" shall mean a sale by the Company of Common Stock, or equity securities convertible into Common Stock, in a public or private offering, raising gross proceeds of at least $10,000,000 where the shares sold are either registered under the Securities Act on issuance, or the Company agrees to register such shares following the issuance of such shares. The price per share paid by Intrexon in any such Qualified Financing shall be the same as that paid by the other investors in such Qualified Financing, and Intrexon shall receive securities of the same type and with the same rights, preferences and privileges as the other investors in such Qualified Financing, including, for example, any warrant coverage, subject to the execution by Intrexon of the investment documents entered into by the other investors in the Qualified Financing. In case the Qualified Financing is for convertible debt instruments of the Company or non-convertible preferred stock of the Company and the Company requests that Intrexon participate in the Qualified Financing, then notwithstanding the foregoing, Intrexon shall not be required to purchase such securities pursuant to this Section 7.1, but may, at its election, do so, and if so elected by Intrexon, such purchase(s) shall be deemed part of the Equity Purchase Commitment.

In the event that the Qualified Financing is a public offering made pursuant to a registration statement filed with the Commission pursuant to the Securities Act:

**(a)** Upon receipt of the prospectus and other offering documents prepared by the Company in connection with such public offering, Intrexon shall be under no obligation to

participate in such public offering but may, at its election, do so up to the Equity Purchase Commitment calculated based on the amount raised in such public offering. Upon such election, and subject to Section 7.1(b), the Company shall permit Intrexon to participate in such public offering in the amount elected by Intrexon in accordance with the preceding sentence.

**(b)** Unless Intrexon elects to participate in such public offering in the full amount of its Equity Purchase Commitment (calculated based on the amount raised in such public offering) and/or counsel to the Company or counsel to any underwriter in such public offering advises the Company that such inclusion is not permissible under and in compliance with applicable securities laws (including without limitation Section 5 of the Securities Act), the offering and sale of securities to Intrexon pursuant to this Section 7 shall be made by the Company in a concurrent private placement and not in such public offering. In any such private placement: (i) the offer of the securities in such private placement shall be made on the same terms and conditions as the offer of the securities in the public offering, (ii) the closing of the private placement shall occur concurrently with the closing of the Qualified Financing, (iii) the securities offered and sold to Intrexon in the private placement shall be deemed to have been issued in such Qualified Financing for the purpose of calculating Intrexon's purchase obligation, and (iv) the Company shall provide registration rights similar to those provided in the Rights Agreement with respect to the securities purchased in the private placement.

**7.2** Conditions Precedent to Equity Purchase Commitment. Notwithstanding the foregoing, Intrexon shall not be obligated to purchase shares of the Company's Common Stock pursuant to this Section 7 (a) unless the Company shall then be in substantial compliance with its obligations under the Channel Agreement, and such agreement shall not have been terminated, and (b) with respect to a Qualified Financing that is completed following the one year anniversary of the date of the Channel Agreement, the Company shall have confirmed in writing to Intrexon the Company's intent that an amount equal to 40% of the net proceeds (the "**Use of Proceeds Commitment Amount**") from the Qualified Financing shall have been spent, or in the next year will be spent, by the Company under the Channel Agreement.

**SECTION 8. CONDITIONS TO CLOSING.**

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

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

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

**(c)** Delivery of Purchase Price. With respect only to the Company's obligation to issue and sell the Upfront Purchase Shares, the cash purchase price for the Upfront Purchase Shares shall have been delivered to the Company on the Closing Date.

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

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

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

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

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

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

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

**(d)** No Suspension, Etc. Trading in the common stock shall not have been suspended by the Commission or the Nasdaq Capital Market.

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

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

**(g)** Execution of Rights Agreement. On the First Tranche Closing Date, each party shall have delivered its signature to the Rights Agreement to the other party, and such agreement shall be in full force and effect as of the Closing Date.

**(h)** Opinion. Counsel for the Company shall have delivered to Purchaser opinion letters containing legal opinions substantially in the form attached hereto as Exhibit B.

**(i)** Officer's Certificate. On each Closing, the Company shall have delivered to Intrexon a certificate signed by the chief executive officer on behalf of the Company (the "**Officer's Certificate**"), dated as of such Closing, confirming on behalf of the Company the conditions precedent set forth in paragraphs (a), (b), (d), (e), (f), (j) and (k) of this Section 8.2 as of such Closing, and attaching and certifying a copy of the resolutions of the Company's board of directors referred to in the last sentence of Section 3.2.

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

**(k)** Board Appointment. With respect to the First Tranche Closing, the authorized size of the Company's board of directors shall have been set at a membership not exceeding nine (9) in number and Randal J. Kirk shall have been appointed a director of the Company.

**SECTION 9. NOTICES.**

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

If to the Company:
ZIOPHARM Oncology, Inc.
1180 Avenue of the Americas
Suite 1920
New York, NY 10036
Attention: Chief Executive Officer
Fax No.: (646) 214-0711

with copies (which copies shall not constitute notice to the Company) to:
Maslon Edelman Borman & Brand, LLP
3300 Wells Fargo Center
90 South 7th Street
Minneapolis, MN 55402
Attention: Alan M. Gilbert
Fax No.: (612) 642-8381

If to Intrexon:

Intrexon Corporation
20358 Seneca Meadows Parkway
Germantown, MD 20876
Attention: Legal Department
Fax No.: (301) 556-9902

with copies (which copies shall not constitute notice to Intrexon) to:

Cooley LLP
3175 Hanover Street
Palo Alto, CA 94304
Attention: Robert Jones
Fax No.: (650) 849-7400

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 10. MISCELLANEOUS.**

**10.1** 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.

**10.2** 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.

**10.3** 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.

**10.4** 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.

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

**10.6** Counterparts. This Agreement may be executed in two or more counterparts, 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.

**10.7** Successors and Assigns. Except as otherwise expressly provided herein, the provisions hereof shall inure to the benefit of, and be binding upon, the successors, assigns, heirs, executors and administrators of the parties hereto, provided that Intrexon shall not assign its rights or obligations hereunder unless Intrexon assigns such rights in whole and not in part to an assignee of such rights and obligations which shall agree in writing with the Company to be bound by this Agreement and that Intrexon's rights under Sections 6.7, 6.8 and 6.9 and obligations under Section 7 shall not be assignable.

**10.8** 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.

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

**10.10** Entire Agreement. This Agreement (including the Schedule of Exceptions), the Channel Agreement, the Rights Agreement and other documents 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.

**10.11** 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.

**10.12** 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.

**10.13** Further Assurances. From and after the date of this Agreement, upon the reasonable request of Intrexon or the Company, the Company and Intrexon shall execute and deliver such instruments, documents and other writings as may be reasonably necessary or desirable to confirm and carry out and to effectuate fully the intent and purposes of this Agreement.

**10.14** Company Sale. Upon the consummation of a Company Sale, the Company's obligations under Sections 1.4, 6 and 7 shall terminate and be of no further force or effect. For purposes of this Agreement, a "Company Sale" shall mean a merger or consolidation in which (i) the Company is a constituent party, or (ii) a subsidiary of the Company is a constituent party and the Company issues shares of its capital stock pursuant to such merger or consolidation, except in the case of either clause (i) or (ii) any such merger or consolidation involving the Company or

a Company subsidiary in which the shares of capital stock of the Company outstanding immediately prior to such merger or consolidation continue to represent, or are converted into or exchanged for shares of capital stock which represent, immediately following such merger or consolidation, more than 50% by voting power of the capital stock of (A) the surviving or resulting corporation or (B) if the surviving or resulting corporation is a wholly owned subsidiary of another corporation immediately following such merger or consolidation, the parent corporation of such surviving or resulting corporation.

[Remainder of page intentionally left blank.]

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

**ZIOPHARM ONCOLOGY, INC.**

By: /s/ Jonathan Lewis
Name: Jonathan Lewis, MD, PhD
Title: Chief Executive Officer

**INTREXON CORPORATION**

By: /s/ Randal J. Kirk
Name: Randal J. Kirk
Title: Chief Executive Officer

**Exhibit A**

**FORM OF REGISTRATION RIGHTS AGREEMENT**

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.

**Exhibit 10.5**

**EXECUTION VERSION**
**CONFIDENTIAL**

# EXCLUSIVE CHANNEL COLLABORATION AGREEMENT

**THIS EXCLUSIVE CHANNEL COLLABORATION AGREEMENT** (the "**Agreement**") is made and entered into effective as of November 28, 2011 (the "**Effective Date**") by and between **INTREXON CORPORATION**, a Virginia corporation with offices at 20358 Seneca Meadows Parkway, Germantown, Maryland 20876 ("**Intrexon**"), and **ELANCO ANIMAL HEALTH**, a division of Eli Lilly and Company, and its Affiliates, having its principal place of business at 2500 Innovation Way, Greenfield, Indiana 46140 (collectively "**Elanco**"). Intrexon and Elanco may be referred to herein individually as a "**Party**", and collectively as the "**Parties**."

## RECITALS

**WHEREAS,** Intrexon has expertise in and owns or controls proprietary technology relating to the design and production of DNA vectors and their *in vivo* expression for application in life science and industrial fields, including animal science fields; and

**WHEREAS,** Elanco desires to become Intrexon's exclusive channel collaborator with respect to such technology for the purpose of developing product candidates for certain genes in certain companion animal and production animal fields, and Intrexon is willing to enter into such exclusive collaboration with Elanco, all 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** "**Additional Indication**" has the meaning set forth in Section 3.9(a).

**1.2** "**Additional Species**" has the meaning set forth in Section 3.9(a).

**1.3** "**Additional Target**" has the meaning set forth in Section 3.9(a).

**1.4** "**Affiliate**" means any corporation or other entity that controls, is controlled by, or is under common control with a Party to this Agreement. A corporation or other entity will be regarded as in control of another corporation or entity if the latter corporation or entity owns or directly or indirectly controls more than fifty percent (50%) of the voting stock or other ownership interest of the former corporation or other entity, or if the latter corporation or entity possesses, directly or indirectly, the power to direct or cause the direction of the management and policies of the former corporation or other entity or the power to elect or appoint fifty percent (50%) or more of the members of the governing body of the former corporation or other entity. An Affiliate will be bound under this Agreement in the same manner as if it were a Party hereto. Notwithstanding the foregoing, except as set forth in Section 2.3(a), Third Security shall be deemed not to be an Affiliate of Intrexon. In addition, any other person,

corporation, partnership, or other entity that would be an Affiliate of Intrexon 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.

**1.5 "Animal Health"** means all applications and uses for, in and/or on animals (companion or food production (excluding reptiles and rodents)), animal products, animal feed, animals for human food, food safety or the food chain, including but not limited to related systems or processes, amelioration, diagnosis, control, prevention, prophylaxis and/or treatment of pathogens, diseases, pests, parasites or sign(s) or symptom(s) related thereto; the foregoing, applies when the animal is the food source or where a food safety application is used for an animal as a food source and then applied to a non-animal food source (e.g. crop plants), except that "Animal Health" does not include any uses in humans that require an FDA human drug approval.

**1.6** "**Approval Filing**" means a full or administrative NADA or terminal submission (a complete regulatory dossier) for each Product (other than any diagnostic Products) in the Field, or its foreign equivalent.

**1.7** "**[*****]**" has the meaning set forth in Section 3.6(a).

**1.8** "**Channel-Related Program IP**" has the meaning set forth in Section 6.1(c).

**1.9 "Executive Officer"** means the President or Chief Executive Officer of the applicable Party, or another senior executive officer of such Party who has been duly appointed by the President or Chief Executive Officer to act as the representative of the Party, provided that such officer is not a member of the Committee, if applicable, and occupies a position senior to the positions occupied by the applicable Party's members of the Committee, if applicable.

**1.10** "**Claims**" has the meaning set forth in Section 9.1.

**1.11** "**Committees**" has the meaning set forth in Section 2.2(a).

**1.12** "**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 may include, without limitation, manufacturing, marketing, financial, personnel and other business information and plans, whether in oral, written, graphic or electronic form.

**1.13** "**Control**" means, with respect to a Patent or other intellectual property right, that a Party owns or has a license to such right and has the ability to grant to the other Party 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.

**1.14** "**Diligent Efforts**" means, with respect to a Party's obligation under this Agreement, the level of efforts and resources reasonably required to develop, manufacture, and/or commercialize (as applicable) a Licensed 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, taking into consideration the safety and efficacy of such Licensed Product, product profile, the competitiveness of the marketplace, the proprietary position of the Product Candidate and/or Licensed Product, the regulatory structure involved in obtaining product approval, and the potential profitability of such Licensed Product. With respect to a particular task or obligation, Diligent Efforts requires that the applicable Party timely assign responsibility for such task and consistently make and implement decisions and allocate resources designed to advance progress with respect to such task or obligation.

**1.15** "**Dollar**" or "**$**" means the lawful currency of the United States of America.

**1.16** "**Elanco Indemnitees**" has the meaning set forth in Section 9.1.

**1.17 "Elanco Intellectual Property (Elanco IP)"** means Elanco Patent Rights, Elanco Technology, and Elanco Inventions.

**1.18 "Elanco Inventions"** means any Invention by Elanco (other than a joint invention or an invention on Intrexon Chanel Technology or on Intrexon IP) that is discovered, made, or conceived and reduced to practice as a result of the ECC. For clarity, any invention by Elanco outside the ECC will be solely owned by Elanco and is not included in Elanco Inventions.

**1.19 "Elanco Patent Rights"** means any and all Patent Rights owned and/or controlled by Elanco during the term of this Agreement and is reasonably required or useful for Elanco to develop and/or commercialize any Licensed Product.

**1.20** "**Elanco Program Patent**" has the meaning set forth in Section 6.2(b).

**1.21** "**Elanco Technology"** means specifications, sketches, drawings, schematics, prototypes, methods, protocols, know-how, trade secrets, all proprietary data, information, inventions, regulatory submissions, material, compounds, strains, cell lines or other intellectual property of any kind, excluding Patent Rights, and is reasonably required or useful for Elanco to develop and/or commercialize any Licensed Product.

**1.22** "**Elanco Termination IP**" means all Elanco Inventions that Elanco Controls during the Term that: (a) claims the composition of matter of, or the method of making or using, a Reverted Product; or (b) is otherwise necessary or useful for the development, manufacture or commercialization of a Reverted Product.

**1.23** "**Exclusive Channel Collaboration**" or "**ECC**" means the research, development, manufacturing and commercialization activities with respect to the Potential Product Candidates, Product Candidates and Licensed Products, to be conducted by or on behalf of the Parties under this Agreement, solely or in collaboration with each other.

**1.24** "**Field Infringement**" has the meaning set forth in Section 6.3(b).

**1.25** "**Field**" means, for each Target, the use of the Potential Product Candidates, Product Candidate or Licensed Products directed to such Target injected into one (1) or more species of companion and/or food production animals for the *in vivo* expression of effectors in such animals, for the treatment or prophylaxis of a disease or condition in such animals, solely in the following specific combinations: **[*****]** When a Licensed Product is referred to as being developed, used and/or commercialized in the Field, it shall be understood that the Licensed Product is being developed, used and/or commercialized solely for the specific disease and animal species combination set forth above that corresponds to the Target to which the Product Candidate in such Licensed Product is directed.

**1.26** "**First Commercial Sale**" means, with respect to a Licensed Product and country, the first sale for use by an end-user customer of such Licensed Product in such country after any required regulatory approval has been obtained in such country.

**1.27** "**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.

**1.28** "**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.

**1.29** "**Infringement**" has the meaning set forth in Section 6.3(a).

**1.30** "**Intrexon Channel Technology**" means Intrexon's DNA biosynthesis, transgene and gene expression technology directed towards in vivo expression of effectors, including without limitation the technology embodied in the Intrexon Materials and the Intrexon IP, but excluding any non DNA-based drug delivery technology that may be used for the in vivo delivery of the Intrexon Materials.

**1.31** "**Intrexon Indemnitees**" has the meaning set forth in Section 9.2.

**1.32** "**Intrexon IP**" means the Intrexon Patents and Intrexon Know-How.

**1.33** "**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 Elanco to exercise its rights under this Agreement in the Field. For the avoidance of doubt, the Intrexon Know-How shall include any Information (other than Intrexon Patents) in the Channel-Related Program IP.

**1.34** "**Intrexon Materials**" means the genetic code and associated gene constructs used alone or in combination and such other proprietary reagents including but not limited to plasmid vectors, virus stocks, and cells and cell lines, in each case that are reasonably required for, useful for, or provided to Elanco to exercise its rights under this Agreement in the Field.

**1.35** "**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 Elanco to exercise its rights under this Agreement in the Field. For the avoidance of doubt, the Intrexon Patents shall include any Patent in the Channel-Related Program IP.

**1.36** "**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 and/or collaborations.

**1.37** "**Inventions**" has the meaning set forth in Section 6.1(b).

**1.38** "**Intellectual Property Committee**" or "**IPC**" has the meaning set forth in Section 2.2.

**1.39 "Joint Invention"** means an Invention discovered, made, or conceived and reduced to practice jointly by Intrexon employee(s), contractor(s) or agent(s) and Elanco employee(s), contractor(s) or agent(s).

**1.40** "**Joint Steering Committee**" or "**JSC**" has the meaning set forth in Section 2.2.

**1.41** "**Licensed Product**" means any product that comprises a Product Candidate, or during research and development, any Potential Product Candidate or Product Candidate.

**1.42** "**Losses**" has the meaning set forth in Section 9.1.

**1.43** "**Net Sales**" means, with respect to a Licensed Product, the gross amount invoiced by Elanco (including any Elanco Affiliate) or any sublicensee thereof to unrelated Third Parties (excluding any sublicensee) for sales of such Licensed Product in the Territory, less the following:

**(a)** Customary trade, quantity and cash discounts actually allowed;

**(b)** Third Party agent commissions, discounts, refunds, rebates, chargebacks, retroactive price adjustments and similar allowances, limited to reasonable adjustments and allowances which effectively reduces the net selling price;

**(c)** Licensed Product returns or allowances;

**(d)** Allowance for Third Party distribution expenses;

**(e)** Any tax imposed on the sale, delivery or use of the Product, including, without limitation, sales, use, excise or value added taxes, but excluding any tax on income; and

**(f)** Any other similar and customary deductions, which reduces net sales under US GAAP.

Such amounts will be determined from the books and records of Elanco, Elanco Affiliates and/or sublicensee(s) (as applicable), maintained in accordance with U.S. GAAPor, in the case of sublicenses, such similar accounting principles, consistently applied. Elanco further agrees in determining such amounts, it will use Elanco's then-current standard procedures and methodology, including Elanco's then current standard exchange rate methodology for the translation of foreign currency sales into U.S. Dollars or, in the case of sublicensees, such similar methodology, consistently applied.

In the event that the Licensed Product is sold as part of a Combination Product (where "**Combination Product**" means any pharmaceutical product which comprises the Licensed Product and other active compound(s) and/or ingredients), the Net Sales of the Licensed Product, for the purposes of determining royalty payments, shall be determined by multiplying the Net Sales of the Combination Product (as defined in the standard Net Sales definition) by the fraction, A / (A+B) where A is the weighted average sale price of the Licensed Product when sold separately in finished form, and B is the weighted average sale price of the other product(s) sold separately in finished form.

In the event that the weighted average sale price of the Licensed Product can be determined but the weighted average sale price of the other product(s) cannot be determined, Net Sales for purposes of determining royalty payments shall be calculated by multiplying the Net Sales of the Combination Product by the fraction A / C where A is the weighted average sale price of the Licensed Product when sold separately in finished form and C is the weighted average sale price of the Combination Product.

In the event that the weighted average sale price of the other product(s) can be determined but the weighted average sale price of the Licensed Product cannot be determined, Net Sales for purposes of determining royalty payments shall be calculated by multiplying the Net Sales of the Combination Product by the following formula: one (1) minus B / C where B is the weighted average sale price of the other product(s) when sold separately in finished form and C is the weighted average sale price of the Combination Product.

In the event that the weighted average sale price of both the Licensed Product and the other product(s) in the Combination Product cannot be determined, the Net Sales of the Licensed Product shall be determined by the Parties in good faith to reasonably reflect the fair market value of the contribution of the Licensed Product in the Combination Product to the total market value of such Combination Product.

The weighted average sale price for a Licensed Product, other product(s), or Combination Product shall be calculated on a global basis once each calendar year and such price shall be used during all applicable royalty reporting periods for the entire following calendar year. When determining the weighted average sale price of a Licensed Product, other product(s), or Combination Product, the weighted average sale price shall be calculated by dividing the worldwide sales dollars (translated into U.S. dollars) by the units of active ingredient sold worldwide during the twelve (12) months (or the number of months sold in a partial calendar year) of the preceding calendar year for the respective Licensed Product, other product(s), or Combination Product. In the initial calendar year, a forecasted weighted average sale price will be used for the Licensed Product, other product(s), or Combination Product. Any over or under payment due to a difference between forecasted and actual weighted average sale prices will be paid or credited in the first royalty payment of the following calendar year.

Notwithstanding the foregoing, in no event shall the Net Sales of a Licensed Product be reduced by more than **[*****]** in any calendar year by reason of the allocation mechanism outlined above when such Licensed Product is sold in the form of a Combination Product.

**1.44** "**Patents**" means rights under all patents, provisional and non-provisional, owned or controlled by the Parties (including all reissues, extensions, substitutions, confirmations, re-registrations, re-examinations, re-validations, patents of addition, supplementary protection certificates or the equivalents thereof) and under all provisional and non-provisional patent applications (including, without limitation, all continuations, continuations-in-part (to the extent claiming the same subject matter as the application to which it claims priority) and divisionals thereof).

**1.45** "**Potential Product Candidate**" means, for each Target, the DNA sequence directed to such Target (including its vector and/or host) that is designed, discovered and/or synthesized by Intrexon as part of the Research Program for evaluation and/or selection as a Product Candidate pursuant to Section 4.1.

**1.46** "**Product Candidate**" means, for each Target, the Potential Product Candidate for such Target that has been selected as the Product Candidate pursuant to Section 4.1.

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

**1.48** "**Proposed Terms**" has the meaning set forth in Section 11.2.

**1.49** "**Recovery**" has the meaning set forth in Section 6.3(f).

**1.50 "Regulatory Agency"** means, any governmental authority that regulates Products, including but not limited to the Drug Enforcement Administration (DEA), including the Controlled Substance Section (CSS); Environmental Protection Agency (EPA); Food and Drug Administration (FDA), including the Center for Veterinary Medicine (CVM) and the Center for Drug Evaluation and Research (CDER); Food Safety and Inspection Service (FSIS); U.S. Department of Agriculture (USDA); or any counterparts thereof in jurisdictions outside of the USA.

**1.51** "**[*****]**" has the meaning set forth in Section 3.7(a).

**1.52** "**Retained Product**" has the meaning set forth in Section 10.4(a).

**1.53** "**Reverted Product**" has the meaning set forth in Section 10.4(c).

**1.54** "**SEC**" means the United States Securities and Exchange Commission.

**1.55** "**Support Memorandum**" has the meaning set forth in Section 11.2.

**1.56** "**Target**" means each of the following **[*****]**.

**1.57** "**Third Party**" means any individual or entity other than the Parties or their respective Affiliates.

**1.58** "**Third Party IP**" has the meaning set forth in Section 3.7(a).

**1.59** "**Third Security**" means Third Security, LLC.

**1.60** "**Territory**" means the entire world.

**1.61** "**US GAAP**" means generally accepted accounting principles in the United States.

**1.62 "Valid Claim"** means either (a) a claim of an issued and unexpired patent which has not been held permanently revoked, unenforceable or invalid by a decision of a court or other governmental agency of competent jurisdiction, unappealable or unappealed within the time allowed for appeal, and which has not been admitted to be invalid or unenforceable through re-examination, reissue or disclaimer or otherwise; or (b) a claim of a pending patent application, which claim was filed in good faith and has not been abandoned or finally disallowed without the possibility of appeal or refiling of said application, provided that no more than **[*****]** years has passed from the filing date of such patent application in the applicable country.

## ARTICLE 2

## Purpose of Exclusive Channel Collaboration; Management

**2.1 Purpose of Exclusive Channel Collaboration.** The purpose of the ECC shall be: (a) for Intrexon to use the Intrexon Channel Technology to design, discover and synthesis at least one (1) Potential Product Candidate(s) with respect to each Target for further evaluation; (b) for the Parties to select one (1) Potential Product Candidate with respect to each Target as a Product Candidate; and (c) with respect to such Product Candidate so selected, for Elanco to develop and, if feasible, commercialize Licensed Products comprising such Product Candidate in the Field in the Territory. For clarity, there shall be no more than one (1) Product Candidate for each Target for each indication in the Field unless the Parties otherwise agree, and there shall be no more than four (4) Product Candidates in total under this Agreement unless Elanco exercises its right to expand the Field for any Target under Section 3.10(b).

**2.2 Committees**. Within thirty (30) days after the Effective Date, the Parties shall establish: (a) a joint steering committee to establish and oversee the Parties' activities under the ECC and to facilitate communications between the Parties with respect thereto (the "**Joint Steering Committee**" or the "**JSC**"); and (b) an intellectual property committee to manage intellectual property issues in connection with the ECC, such as the strategy and activities pertaining to intellectual property protection for Inventions generated under the ECC and the evaluation of Third Party intellectual properties for in-licensing opportunities, in each case as more specifically described in this Agreement (the "**Intellectual Property Committee**" or the "**IPC**"). From time to time during the Term, the Parties may form other committees as reasonably necessary to efficiently advance the ECC, in accordance with the rest of this Article 2 (the JSC, the IPC and each such other committee, collectively, the "**Committees**").

**2.3 General Committee Membership and Procedure.**

**(a) Membership**. For each Committee, each Party shall designate an equal number of representatives (not to exceed three (3) for each Party), each of whom shall have the appropriate expertise to serve as a representative of such Committee and shall be an employee of such Party or of its Affiliate. Solely for the purpose of this Section 2.3, Third Security shall be deemed to be an Affiliate of Intrexon. Each representative may serve on more than one Committee as appropriate in view of the individual's expertise. Each Party may replace its Committee representatives at any time upon written notice to the other Party. Each Committee shall have a chairperson who shall be a representative of such Committee. The chairperson of each committee shall serve for a two (2)-year term and the right to designate which representative to the Committee will act as chairperson shall alternate between the Parties, with Elanco selecting the chairperson first for the JSC, and Intrexon selecting the chairperson first for the 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 thirty (30) days thereafter.

**(b) Meetings**. Each Committee shall hold meetings at such times as it elects to do so, but in no event shall such meetings be held less frequently than once every six (6) months. 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 Elanco 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 (including without limitation in any Working Group).

**(c) Meeting Agendas**. Each Party will disclose to the other Party proposed agenda items along with appropriate information at least seven (7) 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 with the other Party's written consent.

**(d) Working Groups**. From time to time, each Committee may establish and delegate duties to other sub-committees or directed teams (each, a "**Working Group**") on an "as-needed" basis to oversee particular projects or activities. Each such Working Group shall be constituted and shall operate as the applicable Committee determines; provided, that each Working Group shall have equal representation from each Party. Each Working Group and its activities shall be subject to the oversight, review and approval of, and shall report to, the Committee that established such Working Group. In no event shall the authority of the Working Group exceed that specified for the relevant Committee in this Article 2.

**(e) Committee Actions; Limitations of Committee Powers**. Each Committee shall exercise its authority in good faith in the interest of the ECC. Each Committee shall have only such powers as are specifically delegated to it hereunder or from time to time as agreed to 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.

**(f) Elanco IP**. Prior to introducing any Elanco IP into the ECC, the JSC must approve such introduction or use thereof.

**2.4 Committee Decision-Making**.

**(a)** Each Committee shall operate by consensus. If a Committee is unable to reach unanimous consent on a particular matter within thirty (30) days of its initial consideration of such matter, such dispute shall first be referred to appropriate management for resolution within thirty (30) days after such dispute is referred and if unresolved then either Party may provide written notice of such dispute to the Executive Officers of the Parties. The Executive Officers of each of the Parties will meet at least once in person and will in addition communicate 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:

**(i)** the Executive Officer of Intrexon shall have the authority to make the final decision on any dispute pertaining to the Intrexon IP, provided that any final decision made by such Executive Officer of Intrexon will not negatively impact the development and/or commercialization of any Licensed Product unless justified on a commercially reasonable basis taking into account the perspectives of both Parties;

**(ii)** the Executive Officer of Elanco shall have the authority to make the final decision on any dispute pertaining to the development and/or commercialization of any Licensed Product (after the selection of the Product Candidate contained therein), provided that any final decision made by such Executive Officer of Elanco will not negatively impact the scope, duration or enforceability of any Intrexon IP; and

**(iii)** if any additional Committee is formed, then the Parties shall, at the time of such formation, agree on which Party shall have the final decision-making authority within the subject matter of such Committee.

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

## ARTICLE 3

## License Grants

**3.1 Licenses to Elanco.**

**(a) Research License.** Intrexon hereby grants to Elanco a license under Intrexon IP, including the use of Intrexon Materials, to research and use Potential Product Candidates and Product Candidates in the Field and Territory, solely to conduct the activities under this Agreement.

**(b) Development and Commercialization License.** For each Potential Product Candidate and for each Product Candidate selected pursuant to Section 4.1 below, Intrexon hereby grants to Elanco an exclusive license under Intrexon IP to develop, use, import, make and have made, sell, and offer for sale Licensed Products. To the extent Licensed Products incorporates Intrexon Materials, the above license grant also applies to such Intrexon Material. Such license shall be exclusive with respect to any clinical development, selling, offering for sale or other commercialization of Licensed Products in the Field, and shall be otherwise non-exclusive. Elanco has those further license rights for development and commercialization as provided in Article 6.

**(c) Trademark License.** Subject to the terms and conditions of this Agreement, Intrexon hereby grants to Elanco a non-exclusive, royalty-free license to use and display the Intrexon Trademarks, solely in connection with the commercialization of Licensed Products, in the promotional materials, packaging, and labeling for Licensed Products, as provided under and in accordance with Section 4.8.

**3.2 Sublicensing**. With Intrexon's written consent and to the extent reasonably necessary, Elanco may transfer Intrexon Materials to a Third Party research, development or manufacturing contractor performing research and development activities for the Potential Product Candidate, Product Candidate, or Licensed Products, and may grant any sublicenses solely to the extent necessary to enable such Third Party to perform such activities. Such Intrexon written consent will not be unreasonably withheld taking into account the protection of Intrexon IP. Elanco shall have the right to sublicense the rights granted under Section 3.1 to an Affiliate without first obtaining Intrexon's written consent, and such sublicense shall be effective for as long as such entity remains an Affiliate of Elanco. Elanco shall remain responsible for, and be guarantor of, the performance by any sublicensee and shall cause such

sublicensee to comply with the provisions of this Agreement in connection with the practice of such sublicense or the use of such Intrexon Materials (as though such Third Party or Affiliate were Elanco), and Elanco shall remain primarily responsible for any payment obligations owed to Intrexon under this Agreement. None of the enforcement rights under the Intrexon Patents that are granted to Elanco 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. Except as provided above, Elanco 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 Licensed Products, in each case except with Intrexon's written consent, which written consent may be withheld in Intrexon's sole discretion.

**3.3 Exclusivity.**

**(a)** During the Term, neither Intrexon nor any Affiliate shall (either by itself or with a Third Party) develop or commercialize in the Field and Territory outside the ECC any product directed to a particular Target that has been identified as included in the ECC, unless and until: (i) Elanco elects not to select a Product Candidate for such Target; or (ii) such Product Candidate reverts to Intrexon.

**(b)** During the Term, neither Elanco nor its Affiliates shall (either by itself or with a Third Party) develop or commercialize in the Field and Territory outside the ECC any gene product and directed to a Target that has been identified as included in the ECC using in vivo expression control or ex vivo production of gene-based technology, excluding the administration to an animal of an effector protein developed outside of the ECC, unless and until: (i) Elanco elects not to select a Product Candidate for such Target; or (ii) such Product Candidate reverts to Intrexon.

**3.4 No Non-Permitted Use**. Elanco 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: (a) for performing research on any product other than Licensed Products; or (b) for the research, development, manufacturing or commercialization of any product other than Licensed Products.

**3.5 No Prohibition on Intrexon**. Except as in accordance with this Agreement, Intrexon shall not be prohibited 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 and in accordance with this Agreement, Elanco acknowledges that Intrexon has rights in Intrexon's sole discretion, to make the Intrexon Materials, Intrexon Channel Technology (including any active pharmaceutical ingredient used in a Licensed Product), and Intrexon IP available to Third Party channel partners and/or collaborators for use outside the Field or field of Animal Health, respectively (including without limitation using the same gene construct delivered for the treatment or prevention of the same disease in other animal species, or the treatment or prevention of other diseases in the same animal species.

**3.6 Third Party Licenses.**

**(a)** [*****] shall obtain[*****] any licenses from Third Parties that are required in order to practice the Intrexon Channel Technology in the Field where the licensed intellectual property is directed to Intrexon's *in vivo* expression system, but excluding any intellectual property that is directed to any Target ("[*****]"). Other than with respect to [*****], the JSC, based on a recommendation from the IPC, shall have the right to approve (or withhold approval) for obtaining any licenses from Third Party that may be required in order to lawfully make, use, sell, offer for sale, or import Licensed Products ("[*****]"). The parties agree that [*****] will have a first option to seek a license broader in scope than the Field. If, after ninety (90) days [*****] reach a final decision, [*****] shall have the option [*****] to obtain any such licenses within the Field. To the extent commercial progress requires action in advance of the 90-day period, [*****] shall meet and resolve accordingly. [*****] and [*****] are collectively referred to as "**Third Party IP**").

**(b)** The licenses granted to Elanco 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, provided that Intrexon shall have, at least ten (10) days prior to execution of this Agreement, either provided redacted copies of such upstream license agreements to Elanco or disclosed in writing to Elanco all of such terms and conditions that are applicable to Elanco, in either case sufficient to allow Elanco to assess the impact of such terms and conditions on this Agreement.

**3.7 Licenses to Intrexon**. Subject to the terms and conditions of this Agreement and to the extent Elanco's IP is incorporated into the ECC, Elanco hereby grants to Intrexon a non-exclusive, worldwide, fully-paid, royalty-free license, under any applicable Patents or other intellectual property Controlled by Elanco or its Affiliates for Intrexon to conduct those responsibilities assigned to it for the development of Licensed Products under this Agreement, which license shall be sublicenseable solely to Intrexon's Affiliates or to any of Intrexon's subcontractors. Consistent with Article 6 herein, Elanco hereby grants to Intrexon a non-exclusive, worldwide, fully-paid, royalty-free license, under Elanco Patent Rights and Elanco Technology that claim or cover Joint Inventions in the course of this Agreement, to develop, make, have made, use, sell, offer for sale and import any product outside the Field.

**3.8 Restrictions Relating to Intrexon Materials**. Elanco shall use the Intrexon Materials solely to perform its obligations and to exercise its rights under this Agreement, and not for any other purpose. With respect to any Intrexon Materials comprising Intrexon's vector assembly technology transferred to Elanco, Elanco shall not, and shall ensure that Elanco personnel do not (a) distribute, sell, lend or otherwise transfer such Intrexon Materials to any Third Party except as provided in Section 3.2.; (b) co-mingle such Intrexon Materials with any other proprietary biological or chemical materials without Intrexon's written consent, such consent not to be unreasonably withheld; or (c) analyze such Intrexon Materials for the purpose of attempting to reverse engineer or sequence such Intrexon Materials. The sequence, design and composition of any vector or construct included in Intrexon Materials shall be deemed Confidential Information of Intrexon subject to strictest protection. In addition to the confidentiality and non-use obligations under Article 7, Elanco shall not disclose such sequence, design or composition to any Third Party under any circumstance, except as provided in Section 3.2, without Intrexon's prior written consent, which consent may be withheld at Intrexon's sole discretion.

**3.9 Additional Target and Indication Expansion.**

**(a) Additional Target. Until December 4, 2011**, Elanco shall have the right to select a fourth (4th) Target and its corresponding disease area and companion and/or food production animal species as a specific combination to be added to the ECC, unless Intrexon provides Elanco with reasonable and sufficient evidence that such Target is not available due to prior collaboration or contractual obligations. However, during the aforementioned period, Intrexon agrees not to license the entire Field of Animal Health. Elanco's right to select the 4th Target and its corresponding disease area and companion and/or food production animal species as a specific combination to be added to the ECC shall continue beyond December 4, 2011 through the ninety (90)-day period after the Effective Date, subject to JSC's approval. The JSC shall not unreasonably withhold its approval, but shall in any event not grant such approval if the addition of such Target would cause either Party to breach any of its then-current obligations to any Third Party, in particular if Intrexon has already entered into a collaboration with a Third Party for, granted rights to a Third Party with respect to, or is bound by contractual obligations not to develop and/or commercialize, such Target for such disease area in such animal species, provided in such event Intrexon provides Elanco, or its designated agent, with reasonable and sufficient evidence of such collaboration, rights or contractual obligations. Upon approval by the JSC, such Target shall be deemed an "**Additional Target**", such corresponding animal species shall be deemed "**Addition Species**", and such corresponding indication shall be deemed "**Additional Indication**." During the first year after the Effective Date, Elanco shall have the right to substitute a different Target for one of the then-existing Targets as a specific combination with the same or an alternative indication and species, and such substitution shall be subject to the JSC's approval, and the JSC shall not unreasonably withhold its approval; provided that JSC shall in any event not grant such approval if the addition of such Target would cause either Party to breach any of its then-current obligations to any Third Party, in particular if Intrexon has already entered into a collaboration with a Third Party for, granted rights to a Third Party with respect to, or bound by contractual obligations not to develop and/or commercialize, such Target for such disease area in such animal species, provided in such event Intrexon provides Elanco, or its designated agent, with reasonable and sufficient evidence of such collaboration, rights or contractual obligations.

**(b) Indication Expansion.** Intrexon hereby grants Elanco a right of first refusal to expand the authorized uses within the Field for each Target as set forth below, with such right of first refusal to expire on the later of: (i) the tenth (10th) anniversary of the Effective Date; and (ii) the fifth (5th) anniversary of the date on which the most recent Approval Filing was submitted for a Licensed Product directed to such Target (the "**ROFR Period**"). During the ROFR period, in the event Intrexon intends to develop, or Elanco requests to develop ,a product candidate for a Target in the same animal species corresponding to such Target in the Field but for a product indication that is outside the Field, then, prior to entering into a collaboration with, or granting the right to, a Third Party to do so, such Party shall provide the other Party with written notification of such intent. Within ninety (90) days after receipt of such notification, Elanco shall have the right to elect to expand the Field for such Target under the ECC into such indication for such animal species (the "**Expanded Indication**") as follows: (A) such product candidate (either as a new product candidate or the same as the Product Candidate developed by

the Parties under the ECC for the existing indication within the Field for such Target) shall be deemed a Product Candidate and subject to the terms and conditions hereunder, including but not limited to financial obligations pertaining to such Target, diligence requirements and reversion rights; and, (B) such new Product Candidate, indication and animal species combination shall be deemed included in the definition of Field for such Target.

**3.10 Combination Products.** Elanco shall not commence any development or commercialization of any Combination Product in the Field without first obtaining the approval of the JSC and the agreement between the Parties as to the indication in which such Combination Product will be developed and commercialized.

## ARTICLE 4

## Research, Development, Commercialization and Manufacturing

**4.1 Research Activities.**

**(a) Research Plan.** The Parties have agreed upon an initial research plan outlining the Parties' respective activities leading to the discovery and selection of Product Candidates under the ECC, attached to this Agreement as Exhibit A. Within sixty (60) days after the Effective Date, the Parties shall agree on a detailed research plan that is substantially consistent with the initial research plan, as well as an associated budget under which the total internal and out-of-pocket costs and expenses to be incurred by Intrexon that are reasonable and necessary for Intrexon to accomplish its responsibilities under the Research Plan (the "**Intrexon Research Costs**") **[*****]** (the "**Research Plan**"). As part of the Research Plan, for each Target for the indication in the Field, Intrexon shall use Diligent Efforts to propose the DNA design matrix and *in vitro* bioassay testing for the Product Candidate for such Target, subject to the approval by the JSC, and the Parties shall jointly agree to the *in vivo* proof of concept studies to be used by the Parties to evaluate the Potential Product Candidate(s) for such Target. It is the Parties' intent for Intrexon to use the Intrexon Channel Technology to design and synthesize at least one (1) Potential Product Candidate for such Target for such indication based on such agreed upon design matrix, and will present to the ECC the optimized DNA construct for such Potential Product Candidate(s), together with a host, vector or plasmid to present such DNA for use in the animal species specified in the Field. The Parties will conduct the studies in the Research Plan to further characterize and evaluate such Potential Product Candidate, including for Elanco to conduct *ex vivo* and *in vivo* proof of concept studies and possibly *in vitro* studies, in each case as agreed upon by the Parties and set forth in the Research Plan. For clarity, the Parties acknowledge that drug discovery and design are unpredictable and that Intrexon shall not be deemed in breach of this Agreement in the event its Diligent Efforts under the Research Plan does not lead to a Potential Product Candidate for any particular Target that meets the design matrix approved by the JSC. Final decisions regarding the Research Plan, including modifications, should be approved by the JSC.

**(b) Selection of Product Candidate.** After completing the proof of concept studies set forth in the Research Plan, the JSC will select one (1) Product Candidate for each Target in each indication in the Field, provided that if the representatives of the Parties on the JSC cannot agree on such selection, Elanco's representatives on the JSC shall have the final

decision making authority on such selection. The selection of such Product Candidate by the JSC or Elanco, as the case may be, shall be documented in writing, signed by authorized representative of Elanco, and delivered promptly to Intrexon. The date Intrexon receives such written notification shall be deemed the date on which such selection is made. Elanco shall pay the Selection Fee in accordance with Section 5.3(a), and upon Intrexon's receipt of such Selection Fee such Potential Product Candidate shall become a Product Candidate.

**(c) Costs under the Research Plan**. Each Party shall initially bear its own costs and expenses incurred in connection with its activities under the Research Plan, provided that Elanco shall reimburse Intrexon for the Intrexon Research Costs as set forth in Section 5.2, further provided that: (i) Intrexon shall provide Elanco an estimate of the Intrexon Research Costs to be incurred by Intrexon to complete their activities under the Research Plan; (ii) the estimated Intrexon expenses will be considered a not to exceed value without further endorsement by the Elanco JSC committee member; (iii) Intrexon shall submit an invoice to Elanco for their documented research expenses on a monthly basis; (iv) Intrexon shall timely inform Elanco if, in its reasonable judgment, there will likely be a budget overrun of Intrexon Research Costs **[*****]** in a given calendar year and the Parties will discuss in good faith as to any adjustment to Intrexon's activities under the Research Plan, or adjustment in the **[*****]** reimbursement amount by Elanco in such calendar year; (iii) Elanco shall not have the obligation to reimburse Intrexon **[*****]** for work that is not included in the Research Plan as approved by the JSC, in any calendar year without its written consent, to be withheld at its sole discretion; and (iv) Intrexon shall not have the obligation to perform any research activities or incur any associated Intrexon Research Costs unless Elanco reimburses Intrexon for Intrexon Research Costs incurred in connection therewith.

**4.2 Development and Commercialization**. Elanco shall be solely responsible for the development and commercialization, and all decisions thereon, of Licensed Products comprising Product Candidates in the Field, at its sole cost and expense, subject to Section 4.5.

**4.3 Information and Reporting**. Elanco shall keep Intrexon regularly informed about Elanco's efforts to research (in accordance with the Research Plan), develop and commercialize Licensed Products, including reasonable and accurate summaries of Elanco's progress in such research, development and commercialization efforts. Intrexon shall keep Elanco informed about Intrexon's efforts to conduct research activities under the Research Plan. Such disclosures by Elanco and Intrexon will be made in the course of JSC meetings at least once every six (6) months while Licensed 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, Elanco shall own and maintain, at its own cost, all regulatory filings and regulatory approvals for Licensed Products that Elanco is developing or commercializing pursuant to this Agreement. As such, Elanco shall be responsible for all reporting requirements related to the Licensed Products to the appropriate Regulatory Agencies in the relevant countries, in accordance with the applicable laws and regulations of such countries. Elanco shall notify Intrexon in writing of all material filings and correspondence with Regulatory Agencies, and shall provide Intrexon with a copy of such filings and correspondence upon Intrexon's request. The decision to list or not list Patents in any regulatory filing for a Licensed Product (for example, as required by 21 C.F.R. §

314.53(b)), or add or delete a Patent from a regulatory filing shall be determined by Intrexon, after consultation with Elanco. Notwithstanding the foregoing, Intrexon shall own and maintain, at its own cost, all regulatory filings and regulatory approvals directed specifically to any activator ligand master file.

**4.5 Diligence**. Elanco shall use Diligent Efforts to develop and commercialize Licensed Products comprising of the Product Candidate(s) selected for each Target in the Field in the Territory. Without limiting the foregoing, Elanco shall use Diligent Efforts to develop at least one (1) Licensed Product for each Product Candidate and shall use Diligent Efforts to commercialize such Licensed Product if, at the time of the First Commercial Sale of such Licensed Product, it reasonably appears to promise, based on reasonable data available to the Parties at the time, to offer superior efficacy, safety or cost, as compared with those products that are marketed for the same indication in the same animal species. The activities of Elanco's Affiliates and any permitted sublicensees shall be attributed to Elanco for the purposes of evaluating Elanco's fulfillment of the obligations set forth in this Section 4.5.

**4.6 Manufacturing**.

**(a)** Intrexon shall research and develop a process with the objective of validating the process for the manufacture of each Licensed Product hereunder (such process is the "**Validated Process**"). In connection with such research and development, Intrexon, or a Third Party approved by the JSC, shall manufacture and supply pre-clinical quantities of each Licensed Product. Intrexon shall provide such quantities to Elanco for the pre-commercial development activities hereunder, at Elanco expense, said expense approved in advance by written confirmation of the JSC.

**(b)** Intrexon wishes to manufacture, or have manufactured by a Third Party, the Licensed Product and corresponding activator ligand, either in bulk form or as finished product according to the Validated Process. Elanco and Lilly have comprehensive manufacturing standards and criteria for such products, including without limitations, GMP, quality, capacity, and costs. Intrexon shall have the option to present a proposal for consideration to be the manufacturer of the Licensed Product, or component thereof, and corresponding activator ligand, either in bulk form or as finished product, for Elanco for clinical and/or commercialization use. Elanco will determine whether Intrexon, or Intrexon's proposed Third Party, is a manufacturer of a Licensed Product. Elanco shall make their determination as to the manufacturer of each Licensed Product based on the commercially reasonable consideration of their standards and criteria, as applied in a manner consistent with that applied to the manufacture of other Elanco products and in good faith. Upon Intrexon's request, Elanco shall provide Intrexon with a reasonable explanation and summary of the criteria that Elanco used in deciding upon the manufacturer(s). In the event Intrexon is chosen by Elanco to manufacture Licensed Product under this Agreement, such supply shall be carried out under the terms negotiated by the Parties in good faith and set forth in separate supply and quality agreements.

**(c)** In the event that Intrexon is not selected as the manufacturer for clinical and/or commercial quantities of a Licensed Product, Elanco will assume all responsibility and related expense for manufacturing and supply of clinical and/or commercial quantities of such

Licensed Product in accordance with the Validated Process. Intrexon shall coordinate the transfer to Elanco, or Elanco-designated contract manufacturer(s), the Validated Process, along with any additional Information Controlled by Intrexon that is necessary for the manufacturing of such bulk drug substance and/or finished product for the sole purpose of manufacturing such bulk drug substance and/or finished product on behalf of Elanco for use in connection with Elanco's exercise of its rights in the Field. The reasonable costs and expenses incurred by Intrexon in carrying out such transfer shall be borne by Elanco and shall be negotiated in good faith by the Parties at the time Elanco exercises its rights under this Agreement. Elanco, in consultation with Intrexon, would provide oversight of the process validation of such Licensed Products at the Elanco selected manufacturing site(s). The Validated Process, along with any additional manufacturing Information transferred hereunder to Elanco or its contract manufacturer shall be deemed Confidential Information of Intrexon, and shall not be further transferred to any Third Party or Elanco Affiliate without the prior written consent of Intrexon. Any changes to the Validated Process would need to be approved in advance by the JSC, such approval not to be unreasonably withheld. Any such changes to the Validated Process provided by Intrexon to Elanco are owned by Intrexon, with Elanco having a non-exclusive license right (such non-exclusive right hereby granted to Elanco by Intrexon) for purposes of exercising rights in the Field, pursuant to this Section 4.6.

**4.7 Compliance with Law**. Each Party shall comply, and shall ensure that its Affiliates, licensees, sublicensees and Third Party contractors comply, with all applicable laws and regulations in connection with their activities under the ECC.

**4.8 Trademarks.** To the extent permitted by applicable law and regulations, Elanco at its sole discretion shall have the option to include Intrexon Trademark(s), on the packaging, promotional materials, and labeling for Licensed Products. To the extent that Intrexon adopts a trademark across its platform Technology, Elanco will make reasonable efforts to adopt such trademarks. If so used, such Licensed Products shall carry, in a conspicuous location, the applicable Intrexon Trademark(s), subject to Elanco's reasonable approval of the size, position, and location thereof. Elanco shall provide Intrexon with copies of any materials containing the Intrexon Trademarks prior to using or disseminating such materials, in order to obtain Elanco's approval thereof. Elanco's use of the Intrexon Trademarks shall be subject to prior review and approval of the IPC. Elanco acknowledges Intrexon's sole ownership of the Intrexon Trademarks and agrees not to take any action inconsistent with such ownership. Elanco covenants that it shall not use any trademark confusingly similar to any Intrexon Trademarks in connection with any products (including any Licensed Product). From time to time during the Term, Intrexon shall have the right to obtain from Elanco samples of Licensed Product sold by Elanco or its Affiliates or sublicensees for the purpose of inspecting the quality of such Licensed Products and use of the Intrexon Trademark(s). In the event that Intrexon inspects the quality of such Licensed Products and use of the Intrexon Trademark, Intrexon shall notify the result of such inspection to Elanco in writing thereafter. Elanco shall comply with reasonable policies provided by Intrexon from time-to-time to maintain the goodwill and value of the Intrexon Trademarks.

## ARTICLE 5

## Compensation

**5.1 Access Fee**. Within thirty (30) days after the Effective Date, Elanco shall pay Intrexon a non-refundable, non-creditable, one-time technology access fee in the amount of **[*****]**.

**5.2 Research Expenses**. Elanco shall reimburse Intrexon for its incurred Intrexon Research Costs **[*****]** subject to adjustments in accordance with Section 4.1(c)(ii) or (iii).

**5.3 Milestones.** Elanco shall make the following non-refundable, non-creditable milestone payments to Intrexon, with each such payment payable only once for each Product Candidate:

**(a)** A selection fee in the amount of **[*****]** within sixty (60) days after each selection of a Potential Product Candidate as a Product Candidate for development of a Licensed Product (the "**Selection Fee**") per Section 4.1(b).

**(b)** A milestone in the amount of **[*****]** within sixty (60) days after the first Regulatory Submission of each Licensed Product in the United States or the European Union. For clarity, only one Regulatory Submission milestone shall be paid by Elanco for each Licensed Product, regardless of the number of subsequent Regulatory Approvals for that Licensed Product.

**(c)** A milestone in the amount of **[*****]** within sixty (60) days after the earlier of the following: (i) the First Commercial Sale of each Licensed Product in the United States or the European Union; or (ii) when total aggregate worldwide Net Sales of all Licensed Products over time reaches **[*****]**, regardless of the country(ies) in which regulatory approval has been obtained for any Licensed Product.

**5.4 Royalties.**

**(a)** Royalty Rates for Licensed Products Directed to **[*****]**. For each of **[*****]**, Elanco shall make, during the period that such Licensed Product, its manufacture, use, sale, offer for sale or importation is covered by a Valid Claim under Intrexon Patents in such country, royalty payments to Intrexon, on a Licensed Product-by-Licensed Product basis, based on annual Net Sales of such Licensed Product covered by a Valid Claim and directed to suchTargets in the Territory by Elanco, its Affiliates and sublicensees at the applicable rates set forth below.

| Total Net Sales of a Licensed Product covered by a Valid Claim Directed to a Target throughout the Territory in any Calendar Year by Elanco, its Affiliates and/or sublicensees | Patent Royalty Rate Applicable to such Licensed Products |
|---|---|
| Portion of Net Sales of the applicable Licensed Products which are less than or equal to **[*****]** | **[*****]** |
| Portion of Net Sales of the applicable Licensed Products which are more than **[*****]** but less than or equal to **[*****]** | **[*****]** |
| Portion of Net Sales of the applicable Licensed Products which are more than **[*****]** but less than or equal to **[*****]** | **[*****]** |
| Portion of Net Sales of the applicable Licensed Products which are more than **[*****]** | **[*****]** |

By way of example, if, in a given calendar year the total Net Sales of a Licensed Product covered by a Valid Claim directed to either **[*****]** throughout the Territory is **[*****]**, then the royalties due to Intrexon under this Section 5.4(a) shall be: **[*****]**.

**(b)** Royalty Rates for Licensed Products Directed to **[*****]**. For **[*****]**, Elanco shall make, during the period that such Licensed Product, its manufacture, use, sale, offer for sale or importation is covered by a Valid Claim under Intrexon Patents in such country, royalty payments to Intrexon, on a Licensed Product-by-Licensed Product basis, based on annual Net Sales of all Licensed Products directed to such Target in the Territory by Elanco, its Affiliates and sublicensees at the applicable rates set forth below.

| Total Net Sales of a Licensed Product covered by a Valid Claim Directed to a Target throughout the Territory in any Calendar Year by Elanco, its Affiliates and/or sublicensees | Patent Royalty Rate Applicable to such Licensed Product |
|---|---|
| Portion of Net Sales of the applicable Licensed Products which are less than or equal to **[*****]** | **[*****]** |
| Portion of Net Sales of the applicable Licensed Products which are more than **[*****]** but less than or equal to **[*****]** | **[*****]** |
| Portion of Net Sales of the applicable Licensed Products which are more than **[*****]** but less than or equal to **[*****]** | **[*****]** |
| Portion of Net Sales of the applicable Licensed Products which are more than **[*****]** | **[*****]** |

By way of example, if, in a given calendar year the total Net Sales of aLicensed Product covered by a Valid Claim and directed to **[*****]** throughout the Territory is **[*****]**, then the royalties due to Intrexon under this Section 5.4(b) shall be: **[*****]**.

**(c)** Royalty Rates for Licensed Products Directed to the Additional Target. For the Additional Target, Elanco shall make, during the period that such Licensed Product, its manufacture, use, sale, offer for sale or importation is covered by a Valid Claim under Intrexon Patents in such country, royalty payments to Intrexon, on a Licensed Product-by-Licensed Product basis, based on annual Net Sales of a Licensed Product covered by a Valid Claim and directed to such Additional Target in the Territory by Elanco, its Affiliates and sublicensees at the applicable rates set forth below.

| Total Net Sales of a Licensed Product Directed covered by a Valid Claim to a Target throughout the Territory in any Calendar Year by Elanco, its Affiliates and/or sublicensees | Royalty Rate Applicable to such Licensed Product if used in **[*****]** | Patent Royalty Rate Applicable to such Licensed Product if used in **[*****]** |
|---|---|---|
| Portion of Net Sales of the applicable Licensed Products which are less than or equal to **[*****]** | **[*****]** | **[*****]** |
| Portion of Net Sales of the applicable Licensed Products which are more than **[*****]** but less than or equal to **[*****]** | **[*****]** | **[*****]** |
| Portion of Net Sales of the applicable Licensed Products which are more than **[*****]** but less than or equal to **[*****]** | **[*****]** | **[*****]** |
| Portion of Net Sales of the applicable Licensed Products which are more than **[*****]** | **[*****]** | **[*****]** |

By way of example, if, in a given calendar year the total Net Sales of a Licensed Product with a Valid Claim and directed to the Additional Target in **[*****]** throughout the Territory is **[*****]**, then the royalties due to Intrexon under this Section 5.4(c) shall be: **[*****]**.

**(d)** Royalty Report and Payment. Following the First Commercial Sale of a Licensed Product and for as long as such Licensed Product is sold by Elanco, its Affiliates or sublicensees, Elanco shall furnish to Intrexon a royalty report for each calendar quarter setting forth the Net Sales of such Licensed Product during such calendar quarter. Reports shall be due on the sixtieth ($60^{th}$) day following the end of each calendar quarter. Royalties shown to have accrued by each royalty report shall be due and payable on the date such royalty report is due. Elanco shall keep complete and accurate records in sufficient detail to enable the royalties payable hereunder to be determined.

**(e) Know-How Royalties.** If, for a given Product and country, there is no Valid Claim of any Intrexon Patent Rights or Joint Patent Rights in the country of sale that covers the Product or its manufacture, use, sale, offer for sale or importation, then Elanco will pay to Intrexon on a quarterly basis Know-How royalties at a rate that is one-half of the Patent Royalties, but no less than a rate of **[*****]**, until the later of; i) the expiration of the last Valid Claim of an Intrexon Patent pertaining to a Licensed Product in such country of sale plus **[*****]** years of Know-how Royalty Period, or ii) expiration of applicable data exclusivity period, at the Patent Royalty Rate, plus **[*****]** years of Know-how Royalty Period.

**(f) Basis for Royalty**. This Section 5.4 is intended to provide for payments to Intrexon equal to the percentages of Net Sales set forth in this Section 5.3 during the period that such Licensed Product, its manufacture, use, sale, offer for sale or importation is covered by a Valid Claim under Intrexon Patents in such country. In establishing this payment structure, the Parties recognize, and Elanco acknowledges, the substantial value of the various actions and investments undertaken by Intrexon prior to the Effective Date and that Intrexon will undertake under this Agreement, and that the value of the Intrexon Channel Technology to be used in the ECC, resides substantially in Intrexon Know-How. As a result, the Parties attribute such value to Intrexon's leading proprietary knowledge in the subject matter, its discovery, design and optimization of any Product Candidate for pharmaceutical applications using Intrexon's proprietary biosynthesis technology and proprietary manufacturing process, in each case created or generated by Intrexon through the expenditure of significant resources and as a result of the innovative capabilities unique to Intrexon. The Parties agree that because Intrexon is not separately compensated under this Agreement for such additional benefits, a **Know-How Royalty** after the expiration of Intrexon Patents, is appropriate. The Parties have agreed to the payment structure set forth herein as a convenient and fair mechanism for both Parties in order to compensate Intrexon for these additional benefits.

**5.5 Method of Payment**. All payments due to Intrexon under this Agreement shall be paid in United States Dollars by wire transfer or Automated Clearing House (ACH) to a bank in the United States designated in writing by Intrexon.

**5.6 Audits.**

**(a)** Upon the written request of Intrexon, Elanco shall permit an independent certified public accounting firm of internationally recognized standing selected by Intrexon, and reasonably acceptable to Elanco, to have access to and to review, during normal business hours and upon reasonable prior written notice, the applicable records of Elanco and its Affiliates to verify the accuracy and timeliness of the reports and payments made by Elanco 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, with no period audited more than once. The independent certified public accountants shall keep confidential any information obtained during such inspection and shall report to Intrexon and Elanco only the amounts of Net Sales and Royalties due and payable.

**(b)** If such accounting firm concludes that additional amounts were owed during such period, Elanco shall pay additional amounts, with interest from the date originally due as set forth in Section 5.4(d), 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 Elanco shall in addition reimburse Intrexon for all costs related to such audit; otherwise, Intrexon shall pay all costs of the audit.

**(c)** Intrexon shall (i) treat all information that it receives under this Section 5.6 in accordance with the confidentiality provisions of Article 7 and (ii) cause its accounting firm to enter into an acceptable confidentiality agreement with Elanco obligating such firm to retain all such financial information in confidence pursuant to such confidentiality agreement.

**5.7 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. Elanco 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 Elanco or the appropriate governmental authority (with the assistance of Elanco 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 Elanco of its obligation to withhold tax, and Elanco shall apply the reduced rate of withholding tax, or dispense with withholding tax, as the case may be, provided that Elanco 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, Elanco withholds any amount, it shall make timely payment to the proper taxing authority of the withheld amount, and send to Intrexon proof of such payment within forty-five (45) days following that latter payment.

**5.8 Late Payments**. If either Party fails to pay any payment due under this Agreement on or before the date such payment is due, as provided in this Agreement, such late payment shall bear interest, to the extent permitted by applicable law, at the prime rate as of the date of U.S. Mail postmark of the relevant payment if sent by U.S. Mail, or otherwise on the date of receipt of payment, as published in The Wall Street Journal and found on the wsj.com website at the following link or its successor site:

http://interactive5.wsj.com/edition/resources/documents/mktindex.htm?rates.htm

plus five percentage points (5.0 p.p.), as calculated on the number of days the relevant payment is delinquent from and including the date payment is due through and including the date upon which the owed Party has collected immediately available funds in its own account.

## ARTICLE 6

## Intellectual Property

**6.1 Ownership.**

**(a)** As between the Parties, each Party shall remain the sole and exclusive owner of all Patents and Information owned by such Party as of the Effective Date, and shall retain all rights therein, subject to the licenses granted under this Agreement.

**(b)** Elanco 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 ECC, together with all intellectual property rights therein (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)** As between the Parties, and excluding Joint Inventions, and subject to Section 6.1(f), Intrexon shall solely own all right, title and interest in all Inventions using or incorporating Intrexon Channel Technology and/or Intrexon IP (the "**Channel-Related Program IP**"), provided such Channel-Related Program IP does not use or incorporate Elanco IP. For Joint Inventions based solely on Intrexon IP and/or Intrexon Channel Technology, Intrexon shall own such Joint Inventions and such Joint Inventions are included in Intrexon IP, and accordingly Elanco shall have the license rights provided in Article 3. 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 solely by Elanco using or incorporating the Intrexon Channel Technology, Intrexon IP, or Intrexon Materials, 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, and shall be subject to the licenses granted to Elanco in this Agreement.

**(d)** As between the Parties, and excluding Joint Inventions, and subject to Section 6.1(f), Elanco shall solely own all right, title and interest in all Inventions, using or incorporating Elanco IP , provided such Inventions do not use or incorporate the Channel-Related Program IP . For Joint Inventions based solely on Elanco IP, Elanco shall own such Joint Inventions shall have all rights in the field of Animal Health*)*, with Intrexon having all the rights outside of the field of Animal Health, with (i) such rights outside the field of Animal Health are hereby granted by Elanco to Intrexon, and, (ii) such rights inside the field of Animal Health are hereby granted by Intrexon to Elanco. 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 solely by Intrexon using or incorporating the Elanco IP, together with all patent rights and other intellectual property rights therein, shall be solely owned by Elanco and shall be included in the Elanco IP, and shall be subject to the licenses granted to Intrexon in this Agreement.

**(e)** All Joint Inventions that use or incorporates (i) Elanco IP and (ii) Intrexon IP and/or Intrexon Channel Technology shall be owned jointly by the Parties with each Party owning an undivided half-interest under such Inventions, with Elanco having all rights in the Field, such rights inside the Field hereby granted by Intrexon to Elanco, and as to the rights outside the Field neither Party may utilize such Inventions without mutual agreement by both Parties.

**(f)** All Inventions made solely by either Party using both Intrexon IP and/or Intrexon Materials and Elanco IP shall be owned jointly by the Parties with each Party owning an undivided half-interest under such Inventions, with Elanco having all rights inside the Field and as to the rights outside the Field neither Party may utilize such Inventions without mutual agreement by both Parties, and provided in each case such Inventions do not use or incorporate the other Party's IP without the other Party's consent.

**(g)** All information regarding Channel-Related Program IP shall be Confidential Information of Intrexon. All information regarding Elanco Program IP shall be Confidential Information of Elanco. Each Party shall be under appropriate written agreements with each of its employees or agents working on the ECC, pursuant to which such person shall grant all rights in the Inventions to such Party, so that such Party may convey certain of such rights to the other Party as provided in this Agreement.

**6.2 Patent Prosecution.**

**(a)** Intrexon shall have the sole right, but not the obligation, to conduct and control the filing, prosecution and maintenance of the Intrexon Patents. At the reasonable request of Intrexon, Elanco shall cooperate with Intrexon in connection with such filing, prosecution, and maintenance, at Intrexon's expense. Under no circumstances shall Elanco: (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, Intrexon IP, Intrexon Materials or Intrexon Channel Technology; or (b) use, attempt to use, or assist anyone else in using or attempting to use, the Intrexon Know-How, Intrexon Materials, Intrexon Channel Technology or any Confidential Information of Intrexon to support the filing of patent application, either in the United States or elsewhere.

**(b)** Elanco 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 Elanco or its Affiliates ("**Elanco Program Patents**"). At the reasonable request of Elanco, Intrexon shall cooperate with Elanco in connection with such filing, prosecution, and maintenance, at Elanco's expense.

**(c)** The prosecuting party shall be entitled to use patent counsel selected by it (including in-house patent counsel as well as outside patent counsel) for the filing, prosecution and maintenance of the Patents under this Section 6.2. The prosecuting party shall:

**(i)** regularly provide the other Party in advance with sufficient details relating to the prosecuting party's prosecution of Patents hereunder to permit such other Party to access prosecution information itself directly; provided that, to the extent that any such prosecution information is not readily accessible to the public, the prosecuting party will provide copies of the appropriate information (including copies of substantive communications, notices and actions submitted to or received from the relevant patent authorities) to such other Party; and

**(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 of a due date, 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. In accordance with the above time lines, for patent applications that relate solely to Licensed Products, Intrexon will coordinate a prosecution strategy toward commercial goals, working objectively in good faith to accommodate therein Elanco's reasonable and timely suggestions and input; provided such suggestions and input do not propose an adverse position to another Intrexon Patent.

**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 a Intrexon Patent is invalid or unenforceable) (collectively, "**Infringement**"), either by settlement or lawsuit or other appropriate action. Infringing activities of a third party (or third parties) in the Field constitute a "Field Infringement". 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 Elanco on such determination.

**(b)** Notwithstanding the foregoing, Elanco 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 Elanco 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(f) 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. Intrexon and Elanco shall bear the costs and expenses of such enforcement equally.

**(c)** 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 (except with respect to an action under Section 6.3(b), where all costs and expenses will be shared equally in accordance with terms thereof).

**(d)** Elanco 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 Elanco in the Field without Elanco's prior written consent, which consent shall not be unreasonably withheld.

**(e)** 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 Elanco pursuant to Section 6.3(b), Elanco shall retain one hundred percent (100%) of any Recovery. In any action initiated by Intrexon or Elanco pursuant to Section 6.3(c), the Parties shall share the Recovery equally.

**(f)** Elanco shall promptly notify Intrexon in writing of any alleged, threatened, or actual Infringement of which it becomes aware, and Intrexon shall promptly notify Elanco in writing of any alleged, threatened, or actual Field Infringement of which it becomes aware.

## ARTICLE 7

## Confidentiality

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

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

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

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

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

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

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

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

**(a)** complying with applicable laws or regulations or valid court orders, provided that the Party making such disclosure provides the other Party with reasonable prior written notice of such disclosure and makes a reasonable effort to obtain, or to assist the other Party in obtaining, a protective order preventing or limiting the disclosure, with equally stringent confidentiality provisions as are in this Agreement, and 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 Agencies in order to seek or obtain approval to conduct clinical trials, or to gain regulatory approval, of Licensed Products or any products being developed by Intrexon or its other licensees and/or channel partners and/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, (ii) does not unreasonably reject any such suggestions, and (iii) make such disclosure under equally stringent confidentiality provisions as are in this Agreement;

**(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 made under equally stringent confidentiality provisions as are in this Agreement and 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 and/or collaborators who agree to be bound by obligations of confidentiality and non-use at least equivalent in scope to those set forth in this Article 7.

**7.3 Publicity.**

**(a)** Until the later of First Commercial Sale by Elanco of the first Licensed Product, or public announcement by the USA or European **regulatory agency** of its approval of such Licensed Product for commercial sale, neither Party will disclose to the public, any information about this Agreement, including its existence, without the prior written consent of the other Party, which decision regarding consent will be communicated no later than twenty (20) business days from the date of receipt of the request, except where required for local fiscal reporting laws, filing regulations or stock exchange rules relating to the Party or any Affiliate of the Party. Furthermore, neither Party shall use in advertising, publicity or otherwise the name or any trademark of the other Party without prior written consent.

**(b)** Notwithstanding the foregoing, the Parties agree as follows:

**(i)** Each Party shall have the right to make disclosures related to this Agreement required by law, including where a Party may be obligated to file a copy of this Agreement with the Securities Exchange Commission, either as of the Effective Date or at some point during the Term. Each Party shall be entitled to make such a required disclosures, 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 required disclosure, the disclosing Party shall provide the other Party with a copy of the proposed disclosure marked to show, where applicable, provisions for which the disclosing 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 such required disclosures. The other Party shall promptly provide any such comments.

**(ii)** Each Party shall have the right to a disclose, as reasonably necessary and appropriate, terms or conditions of this Agreement (i) on a need-to-know basis to its legal and financial advisors to the extent such disclosure is reasonably necessary or (ii) to a third party in connection with

**(1)** an equity investment in such Party,

**(2)** a merger, consolidation or similar transaction by such Party, or

**(3)** the sale of all or substantially all of the assets of such Party.

**(iii)** Each Party shall have the right to a disclose the scope and Field of this Agreement to a third party in connection with a collaboration or strategic alliance. The disclosing Party shall ensure that the recipient third party is subject to a confidentiality agreement, with a minimum term of three (3) years, prior to making any disclosure under subsection (ii) or (iii) of this Section 7.3(b).

**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 Audits.**

**(a)** For the purpose of confirming compliance with the licenses granted in Article 3 and Article 6 and the confidentiality obligations under Article 7, each Party acknowledges that the other Party's authorized representative(s), during regular business hours may (i) examine and inspect the audited Party'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 the auditing Party to the audited Party. The audited Party will make itself and the pertinent employees and/or agents available, on a reasonable basis, to the auditing Party for the aforementioned compliance review.

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

**(c)** To the extent Elanco transfers any Intrexon Materials to any Third Party, Elanco shall include in its agreement with such Third Party provisions at least as protective of the Intrexon Materials as set forth in Section s7.5(a) and (b) above, and shall ensure that any such Third Party recipient is in strict compliance with such obligations.

## ARTICLE 8

## Representations And Warranties

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

**(a) Corporate Power**. Eli Lilly and Company, operating through its business unit, Elanco, is duly organized and validly existing under the laws of Indiana and has corporate full power and authority to enter into this Agreement and to carry out the provisions hereof.

**(b) Due Authorization**. Elanco is duly authorized to execute and deliver this Agreement and to perform its obligations hereunder, and the person executing this Agreement on Elanco'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 Elanco 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 Elanco 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. Elanco is aware of no action, suit or inquiry or investigation instituted by any governmental agency which questions or threatens the validity of this Agreement.

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

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

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

**(c) Binding Agreement**. This Agreement is a legal and valid obligation binding upon Intrexon and enforceable in accordance with its terms, except as such enforcement may be limited by applicable bankruptcy, insolvency, reorganization, arrangement, moratorium or other similar laws affecting creditors' rights, and subject to general equity principles and to limitations on availability of equitable relief, including specific performance. The execution, delivery and performance of this Agreement by Intrexon does not conflict with any agreement, instrument or understanding, oral or written, to which it is a party or by which it may be bound. Intrexon is aware of no action, suit or inquiry or investigation instituted by any governmental agency which questions or threatens the validity of this Agreement.

**(d) Additional Intellectual Property Representations.**

**(i)** it has not previously assigned, transferred, conveyed or otherwise encumbered its right, title and interest in Intrexon Patents or Intrexon Know-How in a manner that is inconsistent with the licenses granted to Elanco under Article 3 and Article 6;

**(ii)** to Intrexon's knowledge after reasonable due diligence, it is the owner or licensee of the Intrexon Patents and Intrexon Know-How, free and clear of any liens, charges and encumbrances; and

**(iii)** to Intrexon's knowledge after reasonable due diligence, there are no claims, judgments or settlements against or owed by Intrexon and no pending or threatened claims or litigation relating to the Intrexon Patents or Intrexon Know-How.

**8.3 Warranty Disclaimer**. EXCEPT FOR THE EXPRESS WARRANTIES PROVIDED IN THIS ARTICLE 8 OR IN THE EQUITY AGREEMENTS, 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 Elanco and its Affiliates and their respective directors, officers, employees, and agents (collectively, the "**Elanco Indemnitees**") from and against any and all liabilities, damages, costs, expenses, or losses (including reasonable legal expenses and attorneys' fees) (collectively, "**Losses**") resulting from any claims, suits, actions, demands, or other proceedings brought by a Third Party (collectively, "**Claims**") to the extent arising from (a) the negligence or willful misconduct of Intrexon or any of its Affiliates, or their respective employees or agents, (b) the use, handling, storage or transport of Intrexon Materials by or on behalf of Intrexon or its Affiliates, licensees (other than Elanco) or sublicensees; (c) breach by Intrexon of any representation, warranty or covenant in this Agreement; or (d) **[*****]**. Notwithstanding the foregoing, Intrexon shall not have any obligation to indemnify the Elanco Indemnitees to the extent that a Claim arises from (i) the negligence or willful misconduct of Elanco or any of its Affiliates, licensees, or sublicensees, or their respective employees or agents; or (ii) a breach by Elanco of a representation, warranty, or covenant of this Agreement.

**9.2 Indemnification by Elanco**. Elanco agrees to indemnify, hold harmless, and defend Intrexon, and its Affiliates, 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 Elanco or any of its Affiliates or their respective employees or agents; (b) the use, handling, storage, or transport of Intrexon Materials by or on behalf of Elanco or its Affiliates, licensees, or sublicensees; (c) breach by Elanco or any representation, warranty or covenant in this Agreement; or (d) **[*****]**. Notwithstanding the foregoing, Elanco 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 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.

**9.4 Insurance**. During the term of this Agreement, each Party shall maintain in effect and good standing a comprehensive general liability insurance policy issued by a reputable insurance company in amounts considered standard for the industry, provided that Elanco may self insure. At the other Party's reasonable request, the insuring Party shall provide the other Party with all details regarding such policy, including without limitation copies of the applicable liability insurance contracts.

## 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.

**10.2 Termination for Material Breach**. Either Party shall have the right to terminate this Agreement upon written notice to the other Party if the other Party commits any material breach of this Agreement that such breaching Party fails to cure within sixty (60) days following written notice from the nonbreaching Party specifying such breach. Specifically but without limiting the foregoing, Intrexon shall have the right to terminate this Agreement pursuant to this Section 10.2(a), in the event Elanco has not: (i) selected any Product Candidate within twelve (12) months (or such other time as mutually agreed by the JSC) after a Potential Product Candidate has been identified as viable by the JSC; or (ii) completed a regulatory submission for the approval of a Licensed Product comprising a Product Candidate within forty-eight (48) months after the selection of such Product Candidate, provided that Intrexon's right to terminate this Agreement under subsection (ii) shall be limited to such Product Candidate and the Target to which it directs.

**10.3 Termination by Elanco**.

**(a)** Elanco shall have the right to voluntarily terminate this Agreement in its entirety or on a Target-by-Target basis, upon ninety (90) days written notice to Intrexon, provided that, in the event Intrexon is conducting research activities for any Target under Section 4.1, the notice period for Elanco to terminate any such research shall be one hundred eighty (180) days.

**(b)** After the selection of a Product Candidate, Elanco may terminate this Agreement on a Licensed Product-by-Licensed Product basis at its sole discretion upon the later of; i) expiration of the last Valid Claim of an Intrexon Patent pertaining to a Licensed Product plus **[*****]** years of Know-how Royalty Period, or ii) expiration of applicable data exclusivity period, plus **[*****]** years of Know-how Royalty Period, with Elanco retaining the rights to develop, commercialize and sale Retained Products per this Agreement in accordance with Section 10.4.

**10.4 Effect of Termination**. In the event of expiration of this Agreement or termination of this Agreement, pursuant to Section 10.2 or Section 10.3, with respect to a particular Target (or in its entirety, in which case the following shall apply to all Targets), the following shall apply:

**(a) Retained Products**. Notwithstanding to the contrary, Elanco shall be permitted to continue, at its sole discretion, the development, commercialization and sale of any Licensed Product directed to such Target that, at the time of termination, satisfies at least one of the following criteria (a "**Retained Product**"):

(i) is being commercialized or sold by Elanco,

(ii) has received regulatory approval in the United States or the European Union, or

(iii) is a subject of an application for regulatory approval in the Field that is pending before the applicable Regulatory Agency.

Elanco's right to continue to develop and/or commercialize a Retained Product under this Section 10.4(a) shall be subject to Elanco's full compliance with the payment provisions in Article 5 of this Agreement that survive termination. This Section 10.4(a) shall not apply in the event Intrexon terminates this Agreement for Elanco's uncured material breach in its payment obligations under Article 5. Notwithstanding anything to the contrary, this Section 10.4 shall survive termination of this Agreement.

**(b) Termination of Licenses**. Except as necessary for Elanco to continue to develop, commercialize and sell the Retained Products as permitted by Section 10.4(a), all rights and licenses granted by Intrexon to Elanco under this Agreement with respect to such Target, including Elanco's rights under Section 3.10, shall terminate without further action by either Intrexon or Elanco. Elanco's 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 Licensed Products, that are not selected by Elanco following expiration or termination as Retained Products, directed to such terminated Target(s) shall be referred to herein as the "**Reverted Products**." Elanco 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 Elanco 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. Elanco 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**. Elanco shall promptly return, or at Intrexon's request Elanco shall promptly destroy, any Intrexon Materials in Elanco's possession or control at the time of termination that pertain to the terminated Target (unless such Confidential Information also pertains to another Target that remains the subject of this Agreement after such termination), other than any Intrexon Materials necessary for the continued development and commercialization of the Retained Products.

**(e) Licenses to Intrexon**. Elanco is automatically deemed to grant, upon expiration or termination, to Intrexon a worldwide, fully paid, royalty-free, exclusive (even as to Elanco and its Affiliates), irrevocable, license (with full rights to sublicense) under the Elanco 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. Elanco shall also take such actions and execute such other instruments and documents as may be necessary to document such license to Intrexon.

**(f) Approval Filings**. If Elanco terminates this Agreement during the term of this Agreement other than for Intrexon's breach, or if Intrexon terminates this Agreement for Elanco's breach, Elanco shall timely assign to Intrexon, and will provide full copies of, all regulatory approvals and regulatory filings that relate specifically and solely to Reverted Products. Elanco 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, Elanco shall provide copies of the portions of such regulatory filings that relate to Reverted Products and shall reasonably cooperate to assist Intrexon in obtaining the benefits of such regulatory approvals with respect to the Reverted Products.

**(g) Data Disclosure**. Elanco 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 Elanco or its Affiliates to the extent that they pertain 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**.

**(i)** To the extent that Elanco acquires a third party license with respect to a Licensed Product; where such license (1) is signed after the Effective Date; (2) is effected at the direction of the JSC and (3) claims inventions or know-how specific to or used or incorporated into the development, manufacture and/or commercialization of the Licensed Products; then Elanco shall use Diligent Efforts to provide that Intrexon can acquire such license rights for any Reverted Product hereunder on substantially the same terms.

**(ii)** To the extent that Elanco acquires a third party license with respect to a Licensed Product; where such license (1) is signed after the Effective Date; (2) is not effected at the direction of the JSC and (3) claims inventions or know-how specific to or used or incorporated into the development, manufacture and/or commercialization of the Licensed Products; then Elanco shall use commercially reasonable efforts to provide that Intrexon can acquire such license rights for any Reverted Product on substantially the same terms. Elanco may use such reasonable efforts after a notice of termination under this Section 10, and those reasonable efforts shall satisfy the requirement of this paragraph. Prior to a notice of termination under this Section 10, Elanco acknowledges that it will not knowingly take any directed actions to prevent the transfer of such rights.

**(iii)** Upon a notice of termination, Elanco will provide to Intrexon a description of technologies within third party licenses, under (i) and (ii) above, for the purposes of review by the parties in assessing Intrexon's desire to obtain rights under such licenses.

**(i) Remaining Materials**. At the request of Intrexon, Elanco shall transfer to Intrexon, all quantities of Reverted Product (including API or work-in-process) in the possession of Elanco or its Affiliates. Elanco 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**.

**(i)** To the extent that Elanco contracts with third party vendors (including suppliers and distributors) with respect to a Licensed Product; where such contract (1) is signed after the Effective Date; (2) is effected at the direction of the JSC and (3) directly relates to the development, manufacture and/or commercialization of the Licensed Products; then Elanco shall use Diligent Efforts to provide that Intrexon can contract with any such vendor on substantially the same terms for any Reverted Product.

**(ii)** To the extent that Elanco contracts with third party vendors (including suppliers and distributors) with respect to a Licensed Product; where such license (1) is signed after the Effective Date; (2) is not effected at the direction of the JSC and (3) claims inventions or know-how specific to or used or incorporated into the development, manufacture and/or commercialization of the Licensed Products; then Elanco shall use commercially reasonable efforts to provide that Intrexon can contract with any such vendor on substantially the same terms for any Reverted Product. Elanco may use such reasonable efforts after a notice of termination under this Section 10, and those reasonable efforts shall satisfy the requirement of this paragraph. Prior to a notice of termination under this Section 10, Elanco acknowledges that it will not knowingly take any directed actions to prevent the transfer of such rights.

**(iii)** Upon a notice of termination, Elanco will provide to Intrexon a description of technologies within third party licenses, under (i) and ii) above, for the purposes of review by the parties in assessing Intrexon's desire to obtain rights under such licenses. Such descriptions or license copies may be redacted as may be required, but still sufficient for the aforementioned purposes.

**(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 Elanco, 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 that pertain to the terminated Target (unless such Confidential Information also pertains to another Target that remains the subject of this Agreement after such termination), provided 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 Elanco) 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 Elanco 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 3.2, 3.4, 3.5, the last sentence of 3.7 and 5.6; Articles 6, 7 and 9 through 12; and any relevant definitions in Article 1.

## 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. In the event of any disputes, controversies or differences which may arise between the Parties out of or in relation to or in connection with this Agreement (other than disputes arising from a Committee), including, without limitation, any alleged failure to perform, or breach, of this Agreement, or any issue relating to the interpretation or application of this Agreement, then upon the request of either Party by written notice, the Parties agree to meet and discuss in good faith a possible resolution thereof, which good faith efforts shall include at least one in-person meeting between the Executive Officers of each Party. If the matter is not resolved within thirty (30) days following the written request for discussions, either Party may then pursue any available legal recourse. 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 Governing Law.** This Agreement shall be governed by and construed under the substantive laws of the State of New York, excluding any conflicts or choice of law rule or principle that might otherwise refer construction or interpretation of this Agreement to the substantive law of another jurisdiction.

**11.3 Costs.** Each Party shall bear its own legal fees.

**11.4 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 if necessary to protect the interests of such Party or to preserve the status quo pending the dispute resolution. Specifically, the Parties agree that a material breach by either Party of its obligations in 3.3 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 3.3, 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, 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.

**11.5 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 enforcing this Agreement and agree not to commence any action, suit or proceeding related thereto except in such courts.

**11.6 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.

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

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

| | |
|---|---|
| If to Intrexon: | Intrexon Corporation<br>20358 Seneca Meadows Parkway<br>Germantown, MD 20876<br>Attention: President, Animal Science Division<br>Fax: (301) 556-9901 |
| with a copy to: | Intrexon Corporation<br>20358 Seneca Meadows Parkway<br>Germantown, MD 20876<br>Attention: Legal Department<br>Fax: (301) 556-9902 |
| If to Elanco: | Elanco Animal Health<br>a Division of the Eli Lilly and Company<br>2500 Innovation Way<br>Greenfield, Indiana 46140<br>Attention: Elanco General Counsel<br>Fax: **[*****]** |

**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 and the exhibit attached hereto constitute the entire, final, complete and exclusive agreement between the Parties and supersede all previous agreements or representations, written or oral, with respect to the subject matter of this Agreement (including any prior confidentiality agreement between the Parties). All information of Intrexon or Elanco 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 Nonassignability; 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 nonassigning or nondelegating 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 hereto. Notwithstanding the foregoing, in the event that either Party assigns this Agreement to its successor in interest by way of merger, acquisition, 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)), (a) the intellectual property rights of such successor in interest or any of its affiliates shall be automatically excluded from the rights licensed to the other Party under this Agreement, and (b) such successor in interest may elect by written notice to have the restrictions set forth in Section 3.3 not apply to the activities of such successor in interest (but, for purposes of clarity, such restriction shall in any event continue to apply to the applicable Party and all other Affiliates of such Party not related to such successor in interest). In the event that a successor in interest to Elanco elects to have the restrictions set forth in Section 3.3 not apply to the activities of such successor in interest, Intrexon shall have the termination right set forth in Section 10.2(c).

**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 Solicitation:** Neither Elanco nor Intrexon personnel involved in the ECC research and development, or members of the JSC or IPC, may directly or indirectly solicit, in order to offer to employ, any employee of the other Party for a period of one year after the Effective Date without the prior approval of such other Party. General employment solicitations or advertisements or employment discussions initiated by such an employee, are not direct or indirect solicitations, and are not prohibited under this Agreement. The parties will identify, in writing within thirty days of execution of this Agreement, certain ECC participants or identified roles from each Party, for which the restrictions on solicitation, offers of employment and employment shall extend for a period of 7-years after the Effective Date.

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

**12.13 Counterparts**. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original and all of which shall constitute together the same instrument.

*[Remainder of page intentionally left blank.]*

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.

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

**INTREXON CORPORATION**

By: /s/ Thomas R. Kasser
Name: Thomas R. Kasser
Title: SVP, President ASD

**ELANCO ANIMAL HEALTH, A DIVISION OF ELI LILLY AND COMPANY**

By: /s/ William C. Weldon
Name: William C. Weldon
Title: Vice President Elanco Global R&D

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.

**EXHIBIT A**

**Research Plan**

**[*****]**

**Exhibit 10.6**

**EXECUTION COPY**
**CONFIDENTIAL**

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# EXCLUSIVE CHANNEL COLLABORATION AGREEMENT

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

## RECITALS

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

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

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

## ARTICLE 1

## DEFINITIONS

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

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

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

**1.3** "**Authorizations**" has the meaning set forth in Section 8.2(d)(xii).

**1.4** "**CC**" has the meaning set forth in Section 2.2(b).

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

**1.6** "**Claims**" has the meaning set forth in Section 9.1.

**1.7** "**CMCC**" has the meaning set forth in Section 2.2(b).

**1.8** "**Committees**" has the meaning set forth in Section 2.2(a).

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

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

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

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

**1.13** "**CRC**" has the meaning set forth in Section 2.2(b).

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

**1.15** "**Equity Agreements**" has the meaning set forth in Section 5.1.

**1.16** "**Excess Product Liability Costs**" has the meaning set forth in Section 9.3.

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

**1.18** "**FDA**" has the meaning set forth in Section 8.2(d)(xiii).

**1.19** "**Field Infringement**" has the meaning set forth in Section 6.3(b)

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

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

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

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

**1.24** "**Infringement**" has the meaning set forth in Section 6.3(a).

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

**1.26** "**Intrexon Indemnitees**" has the meaning set forth in Section 9.2.

**1.27** "**Intrexon IP**" means the Intrexon Patents and Intrexon Know-How.

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

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

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

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

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

**1.33** "**Inventions**" has the meaning set forth in Section 6.1(b).

**1.34** "**IPC**" has the meaning set forth in Section 2.2(b).

**1.35** "**JSC**" has the meaning set forth in Section 2.2(b).

**1.36** "**KFLP**" means the Koski Family Limited Partnership.

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

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

**1.39** "**Lantibiotics Program**" has the meaning set forth in Section 2.1.

**1.40** "**Losses**" has the meaning set forth in Section 9.1.

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

**1.42** "**Net Sales**" means, with respect to any Oragenics Product, the net sales of such Oragenics Product by Oragenics or an Affiliate 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), 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 product, solely for purposes of the calculation of Net Sales, shall be deemed to be no less than the price at which such product would be sold in a similar transaction to a third party not also purchasing the other products or services.

**1.43** "**Oragenics Indemnitees**" has the meaning set forth in Section 9.1.

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

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

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

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

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

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

**1.50** "**Product Profit**" means Net Sales less Cost of Goods Sold.

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

**1.52** "**Product Sublicense**" has the meaning set forth in Section 3.2(c).

**1.53** "**Product Sublicensee**" has the meaning set forth in Section 3.2(c).

**1.54** "**Proposed Terms**" has the meaning set forth in Section 11.2.

**1.55** "**Prosecuting Party**" has the meaning set forth in Section 6.2(c).

**1.56** "**Recovery**" has the meaning set forth in Section 6.3(f).

**1.57** "**Retained Product**" has the meaning set forth in Section 10.4(a).

**1.58** "**Reverted Product**" has the meaning set forth in Section 10.4(c).

**1.59** "**SEC**" means the United States Securities and Exchange Commission.

**1.60** "**Sublicensing Revenue**" means any cash consideration, or the cash equivalent value of non-cash consideration, regardless of whether in the form of upfront payments, milestones, or royalties, actually received by 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 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(b), any payments received by Oragenics from permitted sublicensees for the first instance (but not subsequent instances) of attainment of a commercialization milestone event that is the same as (or substantially similar to) a commercialization milestone event for which Intrexon is entitled to receive an equity-based milestone payment under Section 5.2(a), and (e) amounts received from sublicensees in respect of any Oragenics Product sales that are included in Net Sales.

**1.61** "**Superior Therapy**" means a therapy in the Field that, based on the data then available, (a) demonstrably appears to offer either superior efficacy or safety or significantly lower cost of therapy, as compared with both (i) those therapies that are marketed (either by 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.

**1.62** "**Support Memorandum**" has the meaning set forth in Section 11.2.

**1.63** "**Term**" has the meaning set forth in Section 10.1.

**1.64** "**Territory**" means the entire world.

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

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

**1.67** "**Third Security**" means Third Security, LLC.

**1.68** "**US GAAP**" means generally accepted accounting principles in the United States.

## ARTICLE 2

### SCOPE OF CHANNEL COLLABORATION; MANAGEMENT

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

**2.2 Committees**.

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

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

| Committee | Purpose |
|---|---|
| Joint Steering Committee ("**JSC**") | Establish projects for the Lantibiotics Program and establish the priorities, as well as approve budgets for such projects. Approve all subcommittee projects and plans. |
| Chemistry, Manufacturing and Controls Committee ("**CMCC**") | Establish project plans and review and approve activities and budgets for chemistry, manufacturing, and controls under the Lantibiotics Program. |
| Clinical/Regulatory Committee ("**CRC**") | Review and approve all research and development plans, clinical projects and publications, and regulatory filings and correspondence under the Lantibiotics Program; review and approve itemized budgets with respect to the foregoing. |

| Committee | Purpose |
|---|---|
| Commercialization Committee ("**CC**") | Establish project plans and review and approve activities and budgets for commercialization activities under the Lantibiotics Program. |
| Intellectual Property Committee ("**IPC**") | Evaluate intellectual property issues in connection with the Lantibiotics Program; review and approve itemized budgets with respect to the foregoing. |

**2.3 General Committee Membership and Procedure**.

**(a) Membership**. For each Committee, each Party shall designate an equal number of representatives (not to exceed four (4) for each Party) with appropriate expertise to serve as members of such Committee. For the JSC the representatives must all be employees of such Party or an Affiliate of such Party, and for Committees other than the JSC the representatives must all be employees of such Party or an Affiliate of such Party with the caveat that each Party may designate for each such other Committee up to one (1) representative who is not an employee if : (i) such non-employee representative agrees in writing to be bound to the terms of this Agreement for the treatment and ownership of Confidential Information and Inventions of the Parties, and (ii) the other party consents to the designation of such non-employee representative, which consent shall not be unreasonably withheld. Each representative as qualified above may serve on more than one Committee as appropriate in view of the individual's expertise. Each Party may replace its Committee representatives at any time upon written notice to the other Party. Each Committee shall have a chairperson; the chairperson of each committee shall serve for a two-year term and the right to designate which representative to the Committee will act as chairperson shall alternate between the Parties, with 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.

**(b) Meetings**. Each Committee shall hold meetings at such times as it elects to do so, but in no event shall such meetings be held less frequently than once every six (6) months, with the caveat that both Parties may agree to suspend activities of a given Committee other than the JSC until such time as one Party informs the other Party of its then desire to reactivate the so-suspended Committee, at which point the Parties will thereafter schedule and hold the next meeting for the reactivated Committee within one (1) month. Meetings of any

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

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

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

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

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

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

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

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

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

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

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

## ARTICLE 3

## LICENSE GRANTS

**3.1 Licenses to Oragenics**.

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

**(b)** Subject to the terms and conditions of this Agreement, Intrexon hereby grants to Oragenics a non-exclusive, royalty-free license to use and display the Intrexon

Trademarks, solely in connection with the Commercialization of Oragenics Products, in the promotional materials, packaging, and labeling for Oragenics Products, as provided under and in accordance with Section 4.9.

**3.2 Sublicensing**. Except as provided below, Oragenics 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 Oragenics Products or use or display the Intrexon Trademarks, in each case except with Intrexon's written consent, which written consent may be withheld in Intrexon's sole discretion. Notwithstanding the foregoing, Oragenics shall have a limited right to sublicense under the circumstances described in Sections 3.2(a) through 3.2(c) below.

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

**(b)** Oragenics may, with Intrexon's written consent, which written consent shall not be unreasonably withheld, conditioned, or delayed, sublicense the rights granted under Section 3.1 to an Affiliate, or transfer the Intrexon Materials to an Affiliate, or grant an Affiliate the right to research, develop, use, or Commercialize Oragenics Products or use or display the Intrexon Trademarks. In the event that Intrexon consents to any such grant or transfer to an Affiliate, Oragenics 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 Oragenics), including any payment obligations owed to Intrexon hereunder.

**(c)** Oragenics may grant a sublicense of the rights granted under Section 3.1 to a Third Party licensee of any Oragenics Product (a "**Product Sublicensee**") to the extent necessary to permit such Third Party to research, develop, use, import, export, make, have made, sell, and offer for sale that Oragenics Product (a "**Product Sublicense**"), provided, that (i) such Product Sublicense is expressly limited to the appropriate Oragenics Product, (ii) does not grant the Product Sublicensee any rights to Intrexon IP other than that incorporated into the Oragenics Product at the time of the Product Sublicense, (iii) does not purport to relieve Oragenics of any of its obligations under this Agreement, (iv) the Product Sublicensee agrees in writing, in a document in form reasonably acceptable to Intrexon and to which Intrexon is an express third party beneficiary, to abide by the following provisions of this Agreement: Sections 3.1., 3.3-3.6, 3.8, 3.10, and 3.11 and Articles VI, VII, and X), (v) the Product Sublicense is presented in full to the JSC by Oragenics before execution by Oragenics and the prospective Product Sublicensee and as soon as is reasonably practical for the purpose of allowing the JSC to review and comment upon the terms and scope of the Product Sublicense agreement before execution, and (vi) the Product Sublicensee is not controlled by or otherwise affiliated with a member of the KFLP Group.

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

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

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

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

**3.7 No Prohibition on Intrexon**. Except as explicitly set forth in Sections 3.1 and 3.4, nothing in this Agreement shall prevent Intrexon from practicing or using the Intrexon Materials, Intrexon Channel Technology, and Intrexon IP for any purpose, and to grant to Third Parties the right to do the same. Without limiting the generality of the foregoing, Oragenics acknowledges that Intrexon has all rights, in Intrexon's sole discretion, to make the Intrexon

Materials, Intrexon Channel Technology (including any active pharmaceutical ingredient used in an Oragenics Product), and Intrexon IP available to Third Party channel partners or collaborators for use in fields outside the Field.

**3.8 Rights to Clinical and Regulatory Data**. Oragenics shall own and control all clinical data and regulatory filings relating to Commercialization of Oragenics Products during the Term. Oragenics shall provide full copies of all clinical and non-clinical data and reports, regulatory filings, and communications from regulatory authorities that relate specifically and solely to Oragenics Products. To the extent that there exist any clinical and non-clinical data and reports, regulatory filings, and communications from regulatory authorities owned by Oragenics or a Product Sublicensee that relate both to Oragenics Products and other products produced by Oragenics or a Product Sublicensee outside the Field, Oragenics shall provide (or require that the Product Sublicensee provide) to Intrexon upon Intrexon's request copies of the portions of such data, reports, filings, and communications that relate to Oragenics Products. Intrexon shall be permitted, directly or in conjunction with or through partners or other channel collaborators, to reference this data, reports, filings, and communications relating to Oragenics Products in regulatory filings made to obtain regulatory approval for products indicated for use in fields outside the Field. Intrexon shall have the right to use any such information in developing and Commercializing products outside the Field and to license any Third Parties to do so.

**3.9 Third Party Licenses**.

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

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

doubt, Intrexon may at any time obtain a license under [*****] Third Party IP outside the Field, at [*****] sole expense, provided that if [*****] decides to seek to obtain such a license, it shall use reasonable efforts to coordinate its licensing activities in this regard with [*****].

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

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

**(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. 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 of Intrexon's permitted subcontractors.

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

## ARTICLE 4

## OTHER RIGHTS AND OBLIGATIONS

**4.1 Development and Commercialization**. Subject to Sections 4.6 and 4.7, Oragenics shall be solely responsible for the performance of the Lantibiotics Program and the development and commercialization of Oragenics Products in the Field. Oragenics shall be responsible for all costs incurred in connection with the Lantibiotics Program except that Intrexon shall be responsible for the following: (a) costs of establishing manufacturing capabilities and facilities in connection with Intrexon's manufacturing obligation under Section 4.6 (provided, however, that Intrexon may include an allocable portion of such costs, through depreciation and amortization, when calculating the Fully Loaded Cost of manufacturing 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 improvements) but, for clarity, excluding research described in Section 4.7 or research requested by the JSC for the development of an Oragenics Product (which research costs shall be reimbursed by Oragenics); (c) [*****]; and (d) costs of filing, prosecution and maintenance of Intrexon Patents. The costs encompassed within subsection (a) above shall include the scale-up of Intrexon Materials and related active pharmaceutical ingredients for clinical trials and commercialization of Oragenics 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 Oragenics (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**. Oragenics will keep Intrexon informed about Oragenics' efforts to develop and commercialize Oragenics Products, including reasonable and accurate summaries of Oragenics' (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 Oragenics Products, including initiation or completion of a clinical trial, submission of a United States or international regulatory filing, receipt of a response to such United States or international regulatory filing, clinical safety event, receipt of Regulatory Approval, or commercial launch. As set forth in Section 3.8 above, Oragenics 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 Oragenics as soon as practical after they become available. Intrexon will keep Oragenics informed about Intrexon's efforts (a) to establish manufacturing capabilities and facilities for Oragenics Products (and Intrexon Materials relevant thereto) and otherwise perform its manufacturing responsibilities under Section 4.6 and (b) to undertake discovery-stage research for the Lantibiotics Program with respect to the Intrexon Channel Technology and Intrexon Materials. Unless otherwise provided herein, such disclosures by Oragenics and Intrexon will be made in the course of JSC meetings at least once every six (6) months while Oragenics 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, Oragenics shall own and maintain, at its own cost, all regulatory filings and regulatory approvals for Oragenics Products that Oragenics is developing or Commercializing pursuant to this Agreement. As such, Oragenics shall be responsible for reporting all adverse events related to such Oragenics 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 Oragenics and Intrexon establish and execute a separate safety data exchange agreement, which agreement will address and govern the timely exchange of safety information generated by 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 Lantibiotics 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 Lantibiotics Program that relate to the Intrexon Materials, the manufacture of bulk drug product, the manufacturing of bulk quantities of other components of Oragenics Products, or any earlier steps in the manufacturing process for Oragenics Products. To the extent that Intrexon so elects, Intrexon may request that Oragenics and Intrexon establish and execute a separate manufacturing and supply agreement, which agreement will establish and govern the production, quality assurance, and regulatory activities associated with manufacture of Intrexon Materials. Except as provided in Section 4.1, any manufacturing undertaken by Intrexon pursuant to the preceding sentence shall be performed in exchange for cash payments equal to Intrexon's Fully Loaded Cost in connection with such manufacturing, on terms to be negotiated by the Parties in good faith. In the event that Intrexon does not manufacture Intrexon Materials, bulk drug product or bulk quantities of other components of Oragenics Products, then Intrexon shall provide to Oragenics or a contract manufacturer selected by Oragenics and approved by Intrexon all Information Controlled by Intrexon that is related to the manufacturing of such Intrexon Materials, bulk drug product or bulk qualities of other components of Oragenics Products, for use in the Field and is reasonably necessary to enable Oragenics or such contract manufacturer (as appropriate) for the sole purpose of manufacturing such Intrexon Materials, bulk drug product or bulk quantities of other components of Oragenics Products, in each case as manufactured by Intrexon. The costs and expenses incurred by Intrexon in carrying out such transfer shall be borne by Intrexon. Any manufacturing Information transferred hereunder to Oragenics or its contract manufacturer shall not be further transferred to any Third Party or Oragenics Affiliate without the prior written consent of Intrexon; provided, however, that Intrexon shall not unreasonably withhold such consent if necessary to permit Oragenics to switch manufacturers.

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

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

**4.9 Trademarks and Patent Marking.** To the extent permitted by applicable law and regulations, Oragenics shall, and shall ensure that the packaging, promotional materials, and labeling for Oragenics Products shall carry, in a conspicuous location, the applicable Intrexon Trademark(s), subject to Oragenics' reasonable approval of the size, position, and location thereof. Consistent with the U.S. patent laws, Oragenics shall ensure that Oragenics Products, or its packaging or accompanying literature as appropriate, bear applicable and appropriate patent markings for Intrexon Patent numbers. Oragenics shall provide Intrexon with copies of any materials containing the Intrexon Trademarks or patent markings prior to using or disseminating such materials, in order to obtain Intrexon's approval thereof. Oragenics' use of the Intrexon Trademarks and patent markings shall be subject to prior review and approval of the IPC. Oragenics acknowledges Intrexon's sole ownership of the Intrexon Trademarks and agrees not to take any action inconsistent with such ownership. Oragenics covenants that it shall not use any trademark confusingly similar to any Intrexon Trademarks in connection with any products (including any Oragenics Product). From time to time during the Term, Intrexon shall have the right to obtain from Oragenics samples of Oragenics Product sold by Oragenics or its Affiliates or sublicensees, or other items which reflect public uses of the Intrexon Trademarks or patent markings, for the purpose of inspecting the quality of such Oragenics Products, the use of the Intrexon Trademarks, or the accuracy of the patent markings. In the event that Intrexon inspects under this Section 4,9, Intrexon shall notify the result of such inspection to Oragenics in writing thereafter. Oragenics shall comply with reasonable policies provided by Intrexon from time-to-time to maintain the goodwill and value of the Intrexon Trademarks.

## ARTICLE 5

### COMPENSATION

**5.1 Technology Access Fee**. In partial consideration for Oragenics' appointment as an exclusive channel collaborator and the other rights granted to Oragenics hereunder, within thirty (30) days of execution of this Agreement Oragenics shall issue the number of shares of

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.

Oragenics' common stock, in accordance with the terms and conditions of that certain Stock Issuance Agreement of even date herewith (the "**Equity Agreement**"), which shares are termed the Technology Access Fee Shares in the Equity Agreement. Provided that all closing conditions for the Technology Access Fee Shares (as set forth in the Equity Agreement) that are within the reasonable control of Intrexon have been satisfied or waived, the issuance of the Technology Access Fee Shares (as set forth in the Equity Agreement) is a condition subsequent to the effectiveness of this Agreement.

**5.2 Milestones.**

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

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

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

**5.4 Revenue Sharing**.

**(a)** No later than thirty (30) days after each calendar quarter in which there is positive Product Profit arising from the sale of any Oragenics Product in the Field in the Territory, Oragenics shall pay to Intrexon twenty-five percent (25%) of such Product Profit, on an Oragenics Product-by-Oragenics Product basis. Commencing with the Effective Date, in the event that a negative Product Profit occurs for a particular Oragenics Product in any calendar quarter, neither Oragenics nor Intrexon shall owe any payments hereunder with respect to such Oragenics Product. Any negative Product Profit that results from Excess Product Liability Costs may be carried forward to future quarters and offset against positive Product Profit in such future quarters for the same Oragenics Product. Except as set forth in the preceding sentence, Oragenics shall not be permitted to carry forward any negative Product Profits to subsequent quarters.

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

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

**5.6 Payment Reports and Records Retention**. Within thirty (30) days after the end of each calendar quarter during which Net Sales have been generated, during which Sublicensing Revenue has been received, or during which Negative Product Profit has occurred, 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);

**(b)** itemized calculation of Net Sales, showing all applicable deductions;

**(c)** itemized calculation of Cost of Goods Sold;

**(d)** itemized calculation of Sublicensing Revenue, including any offsets claimed for Third Party license costs;

**(e)** the amount of any negative Product Profit for the applicable calendar quarter, and any Negative Product Profit amount carried forward from a prior quarter and applied during the present quarter (as per Section 5.4(a));

**(f)** the amount of the payment (if any) due pursuant to Section 5.4(a) and/or 5.4(b);

**(g)** the amount of taxes, if any, withheld to comply with any applicable law; and

**(h)** the exchange rates used in any of the foregoing calculations.

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

**5.7 Audits.**

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

**(c)** Intrexon shall (i) treat all information that it receives under this Section 5.7 in accordance with the confidentiality provisions of Article 7 and (ii) cause its accounting

firm to enter into an acceptable confidentiality agreement with Oragenics obligating such firm to retain all such financial information in confidence pursuant to such confidentiality agreement, in each case except to the extent necessary for Intrexon to enforce its rights under this Agreement.

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

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

## ARTICLE 6

### INTELLECTUAL PROPERTY

**6.1 Ownership**.

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

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

**(c)** Intrexon shall solely own all right, title and interest in all Inventions related to Intrexon Channel Technology, together with all Patent rights and other intellectual property rights therein (the "**Channel-Related Program IP**"). Oragenics hereby assigns all of

its right, title and interest in and to the Channel-Related Program IP to Intrexon. Oragenics agrees to execute such documents and perform such other acts as Intrexon may reasonably request to obtain, perfect and enforce its rights to the Channel-Related Program IP and the assignment thereof.

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

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

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

**6.2 Patent Prosecution**.

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

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

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

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

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

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

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

**6.3 Infringement of Patents by Third Parties**.

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

**(b)** Notwithstanding the foregoing, Oragenics shall have the first right, but not the obligation, to take appropriate action to enforce Product-Specific Program Patents against

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

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

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

**(e)** Oragenics shall not settle or otherwise compromise any action under this Section 6.3 in a way that diminishes the rights or interests of Intrexon outside the Field or adversely affects any Intrexon Patent without Intrexon's prior written consent, which consent shall not be unreasonably withheld. Intrexon shall not settle or otherwise 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), Oragenics shall retain one hundred percent (100%) of any Recovery, [*****]. 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;

**(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 disclosure and makes a reasonable effort to obtain, or to assist the other Party in obtaining, a protective order preventing or limiting the disclosure and/or requiring that the terms and conditions of this Agreement be used only for the purposes for which the law or regulation required, or for which the order was issued;

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

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

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

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

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

**7.4 Terms of the Agreement**. Each Party shall treat the terms of this Agreement as the Confidential Information of other Party, subject to the exceptions set forth in Section 7.2. Notwithstanding the foregoing, each Party acknowledges that the other Party may be obligated to file a copy of this Agreement with the SEC, either as of the Effective Date or at some point

during the Term. Each Party shall be entitled to make such a required filing, provided that it requests confidential treatment of certain commercial terms and sensitive technical terms hereof to the extent such confidential treatment is reasonably available to it. In the event of any such filing, the filing Party shall provide the other Party with a copy of the Agreement marked to show provisions for which the filing Party intends to seek confidential treatment and shall reasonably consider and incorporate the other Party's comments thereon to the extent consistent with the legal requirements governing redaction of information from material agreements that must be publicly filed. The other Party shall promptly provide any such comments.

**7.5 Proprietary Information and Operational Audits.**

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

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

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

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

## ARTICLE 8

### REPRESENTATIONS AND WARRANTIES

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

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

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

**(c) Binding Agreement**. This Agreement is a legal and valid obligation binding upon Oragenics and enforceable in accordance with its terms, except as such enforcement may be limited by applicable bankruptcy, insolvency, reorganization, arrangement, moratorium or other similar laws affecting creditors' rights, and subject to general equity principles and to limitations on availability of equitable relief, including specific performance. The execution, delivery and performance of this Agreement by Oragenics does not conflict with any agreement, instrument or understanding, oral or written, to which it is a party or by which it may be bound. Oragenics is aware of no action, suit or inquiry or investigation instituted by any governmental agency which questions or threatens the validity of this Agreement.

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

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

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

**(c) Binding Agreement**. This Agreement is a legal and valid obligation binding upon Intrexon and enforceable in accordance with its terms, except as such enforcement may be limited by applicable bankruptcy, insolvency, reorganization, arrangement, moratorium or other similar laws affecting creditors' rights, and subject to general equity principles and to limitations on availability of equitable relief, including specific performance. The execution, delivery and performance of this Agreement by Intrexon does not conflict with any agreement, instrument or understanding, oral or written, to which it is a party or by which it may be bound. Intrexon is aware of no action, suit or inquiry or investigation instituted by any governmental agency which questions or threatens the validity of this Agreement.

**(d) Additional Intellectual Property Representations**.

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

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

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

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

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

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

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

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

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

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

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

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

such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were materially complete and correct on the date filed (or were corrected or supplemented by a subsequent submission); and (4) has not, either voluntarily or involuntarily, initiated, conducted, or issued or caused to be initiated, conducted or issued, any recall, market withdrawal or replacement, safety alert, post sale warning, "dear doctor" letter, or other notice or action relating to the alleged lack of safety or efficacy of any product or any alleged product defect or violation and, to Intrexon's knowledge, no third party has initiated, conducted or intends to initiate any such notice or action.

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

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

## ARTICLE 9

### INDEMNIFICATION

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

**9.2 Indemnification by Oragenics**. Oragenics agrees to indemnify, hold harmless, and defend Intrexon, its Affiliates and Third Security, and their respective directors, officers, employees, and agents (and any Third Parties which have licensed to Intrexon intellectual property rights within Intrexon IP on or prior to the Effective Date, to the extent required by the relevant upstream license agreement) (collectively, the "**Intrexon Indemnitees**") from and

against any Losses resulting from Claims, to the extent arising from any of the following: (a) the negligence or willful misconduct of Oragenics or any of its Affiliates or their respective employees or agents; (b) the use, handling, storage, or transport of Intrexon Materials by or on behalf of Oragenics or its Affiliates, licensees, or sublicensees; (c) breach by Oragenics of any material representation, warranty or covenant in this Agreement; or (d) the design, development, manufacture, regulatory approval, handling, storage, transport, distribution, sale or other disposition of any Oragenics Product by or on behalf of Oragenics or its Affiliates, licensees, or sublicensees. Notwithstanding the foregoing, Oragenics shall not have any obligation to indemnify the Intrexon Indemnitees to the extent that a Claim arises from (i) the negligence or willful misconduct of Intrexon or any of its Affiliates, or their respective employees or agents; or (ii) a breach by Intrexon of a representation, warranty, or covenant of this Agreement.

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

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

**9.5 Insurance**. Immediately prior to, and during marketing, Oragenics shall maintain in effect and good standing a product liability insurance policy issued by a reputable insurance company in amounts considered standard for the industry. Immediately prior to, and during the conduct of any clinical trials, Oragenics shall maintain in effect and good standing a clinical trials liability insurance policy issued by a reputable insurance company in amounts considered standard for the industry. At Intrexon's reasonable request, Oragenics shall provide

Intrexon with all details regarding such policies, including without limitation copies of the applicable liability insurance contracts. Oragenics shall use reasonable efforts to include Intrexon as an additional insured on any such policies.

## ARTICLE 10

## TERM; TERMINATION

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

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

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

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

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

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

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

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

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

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

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

(i) the particular Oragenics Product is being sold by Oragenics triggering profit sharing payments therefor under Section 5.4(a) of this Agreement,

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

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

(iv) the particular Oragenics Product is the subject of at least an ongoing Phase 1, Phase 2 or Phase 3 clinical trial in the Field (in the case of a termination by Intrexon due to an Oragenics uncured breach pursuant to Section 10.2(a) or a termination by Oragenics pursuant to Section 10.3).

Such right to continue development and commercialization 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, non-exclusive, irrevocable, license (with full rights to sublicense) under the Oragenics Termination IP, to make, have made, import, use, offer for sale and sell Reverted Products and to use the Intrexon Channel Technology, the Intrexon Materials, and/or the Intrexon IP in the Field, subject to any exclusive rights held by Oragenics in Reverted Products pursuant to Section 10.4(c). The Parties shall also take such actions and execute such other instruments and documents as may be reasonably necessary to document such license to Intrexon.

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

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

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

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

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

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

**(l) Confidential Information**. Each Party shall promptly return, or at the other Party's request destroy, any Confidential Information of the other Party in such Party's possession or control at the time of termination; provided, however, that each Party shall be permitted to retain (i) a single copy of each item of Confidential Information of the other Party in its confidential legal files for the sole purpose of monitoring and enforcing its compliance with Article 7, (ii) Confidential Information of the other Party that is maintained as archive copies on the recipient Party's disaster recovery and/or information technology backup systems, or (iii)

Confidential Information of the other Party necessary to exercise such Party's rights in Retained Products (in the case of Oragenics) or Reverted Products (in the case of Intrexon). The recipient of Confidential Information shall continue to be bound by the terms and conditions of this Agreement with respect to any such Confidential Information retained in accordance with this Section 10.4(l).

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

## ARTICLE 11

## DISPUTE RESOLUTION

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

**11.2 Arbitration**. Any dispute, controversy, difference or claim which may arise between the Parties and not from a Committee, out of or in relation to or in connection with this Agreement (including, without limitation, arising out of or relating to the validity, construction, interpretation, enforceability, breach, performance, application or termination of this Agreement) that is not resolved pursuant to Section 11.1 shall, subject to Section 11.10, be settled by binding "baseball arbitration" as follows. Either Party, following the end of the thirty (30) day period referenced in Section 11.1, may refer such issue to arbitration by submitting a written notice of such request to the other Party. Promptly following receipt of such notice, the Parties shall meet and discuss in good faith and seek to agree on an arbitrator to resolve the issue, which arbitrator

shall be neutral and independent of both Parties and all of their respective Affiliates, shall have significant experience and expertise in licensing and partnering agreements in the pharmaceutical and biotechnology industries, and shall have some experience in mediating or arbitrating issues relating to such agreements. If the Parties cannot agree on a single arbitrator within fifteen (15) days of request by a Party for arbitration, then each Party shall select an arbitrator meeting the foregoing criteria and the two (2) arbitrators so selected shall select within ten (10) days of their appointment a third arbitrator meeting the foregoing criteria. Within fifteen (15) days after an arbitrator(s) is selected (in the case of the three-person panel, when the third arbitrator is selected), each Party will deliver to both the arbitrator(s) and the other Party a detailed written proposal setting forth its proposed terms for the resolution for the matter at issue (the "**Proposed Terms**" of the Party) and a memorandum (the "**Support Memorandum**") in support thereof. The Parties will also provide the arbitrator(s) a copy of this Agreement, as it may be amended at such time. Within fifteen (15) days after receipt of the other Party's Proposed Terms and Support Memorandum, each Party may submit to the arbitrator(s) (with a copy to the other Party) a response to the other Party's Support Memorandum. Neither Party may have any other communications (either written or oral) with the arbitrator(s) other than for the sole purpose of engaging the arbitrator or as expressly permitted in this Section 11.2; provided that, the arbitrator(s) may convene a hearing if the arbitrator(s) so chooses to ask questions of the Parties and hear oral argument and discussion regarding each Party's Proposed Terms. Within sixty (60) days after the arbitrator's appointment, the arbitrator(s) will select one of the two Proposed Terms (without modification) provided by the Parties that he or she believes is most consistent with the intention underlying and agreed principles set forth in this Agreement. The decision of the arbitrator(s) shall be final, binding, and unappealable. For clarity, the arbitrator(s) must select as the only method to resolve the matter at issue one of the two sets of Proposed Terms, and may not combine elements of both Proposed Terms or award any other relief or take any other action.

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

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

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

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

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

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

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

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

## ARTICLE 12

### GENERAL PROVISIONS

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

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

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

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

| | |
|---|---|
| If to Intrexon: | Intrexon Corporation<br>20358 Seneca Meadows Parkway<br>Germantown, MD 20876<br>Attention: President, Human Therapeutics Division<br>Fax: (301) 556-9901 |
| with a copy to: | Intrexon Corporation<br>20358 Seneca Meadows Parkway<br>Germantown, MD 20876<br>Attention: Legal Department<br>Fax: (301) 556-9902 |

| | |
|---|---|
| If to Oragenics: | Oragenics, Inc.<br>3000 Bayport Dr.<br>Suite 685<br>Tampa, FL 33607<br>Attention: Chief Executive Officer<br>Fax: (813) 286-7904 |
| with a copy to: | Shumaker, Loop & Kendrick, LLP<br>101 E. Kennedy Blvd., Suite 2800<br>Tampa, FL 33602<br>Attention: Mark Catchur, Esq.<br>Fax: (813) 229-1660 |

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

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

**12.7 Entire Agreement; Amendment**. This Agreement, including any exhibits attached hereto, constitute the entire, final, complete and exclusive agreement between the Parties and supersede all previous agreements or representations, written or oral, with respect to the subject matter of this Agreement (including any prior confidentiality agreement between the Parties). All information of Intrexon or Oragenics 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 Oragenics nor Intrexon may directly or indirectly solicit in order to offer to employ, engage in any discussion regarding employment with, or hire any employee of the other Party or an individual who was employed by the other party with one (1) year prior to such solicitation, discussion, or hire, without the prior approval of such other Party. General employment solicitations or advertisements shall not be considered direct or indirect solicitations, and are not prohibited under this Agreement.

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

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

*[Remainder of page intentionally left blank.]*

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

| **INTREXON CORPORATION** | **ORAGENICS, INC.** |
|---|---|
| By: /s/ Jayson Rieger | By: /s/ John N. Bonfiglio |
| Name: Jayson Rieger | Name: John N. Bonfiglio |
| Title: SVP, President, HTD | Title: President and CEO |

**Exhibit 10.7**

**EXECUTION COPY**
**CONFIDENTIAL**

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 August 6, 2012 (the "**Effective Date**") by and between **INTREXON CORPORATION**, a Virginia corporation with offices at 20358 Seneca Meadows Parkway, Germantown, MD 20876 ("**Intrexon**"), and **SYNTHETIC BIOLOGICS, INC.,** a Nevada corporation having its principal place of business at 617 Detroit Street, Suite 100, Ann Arbor, MI 48104 ("**Synthetic**"). Intrexon and Synthetic 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 human antibodies and DNA vectors; and

**WHEREAS,** Synthetic now desires to become Intrexon's exclusive channel collaborator with respect to such technology for the purpose of developing the Anti-Infectives Program (as defined herein), and Intrexon is willing to appoint Synthetic as a channel collaborator in the Field (as defined herein, and subject to amendments to the definition as permitted herein) under the terms and conditions of this Agreement.

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

## ARTICLE 1

## DEFINITIONS

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

**1.1** "**Affiliate**" means, with respect to a particular Party, any other person or entity that directly or indirectly controls, is controlled by, or is in common control with such Party. As used in this Section 1.1, the term "controls" (with correlative meanings for the terms "controlled by" and "under common control with") means the ownership, directly or indirectly, of more than fifty percent (50%) of the voting securities or other ownership interest of an entity, or the possession, directly or indirectly, of the power to direct the management or policies of an entity, whether through the ownership of voting securities, by contract, or otherwise. Notwithstanding the foregoing, any person, corporation, partnership, or other entity that would be an Affiliate of a Party solely because it and such Party are under common control by Third Security or Randal J. Kirk shall not be deemed to be an Affiliate of such Party solely by reason of such common control, with the caveat that, notwithstanding the foregoing, any entity other than Synthetic affiliated with Third Security or Randal J. Kirk shall be deemed to be an Affiliate of Intrexon solely for purposes of Article 9.

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

**1.3** "**Anti-Infectives Program**" has the meaning set forth in Section 2.1(a).

**1.4** "**Authorizations**" has the meaning set forth in Section 8.2(d)(xii).

**1.5** "**CC**" has the meaning set forth in Section 2.2(b).

**1.6** "**Channel-Related Program IP**" has the meaning set forth in Section 6.1(c).

**1.7** "**Claims**" has the meaning set forth in Section 9.1.

**1.8** "**CMCC**" has the meaning set forth in Section 2.2(b).

**1.9** "**Committees**" has the meaning set forth in Section 2.2(a).

**1.10** "**Commercialize**" or "**Commercialization**" means any activities directed to marketing, promoting, distributing, importing for sale, offering to sell and/or selling Synthetic Products.

**1.11** "**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 (and any pricing or reimbursement approvals, if necessary) has been obtained for such product in such country.

**1.12 "Complementary In-Licensed Third Party IP**" has the meaning set forth in Section 3.9(a).

**1.13** "**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.

**1.14** "**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.

**1.15** "**CRC**" has the meaning set forth in Section 2.2(b).

**1.16** "**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 Synthetic 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.

**1.17** "**Equity Agreements**" has the meaning set forth in Section 5.1.

**1.18** "**Excess Product Liability Costs**" has the meaning set forth in Section 9.3.

**1.19** "**Executive Officer**" means : (i) the Chief Executive Officer of the applicable Party, or (ii) 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.

**1.20** "**FDA**" has the meaning set forth in Section 8.2(d)(xiii).

**1.21** "**Field Infringement**" has the meaning set forth in Section 6.3(b)

**1.22** "**Field**" means the exogenous production and use of human recombinant monoclonal antibodies, and mixes thereof, for the treatment of the following eight (8) target toxins and/or diseases in humans (irespective of whether such requires regulatory approval) : (a) *Acinetobacter* infection; (b) pertussis toxin(s) or whooping cough, which is associated with *B. pertussis* infection; (c) the prevention and treatment of Hepatitis C virus re-infection after liver transplantation and acute use after initial exposure or after suspected initial exposure to the Hepatitis C virus; (d) Rabies; (e) Cytomegalovirus infection; (f); Dengue virus infection and Dengue fever; (g) Methicillin-resistant *Staphylococcus aureus* infection; and (h) *Klebsiella* infection. The Field as defined in the previous sentence is subject to amendment according to the mechanisms described in Sections 2.1(b), 2.1(c) and 2.1(d) of this Agreement. Unless context or usage for a particular reference herein to Field dictates otherwise, each particular reference to Field in this Agreement should be interpreted as meaning the definition of the Field that is in effect at the particular point in time that is relevant to that particular reference.

**1.23** "**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 and the terms of Sections 4.6 and 4.7 (as appropriate), Intrexon will bill for its internal direct costs incurred through the use of annualized standard full-time equivalents; such rate shall be based upon the actual fully loaded costs of those personnel directly involved in the provision of such good, product or service. Intrexon may, from time to time, adjust such full-time equivalent rate based on changes to its actual fully loaded costs and will review the accuracy of its full-time equivalent rate at least quarterly. Intrexon shall provide Synthetic with reasonable documentation indicating the basis for any direct and indirect charges, any allocable overhead, and any such adjustment in full-time equivalent rate.

**1.24** "**In-Licensed Program IP**" has the meaning set forth in Section 3.9(a).

**1.25** "**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.

**1.26** "**Infringement**" has the meaning set forth in Section 6.3(a).

**1.27** "**Intrexon Channel Technology**" means Intrexon's current and future technology directed towards the design, identification, and/or production of recombinant monoclonal antibodies, 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) mAbLogix™ (3) DNA and RNA MOD engineering, (4) protein engineering, (5) transcription control chemistry, (6) genome engineering, (7) LEAP™, and (8) cell system engineering.

**1.28** "**Intrexon Indemnitees**" has the meaning set forth in Section 9.2.

**1.29** "**Intrexon IP**" means the Intrexon Patents and Intrexon Know-How.

**1.30** "**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 Synthetic to conduct the Anti-Infectives Program. For the avoidance of doubt, the Intrexon Know-How shall include any Information (other than Intrexon Patents) in the Channel-Related Program IP.

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

**1.32** "**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 Synthetic to conduct the Anti-Infectives Program. For the avoidance of doubt, the Intrexon Patents shall include any Patent in the Channel-Related Program IP.

**1.33** "**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.

**1.34** "**Inventions**" has the meaning set forth in Section 6.1(b).

**1.35** "**IPC**" has the meaning set forth in Section 2.2(b).

**1.36** "**JSC**" has the meaning set forth in Section 2.2(b).

**1.37** "**Losses**" has the meaning set forth in Section 9.1.

**1.38** "**Net Sales**" means, with respect to any Synthetic Product, the net sales of such Synthetic Product by Synthetic or an Affiliate of Synthetic (including without limitation net sales of Synthetic Product to a non-Affiliate sublicensee but not including net sales by such non-Affiliate sublicensee), as determined in accordance with US GAAP as the gross amount invoiced on account of sales of Synthetic 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 Synthetic Product is sold to any third party together with other products or services, the price of such product, solely for purposes of the calculation of Net Sales, shall be deemed to be no less than the price at which such product would be sold in a similar transaction to a third party not also purchasing the other products or services.

**1.39** "**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.

**1.40** "**Primary Program Targets**" has the meaning as set forth in Section 2.1(b).

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

**1.42** "**Proposed Terms**" has the meaning set forth in Section 11.2.

**1.43** "**Prosecuting Party**" has the meaning set forth in Section 6.2(c).

**1.44** "**Recovery**" has the meaning set forth in Section 6.3(f).

**1.45** "**Retained Product**" has the meaning set forth in Section 10.4(a).

**1.46** "**Reverted Product**" has the meaning set forth in Section 10.4(c).

**1.47** "**SEC**" means the United States Securities and Exchange Commission.

**1.48** "**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 Synthetic 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 Synthetic 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 Synthetic 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); and (d) amounts received from sublicensees in respect of any Synthetic Product sales that are included in Net Sales.

**1.49** "**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 Synthetic or others) at such time for the indication and (ii) those therapies that are being actively developed by Synthetic 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.

**1.50** "**Supplemental In-Licensed Third Party IP**" has the meaning set forth in Section 3.8(a).

**1.51** "**Support Memorandum**" has the meaning set forth in Section 11.2.

**1.52** "**Synthetic Indemnitees**" has the meaning set forth in Section 9.1.

**1.53** "**Synthetic 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 Synthetic during the Term through use or practice of Intrexon Channel Technology, Intrexon IP, or the Intrexon Materials.

**1.54** "**Synthetic Program Patent**" has the meaning set forth in Section 6.2(b).

**1.55** "**Synthetic Termination IP**" means all Patents or other intellectual property that Synthetic 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.

**1.56** "**Term**" has the meaning set forth in Section 10.1.

**1.57** "**Territory**" means the entire world.

**1.58 "Third Party**" means any individual or entity other than the Parties or their respective Affiliates.

**1.59** "**Third Security**" means Third Security, LLC.

**1.60** "**US GAAP**" means generally accepted accounting principles in the United States.

## ARTICLE 2

### SCOPE OF CHANNEL COLLABORATION; MANAGEMENT

**2.1 Scope**.

**(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 (collectively, the "**Anti-Infectives Program**"). As provided below, the JSC shall establish, monitor, and govern projects for the Anti-Infectives Program. Either Party may propose potential projects in the Field for review and consideration by the JSC.

**(b) Initial Project for Immediate Commencement**. The Parties as of the Effective Date have identified three specific targets in the Field as being desirable projects for immediate development under the Anti-Infectives Program (the "**Primary Program Targets**"), and the JSC will be directed upon its creation to produce, and thereafter initiate performance of, an initial research project for the production of Synthetic Products for each of the Primary Program Targets. The Primary Program Targets are : (i) *Acinetobacter* infection; (ii) Pertussis toxin(s) or whooping cough, which is associated with *B. pertussis* infection; and (iii) the prevention and treatment of Hepatitis C virus re-infection after liver transplantation and acute use after initial exposure or after suspected initial exposure to the Hepatitis C virus. Synthetic will review data derived from these research projects for the Primary Program Targets via the JSC and will use such to consider the scientific and commercial viability of the Primary Program Targets. The JSC, consistent with its authority herein and subject to Synthetic's agreement to reimburse Intrexon for expenses relating thereto in accord with Section 4.7 below, may also authorize additional research projects for any of the five (5) other targets in the Field that are not Primary Program Targets. Such additional research projects may be authorized by the JSC prior to Synthetic making its election in accord with Section 2.1(c) below. Further, at any time prior to the two-year anniversary of the Effective Date and prior to the election by Synthetic under Section 2.1(c), Synthetic at its sole discretion may suspend the initial research project for one or more of the Primary Program Targets, and swap for such, on a one-for-one basis, any of the five (5) other targets in the Field that are not Primary Program Targets. In the event that Synthetic swaps out a Primary Program Target as set forth in the previous sentence, or in the event that Synthetic otherwise suspends or terminates the initial research project for a Primary Program Target prior to making its election under Section 2.1(c), the definition of Field under Section 1.21 above will be automatically amended such that the suspended, terminated, or swapped-out

Primary Program Target will be removed automatically, immediately and irrevocably from the Field, and thereby all obligations and rights of the Parties as set forth herein which are defined at least in part by or in conjunction with the Field will likewise be immediately amended as such from that time forward. In the event that Synthetic swaps out a Primary Program Target as set forth in the previous sentence, the Primary Program Targets will be automatically amended such that any swapped-out Primary Program Target is removed and replaced with the other target in the Field chosen to be swapped-in by Synthetic, and thereby all obligations and rights of the Parties as set forth herein which are defined at least in part by or in conjunction with the Primary Program Targets will likewise be immediately amended as such from that time forward. Any Synthetic Products corresponding to these suspended, terminated, or swapped-out Primary Program Targets will be treated as Reverted Products in accord with Section 10.4.

**(c) Field Election**. On or before the two-year anniversary of the Effective Date, Synthetic must notify Intrexon in writing of Synthetic's final and binding election, which election identifies up to three (3) target toxins or diseases in the Field (as the Field is defined at the point in time of the notification, taking into account any amendments to its definition caused by operation of Section 2.1(b)). Such election must reference this Section 2.1(c), will be effective immediately upon receipt by Intrexon, and will cause the definition of Field under this agreement to be amended immediately and permanently such that the Field from that time forward shall include only those three (3) elected toxins or diseases (and not any of the toxins or diseases not elected). All rights and obligations of the Parties under this Agreement within and without the Field will be permanently altered accordingly from the date of receipt of that election forward for the remaining Term. For any of the target toxins or diseases in the Field that are not elected by Synthetic under this Section 2.1(c), Synthetic (i) shall immediately cease, and shall cause its Affiliates and, if applicable, (sub)licensees to immediately cease, all development and Commercialization of Synthetic Products pertaining thereto; (ii), 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 such; and (iii) shall return to Intrexon, or destroy all copies thereto at Intrexon's option, all data and materials relating to such not-elected indications. Any Synthetic Products corresponding to these not-elected indications will be treated as Reverted Products in accord with Section 10.4.

**(d) Effect of No Election**. In the event that Synthetic does not communicate an election to Intrexon under Section 2.1(c) on or before the two-year anniversary of the Effective Date, the definition of Field will be amended automatically, immediately and permanently such that on the day after the two-year anniversary of the Effective Date the Field shall include only the Primary Program Targets and not any of the other target toxins or diseases that are not Primary Program Targets. All rights and obligations of the Parties under this Agreement which are defined at least in part by or in conjunction with the Field will thereby be permanently altered accordingly for the remaining Term from that time forward.

**(e) Option to Expand Field Election**. Synthetic, at its sole option, may expand its election rights under Section 2.1(c) to enable it to elect up to five (5) additional indications from the list of items (a) through (h) in Section 1.21 if : (i) prior to or concurrent with making an election under Section 2.1(c) Synthetic notifies Intrexon in writing of its intent to

expand its election rights in accord with this Section 2.1(e), and (ii) Synthetic remits a payment, in cash or equity at Synthetic's sole discretion, to Intrexon of two million dollars ($2M) for each target in excess of three (3) that it desires to elect under Section 2.1(c). Any payment under this section made by Synthetic in equity must be made in compliance with the terms of the Equity Agreements. Any expansion of Synthetic's election rights under Section 2.1(c) hereunder shall not be effective until the appropriate payment required under this Section 2.1(e) is received by Intrexon, and cannot be used to enable Synthetic to elect any targets that were already permanently removed from the Field under Section 2.1(b). Upon successful execution of the option to expand under this Section 2.1(e), all rights and obligations of the Parties under this Agreement within and without the Field will be permanently altered accordingly from the date of receipt of that option forward for the remaining Term.

**2.2 Committees**.

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

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

| **Committee** | **Purpose** |
|---|---|
| Joint Steering Committee ("**JSC**") | Establish projects for the Anti-Infectives Program and establish the priorities, as well as approve budgets for such projects. Approve all subcommittee projects and plans. The JSC shall establish budgets not less than on a quarterly basis. |
| Chemistry, Manufacturing and Controls Committee ("**CMCC**") | Establish project plans and review and approve activities and budgets for chemistry, manufacturing, and controls under the Anti-Infectives Program. |

| Committee | Purpose |
|---|---|
| Clinical/Regulatory Committee ("**CRC**") | Review and approve all research and development plans, clinical projects and publications, and regulatory filings and correspondence under the Anti-Infectives Program; review and approve itemized budgets with respect to the foregoing. |
| Commercialization Committee ("**CC**") | Establish project plans and review and approve activities and budgets for commercialization activities under the Anti-Infectives Program. |
| Intellectual Property Committee ("**IPC**") | Evaluate intellectual property issues in connection with the Anti-Infectives Program; review and approve itemized budgets with respect to the foregoing. |

**2.3 General Committee Membership and Procedure**.

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

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

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

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

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

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

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

**(b) Casting Vote at CMCC**. If a dispute at the CMCC is not resolved pursuant to Section 2.4 above, then (i) in the case of any disputes relating to the Intrexon Materials or controls regarding the dissemination of Intrexon IP or Intrexon Materials, the

Executive Officer of Intrexon shall have the authority to finally resolve such dispute; and (ii) in the case of any other disputes, including the manufacture of a Synthetic Product active pharmaceutical ingredient, the Executive Officer of Synthetic 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 Synthetic 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 Synthetic shall have the authority to finally resolve such dispute.

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

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

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

## ARTICLE 3

### LICENSE GRANTS

**3.1 Licenses to Synthetic**.

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

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

**(c)** For purposes of clarity, the licenses from Intrexon to Synthetic under Sections 3.1(a) and 3.1(b) will automatically change in conjunction with any amendments to the definition of Field in accord with Sections 2.1(c) through 2.1(e).

**3.2 Sublicensing**. Except as provided below, Synthetic 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 Synthetic Products or use or display the Intrexon Trademarks, in each case except with Intrexon's written consent, which written consent may be withheld in Intrexon's sole discretion. Notwithstanding the foregoing, Synthetic shall have a limited right to sublicense under the circumstances described in Sections 3.2(a) and 3.2(b).

**(a)** Synthetic may transfer, to the extent reasonably necessary, Intrexon Materials that are or express active pharmaceutical ingredients to a Third Party contractor performing contract manufacturing, fill, and/or finish responsibilities for Synthetic Products, and may in connection therewith grant limited sublicenses necessary to enable such Third Party to perform such activities. If Synthetic transfers any Intrexon Materials under this Section 3.2(a), Synthetic 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.

**(b)** Synthetic may, with Intrexon's written consent, which consent cannot be unreasonably withheld, sublicense the rights granted under Section 3.1 to an Affiliate, or transfer the Intrexon Materials to an Affiliate, or grant an Affiliate the right to research, develop, use, or Commercialize Synthetic Products or use or display the Intrexon Trademarks. In the event that Intrexon consents to any such grant or transfer to an Affiliate, Synthetic 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 Synthetic), including any payment obligations owed to Intrexon hereunder.

**3.3 Limitation on Sublicensees**. None of the enforcement rights under the Intrexon Patents that are granted to Synthetic 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**. Synthetic hereby covenants that it shall not, nor shall it permit any Affiliate or, if applicable, (sub)licensee, to use or practice, directly or indirectly, any Intrexon IP, Intrexon Channel Technology, or Intrexon Materials for any purposes other than those expressly permitted by this Agreement.

**3.5 Exclusivity**. Intrexon and Synthetic mutually agree that, under the channel collaboration established by this Agreement, it is intended that the Parties will be exclusive to each other in the Field. To this end, neither Intrexon nor its Affiliates shall make the Intrexon Channel Technology or Intrexon Materials available to any Third Party for the purpose of developing or Commercializing products in the Field (except as set forth in Section 3.2), 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 Anti-Infectives Program. Further, other than Synthetic's activities within the Anti-Infectives Program, neither Synthetic nor its Affiliates 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.

**3.6 Off Label Use**. For purpose of clarity, (a) following the Commercial Sale of a Synthetic Product, the use by direct or indirect purchasers or other users of Synthetic Products outside the Field (i.e. "off label use") shall not constitute a breach by Synthetic of the terms of Section 3.3, 3.4 or 3.5, provided that neither Synthetic nor its Affiliate (nor any Third Party under contract with either of them) marketed or promoted Synthetic Products for such off-label use; and (b) following the 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, Synthetic acknowledges that Intrexon has all rights, in Intrexon's sole discretion, to make the Intrexon Materials, Intrexon Channel Technology (including any active pharmaceutical ingredient used in a Synthetic Product), and Intrexon IP available to Third Party channel partners or collaborators for use in fields outside the Field.

**3.8 Rights to Clinical and Regulatory Data**. Synthetic shall own and control all clinical data and regulatory filings relating to Commercialization of Synthetic Products during the Term. Synthetic shall provide at Intrexon's request full copies of all clinical and non-clinical data and reports, regulatory filings, and communications from regulatory authorities that relate specifically and solely to Synthetic Products. To the extent that there exist any clinical and non-clinical data and reports, regulatory filings, and communications from regulatory authorities owned by Synthetic that relate both to Synthetic Products and other products produced by Synthetic outside the Field, Synthetic shall provide to Intrexon upon Intrexon's request copies of the portions of such data, reports, filings, and communications that relate to Synthetic Products. Subject to its ongoing obligations of exclusivity under Section 3.5 and regarding off label use under 3.6, 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 Synthetic 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. Notwithstanding the provisions of this Section 3.8, Intrexon shall not, outside of the Anti-Infectives Program, utilize knowingly any Synthetic clinical and non-clinical data or reports in support of obtaining regulatory approval for a product for use in the Field.

**3.9 Third Party Licenses**.

**(a)** [*****] shall obtain, [*****], any licenses from Third Parties that are required in order to practice the Intrexon Channel Technology in the Field where the licensed intellectual property is reasonably necessary for Intrexon to identify and characterize human antibodies (but specifically excluding intellectual property directed to any processes or methods for expressing monoclonal antibodies from cloned cells or methods of treating humans with antibodies for purposes of therapy) ("**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 Synthetic 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 Synthetic 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 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 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 3.8(c), [*****] shall have the right to pursue a license under Complementary In-Licensed Third Party IP, [*****]. For the avoidance of doubt, [*****] may at any time obtain a license under Complementary In-Licensed Third Party IP outside the Field, [*****], 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. For purposes of clarity, the foregoing requirement shall not restrict [*****] ability with respect to licensing intellectual property owned by a Third Party that is not required in order for [*****] to lawfully make, use, sell, offer for sale, or import Synthetic Products. 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 Synthetic 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 Synthetic Products, Synthetic shall use commercially reasonable efforts to ensure that Synthetic 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 Synthetic 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 Synthetic or shall disclose in writing to Synthetic all of such terms and conditions that are applicable to Synthetic. Synthetic 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 Synthetic 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, Synthetic hereby grants to Intrexon a non-exclusive, worldwide, fully-paid, royalty-free license, under any applicable Patents or other intellectual property Controlled by Synthetic or its Affiliates, solely to the extent necessary for Intrexon to conduct those responsibilities assigned to it under this Agreement, which license shall be sublicensable solely to Intrexon's Affiliates or to any of Intrexon's permitted subcontractors.

**3.11 Restrictions Relating to Intrexon Materials**. Synthetic and its permitted sublicensees shall use the Intrexon Materials solely for purposes of the Anti-Infectives 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, Synthetic shall not, and shall ensure that Synthetic personnel and permitted sublicensees do not, except as otherwise permitted in 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, Synthetic shall be solely responsible for the performance of the Anti-Infectives Program and the development and Commercialization of Synthetic Products in the Field. Synthetic shall be responsible for all costs incurred in connection with the Anti-Infectives Program except that Intrexon shall be responsible for the following: (a) costs of basic research with respect to the Intrexon Channel Technology and Intrexon Materials (i.e., platform improvements) but, for clarity, excluding research described in Section 4.7 or research requested by the JSC for the development of a Synthetic Product (which research costs shall be reimbursed by Synthetic); (b) [*****]; and (c) costs of filing, prosecution and maintenance of Intrexon Patents. The costs encompassed within subsection (a) above shall include the scale-up of Intrexon Materials and related active pharmaceutical ingredients for clinical trials and commercialization of Synthetic 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 Synthetic (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 materials between the Parties.

**4.3 Information and Reporting**. Synthetic will keep Intrexon informed about Synthetic's efforts to develop and commercialize Synthetic Products, including reasonable and accurate summaries of Synthetic's (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 Synthetic Products, including initiation or completion of a clinical trial, submission of a United States or international regulatory filing, receipt of a response to such United States or international regulatory filing, clinical safety event, receipt of Regulatory Approval, or commercial launch. As set forth in Section 3.8 above, Synthetic 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 Synthetic as soon

as practical after they become available. Intrexon will keep Synthetic informed about Intrexon's efforts (a) to establish manufacturing capabilities and facilities for Synthetic 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 Anti-Infectives Program with respect to the Intrexon Channel Technology and Intrexon Materials. Unless otherwise provided herein, such disclosures by Synthetic and Intrexon will be made in the course of JSC meetings at least once every six (6) months while Synthetic 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, Synthetic shall own and maintain, at its own cost, all regulatory filings and regulatory approvals for Synthetic Products that Synthetic is developing or Commercializing pursuant to this Agreement. As such, Synthetic shall be responsible for reporting all adverse events related to such Synthetic 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 Synthetic and Intrexon establish and execute a separate safety data exchange agreement, which agreement will address and govern the timely exchange of safety information generated by Synthetic, Intrexon, and relevant third parties with respect to specific Intrexon Materials. The decision to list or not list Patents in any regulatory filing for a Synthetic 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 Synthetic, except with respect to Product Specific Program Patents, which will be mutually determined by the Parties.

**4.5 Diligence**.

**(a)** Synthetic shall use, and shall require its sublicensees to use, Diligent Efforts to develop and commercialize Synthetic Products.

**(b)** Without limiting the generality of the foregoing, Intrexon may, from time to time, notify Synthetic that it believes it has identified a Superior Therapy, and in such case Intrexon shall provide to Synthetic its then-available information about such therapy and reasonable written support for its conclusion that the therapy constitutes a Superior Therapy. Synthetic shall have the following obligations with respect to such proposed Superior Therapy: (i) within sixty (60) days after such notification, Synthetic shall prepare and deliver to the JSC for review and approval a development plan detailing how Synthetic will pursue the Superior Therapy (including a proposed budget); (ii) Synthetic shall revise the development plan as directed by the JSC; and (iii) following approval of the development plan by the JSC, Synthetic shall use Diligent Efforts to pursue the development of the Superior Therapy under the Anti-Infectives Program in accordance with such development plan. If Synthetic fails to comply with the foregoing obligations, or if Synthetic 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 Synthetic's Affiliates and any permitted sublicensees shall be attributed to Synthetic for the purposes of evaluating Synthetic's fulfillment of the obligations set forth in this Section 4.5.

**4.6 Manufacturing.**

**(a)** As part of the Therapeutic Program, Intrexon shall be tasked with the development of one or more cell lines and may be asked by the JSC or CMCC to research and develop processes, and may thereafter validate such processes, for manufacturing one or more Synthetic Products hereunder. In connection with such research and development, a Third Party selected by Synthetic and approved by the JSC, which approval cannot be unreasonably withheld, may manufacture and supply pre-clinical quantities of each Synthetic Product. Intrexon shall provide, subject to reasonable controls concerning protecting all provided Intrexon Materials, to Synthetic or the selected Third Party such quantities of cells or other Intrexon Materials reasonable necessary for the pre-commercial development activities hereunder, at Synthetic expense, said expense approved in advance by written confirmation of the JSC.

**(b)** Intrexon shall have the option to present a proposal for consideration to the JSC to be the manufacturer of the Synthetic Product, or component thereof, either in bulk form or as finished product, for Synthetic for clinical and/or commercialization use. Synthetic will determine whether Intrexon, or Synthetic's or Intrexon's proposed Third Party, is a manufacturer of a Synthetic Product. Synthetic shall make their determination as to the manufacturer of each Synthetic Product based on the commercially reasonable consideration of their standards and criteria, as applied in a manner consistent with that applied to the manufacture of other Synthetic products and in good faith. Upon Intrexon's request, Synthetic shall provide Intrexon with a reasonable explanation and summary of the criteria that Synthetic used in deciding upon the manufacturer(s). In the event Intrexon is chosen by Synthetic to manufacture Synthetic Product under this Agreement, such supply shall be carried out under the terms negotiated by the Parties in good faith and set forth in separate supply and quality agreements.

**(c)** In the event that Intrexon is not selected as the manufacturer for clinical and/or commercial quantities of a Synthetic Product, Synthetic will assume all responsibility and related expense for manufacturing and supply of clinical and/or commercial quantities of such Synthetic Product in accordance with a validation process. Intrexon shall work with Synthetic to coordinate the transfer to Synthetic, or Synthetic-designated contract manufacturer(s), any process developed to date, along with any additional Confidential Information or materials

Controlled by Intrexon that is necessary for the manufacturing of such bulk drug substance and/or finished product for the sole purpose of manufacturing such bulk drug substance and/or finished product on behalf of Synthetic for use in connection with Synthetic's exercise of its rights in the Field. The reasonable costs and expenses incurred by Intrexon in carrying out such transfer shall be borne by Synthetic and shall be negotiated in good faith by the Parties at the time Synthetic exercises its rights under this Agreement. Synthetic, in consultation with Intrexon, will oversee process validation of such Synthetic Products at the Synthetic selected manufacturing site(s). The process, along with any additional manufacturing Information transferred hereunder to Synthetic or its contract manufacturer shall be deemed Confidential Information of Intrexon, and shall not be further transferred to any Third Party or Synthetic Affiliate without the prior written consent of Intrexon. Any such changes to the process provided by Intrexon to Synthetic are owned by Intrexon, with Synthetic having a non-exclusive license right (such non-exclusive right hereby granted to Synthetic by Intrexon) for purposes of exercising rights in the Field, pursuant to this Section 4.6.

**4.7 Support Services**. As set forth in Section 2.1(b), immediately following the Effective Date, Intrexon will begin providing support services to Synthetic by which Intrexon will conduct research and development of Synthetic Products on behalf of Synthetic for the Primary Program Targets. The JSC will meet promptly following the Effective Date and establish a plan for this research and development, and Synthetic 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, Synthetic shall request, or Intrexon may propose, that Intrexon perform certain additional support services with respect to the Anti-Infectives Program. To the extent that the Parties mutually agree that Intrexon 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 would be compensated for such services by cash payments equal to Intrexon's Fully Loaded Cost in connection with such services. The JSC from time to time may reasonably determine that specific experiments under the Anti-Infectives Program require special therapeutic or technical expertise and thus should be conducted by Third Parties having such capabilities. Upon agreement by the Parties, the billing for any such work conducted by Third Party under the previous sentence may be billed directly to Synthetic or passed through to Synthetic.

**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 Anti-Infectives Program, including without limitation those relating to the transport, storage, and handling of Intrexon Materials and Synthetic Products.

**4.9 Trademarks and Patent Marking.** To the extent permitted by applicable law and regulations, Synthetic shall, and shall ensure that the packaging, promotional materials, and labeling for Synthetic Products shall carry, in a conspicuous location, the applicable Intrexon Trademark(s), subject to Synthetic's reasonable approval of the size, position, and location thereof. Consistent with the U.S. patent laws, Synthetic shall ensure that Synthetic Products, or its packaging or accompanying literature as appropriate, bear applicable and appropriate patent

markings for Intrexon Patent numbers. Synthetic 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. Synthetic's use of the Intrexon Trademarks and patent markings shall be subject to prior review and approval of the IPC. Synthetic acknowledges Intrexon's sole ownership of the Intrexon Trademarks and agrees not to take any action inconsistent with such ownership. Synthetic covenants that it shall not use any trademark confusingly similar to any Intrexon Trademarks in connection with any products (including any Synthetic Product). From time to time during the Term, Intrexon shall have the right to obtain from Synthetic samples of Synthetic Product sold by Synthetic 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 Synthetic 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 Synthetic in writing thereafter. Synthetic 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 Synthetic that Intrexon has reasonably concluded, after consultation with its outside advisors, that Intrexon will have to consolidate Synthetic's financial statements with its own, for so long as Intrexon reasonably believes that such consolidation is necessary, Synthetic shall use its best efforts to comply with the following additional obligations:

**(a)** Synthetic shall maintain at its principal place of business or, upon notice to Intrexon, at such other place as Synthetic shall determine:

(i) a copy of Synthetic's certificate of incorporation or organizational document and all amendments thereto, together with executed copies of any powers of attorney pursuant to which any amendment has been executed;

(ii) a copy of this Agreement;

(iii) a copy of Synthetic's federal, state, and local income tax returns and reports, if any; and

(iv) minutes of meetings of Synthetic's board of directors and shareholders or actions by written consent in lieu thereof, redacted as necessary by Synthetic to exclude any sensitive or confidential information that Intrexon, by operation of law or contractual stipulation, is not permitted to receive.

**(b)** Synthetic shall use the accrual method of accounting in preparation of its annual reports and for tax purposes and shall keep its books and records accordingly, consistent with US GAAP.

**(c)** Intrexon at its own expense and upon reasonable notice, may examine any information it may reasonably request (including, to the extent Synthetic has the right to provide such, the work papers of Synthetic's internal and independent auditors) and make copies of and

abstracts from the financial and operating records and books of account of Synthetic, and discuss the affairs, finances and accounts of Synthetic with Synthetic and independent auditors of Synthetic, all at such reasonable times and as often as Intrexon or any agents or representatives of Intrexon may reasonably request. The rights granted pursuant to this Section 4.10(c) are expressly subject to compliance by Intrexon with the safety, security and confidentiality procedures and guidelines of Synthetic, as such procedures and guidelines may be established from time to time.

**(d)** As soon as available but no later than ninety (90) days after the end of each fiscal year, Synthetic shall cause to be prepared and Intrexon to be furnished with an audited balance sheet as of the last day of such fiscal year and an audited income statement, a statement of stockholders' equity and statement of cash flows for Synthetic for such fiscal year and notes associated with each, in each case prepared in accordance with US GAAP, together with a report of Synthetic's independent auditor that such statements have been prepared in accordance with US GAAP and present fairly, in all material respects, the financial position, results of operations and cash flows of Synthetic.

**(e)** As soon as available but no later than forty five (45) days after the end of each calendar quarter, Synthetic shall furnish the following to Intrexon an unaudited balance sheet as of the last day of such period, and an unaudited income statement, a statement of cash flows and a statement of stockholders' equity for Synthetic for such period, in each case prepared in accordance with US GAAP.

**(f)** As requested by Intrexon on no more than a quarterly basis, a certificate, executed by the Executive Officer of Synthetic, certifying the following:

(i) Synthetic maintains accurate books and records reflecting its assets and liabilities and maintains proper and adequate internal accounting controls that provide assurance that (1) transactions are executed with management's authorization; (2) transactions are recorded as necessary to permit preparation of the consolidated financial statements of Synthetic and to maintain accountability for Synthetic's consolidated assets; (3) access to the assets of Synthetic is permitted only in accordance with management's authorization; (4) the reporting of assets of Synthetic is compared with existing assets at regular intervals; and (5) accounts, notes and other receivables and inventory are recorded accurately, and proper and adequate procedures are implemented to effect the collection of accounts, notes and other receivables on a current and timely basis.

(ii) Synthetic maintains disclosure controls and procedures to the extent such would be required of a publicly registered company under the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder; any such controls and procedures are effective to ensure that all material information concerning Synthetic is made known on a timely basis to those individuals responsible for the preparation of any filings that may be required to be made by Intrexon with the SEC and other public disclosure documents.

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.

**(g)** Synthetic shall promptly prepare and furnish to Intrexon any information, whether written or oral, requested by Intrexon that is reasonably necessary for purposes of Intrexon's ongoing compliance with applicable law.

**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 Synthetic no less than thirty (30) days prior (inclusive of any cure period set forth in Section 10.2(a)) 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 Synthetic 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 under this Section 4.11.

## ARTICLE 5

## COMPENSATION

**5.1 Technology Access Fee**. In partial consideration for Synthetic's appointment as an exclusive channel collaborator in the Field and the other rights granted to Synthetic hereunder, within ten days after receipt of approval from the NYSE Amex for the listing of the equity referred to below (including any extension should the NYSE Amex require shareholder approval of such issuance) but in no event later than one hundred twenty (120) days after the Effective Date, Synthetic shall issue to Intrexon certain equity interests in Synthetic, in accordance with the terms and conditions of that certain Equity Purchase Agreement and Registration Rights Agreement, each of even date herewith (collectively, the "**Equity Agreements**"). Provided that all closing conditions for the Technology Access Fee Shares (as defined in the Equity Agreements) that are within the reasonable control of Intrexon have been satisfied or waived, the issuance of the Technology Access Fee Shares (as set forth in the Equity Agreements) is a condition subsequent to the effectiveness of this Agreement.

**5.2 Milestones.**

**(a) Synthetic Equity-Based Milestones**. Upon the attainment of certain milestone events by each different Synthetic Product, Synthetic has agreed to issue to Intrexon certain equity interests of Synthetic, or at Synthetic's election make a cash payment to Intrexon at the fair market value of the equity interests, as set forth in the Equity Agreements. The specific milestone events and respective amounts due to Intrexon upon achievement of the milestone events are set forth in the Equity Agreements.

**5.3 Equity Agreements Control.** All issuances of equity interests to Intrexon, or cash payments to Intrexon in lieu of equity, shall be in accordance with the terms and conditions of the Equity Agreements, which Equity Agreements shall control to the extent they 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 are positive Net Sales arising from the sale of any Synthetic Product in the Field in the Territory, Synthetic shall pay to Intrexon on a Synthetic Product-by-Synthetic Product basis a seven percent (7%) royalty on the first one-hundred million dollars ($100M) of annual Net Sales, and a fourteen percent (14%) royalty on the portion of annual Net Sales exceeding one-hundred million dollars ($100M). Commencing with the Effective Date, in the event that are negative Net Sales for a particular Synthetic Product in any calendar quarter, neither Synthetic nor Intrexon shall owe any payments hereunder with respect to such Synthetic Product. Any negative Net Sales that results from Excess Product Liability Costs may be carried forward to future quarters and offset against positive Net Sales in such future quarters for the same Synthetic Product. Except as set forth in the preceding sentence, Synthetic shall not be permitted to carry forward any negative Net Sales to subsequent quarters.

**(b)** No later than thirty (30) days after each calendar quarter in which Synthetic or any Synthetic Affiliate receives Sublicensing Revenue, Synthetic shall pay to Intrexon fifty percent (50%) of such Sublicensing Revenue.

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

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

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

**(b)** itemized calculation of Net Sales, showing all applicable deductions;

**(c)** itemized calculation of Sublicensing Revenue;

**(d)** the amount of any negative Net Sales for the applicable calendar quarter, and any negative Net Sales amount carried forward from a prior quarter and applied during the present quarter (as per Section 5.4(a));

**(e)** the amount of the payment (if any) due pursuant to Section 5.4(a) and/or 5.4(b);

**(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.

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.

For three (3) years after each sale of Synthetic Product or after incurring any component item incorporated into a calculation of Net Sales, Synthetic shall keep (and shall ensure that its Affiliates and, if applicable, (sub)licensees shall keep) complete and accurate records of such sales 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, Synthetic shall permit an independent certified public accounting firm of internationally recognized standing selected by Intrexon, and reasonably acceptable to Synthetic, 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 Synthetic and its Affiliates to verify the accuracy and timeliness of the reports and payments made by Synthetic 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, Synthetic shall pay additional amounts, with interest from the date originally due as set forth in Section 5.9, within thirty (30) days of receipt of the accounting firm's written report. If the amount of the underpayment is greater than ten percent (10%) of the total amount actually owed for the period audited, then Synthetic 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 such credit cannot be applied to reduce the amounts payable by Synthetic to Intrexon for any particular calendar quarter by more than twenty-five percent (25%) of the amount otherwise due to Intrexon.

**(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 Synthetic 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. Synthetic 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 Synthetic or the appropriate governmental authority (with the assistance of Synthetic 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 Synthetic of its obligation to withhold tax, and Synthetic shall apply the reduced rate of withholding tax, or dispense with withholding tax, as the case may be, provided that Synthetic 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, Synthetic withholds any amount, it shall make timely payment to the proper taxing authority of the withheld amount, and send to Intrexon proof of such payment within forty-five (45) days following that latter payment.

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

## ARTICLE 6

## INTELLECTUAL PROPERTY

**6.1 Ownership.**

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

**(b)** Synthetic 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 Anti-Infectives 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**"). Synthetic hereby assigns all of its right, title and interest in and to the Channel-Related Program IP to Intrexon. Synthetic 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 Synthetic 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. Synthetic shall be under appropriate written agreements with each of its employees, contractors, or agents working on the Anti-Infectives Program, pursuant to which such person shall grant all rights in the Inventions to Synthetic (so that Synthetic may convey certain of such rights to Intrexon, as provided herein) and agree to protect all Confidential Information relating to the Anti-Infectives Program.

**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 that may be available as a result of the regulatory approval of any Synthetic Product. At the reasonable request of Intrexon, Synthetic shall cooperate with Intrexon in connection with such filing, prosecution, and maintenance, at Intrexon's expense. Under no circumstances shall Synthetic (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 a Synthetic Product.

**(b)** Synthetic 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 Synthetic or its Affiliates and not assigned to Intrexon under Section 6.1(c) ("**Synthetic Program Patents**"). At the reasonable request of Synthetic, Intrexon shall cooperate with Synthetic in connection with such filing, prosecution, and maintenance, at Synthetic's expense.

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

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

lieu of directly providing copies of such information to such other Party, provide such other Party with sufficient information that will permit such other Party to access such information itself directly);

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

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

As used above "**Prosecuting Party**" means Intrexon in the case of Intrexon Patents and Synthetic in the case of Synthetic Program Patents.

**6.3 Infringement of Patents by Third Parties.**

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

**(b)** Notwithstanding the foregoing, Synthetic 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 Synthetic 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) [*****]. Intrexon and Synthetic shall bear the costs and expenses of such enforcement equally. 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 Synthetic on such determination. For the avoidance of doubt, Intrexon has no obligations under this Agreement to enforce any Intrexon Patents against, or otherwise abate, any Infringement that is not a Field Infringement.

**(d)** In the event a Party pursues an action under this Section 6.3, the other Party shall reasonably cooperate with the enforcing Party with respect to the investigation and prosecution of any alleged, threatened, or actual Infringement, at the enforcing Party's expense (except with respect to an action under Section 6.3(c), where all costs and expenses will be shared equally in accordance with terms thereof).

**(e)** Synthetic 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 Synthetic in the Field or adversely affects any Intrexon Patent with respect to the Field without Synthetic's 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 Synthetic pursuant to Section 6.3(b), Synthetic shall retain one hundred percent (100%) of any Recovery, but such Recovery shall be shared with Intrexon as Sublicensing Revenue. In any action initiated by Intrexon or Synthetic pursuant to Section 6.3(c), the Parties shall share the Recovery equally, and such Recovery shall not be deemed to constitute Sublicensing Revenue.

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

## ARTICLE 7

### CONFIDENTIALITY

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

this Agreement, except to the extent that the receiving Party can demonstrate by competent evidence that specific Confidential Information:

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

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

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

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

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

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

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

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

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

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

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

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

**7.3 Publicity; Publications**. The Parties agree that the public announcement of the execution of this Agreement shall be substantially in the form of a press release mutually agreed to by the Parties. Each Party will provide the other Party with the opportunity to review and comment, prior to submission or presentation, on external reports, publications and presentations (e.g., press releases, reports to government agencies, abstracts, posters, manuscripts and oral presentations) that refer to the Anti-Infectives Program or programs that are approved by the JSC. For such reports, publications, and presentations, the disclosing Party will provide the other Party at least fifteen (15) days for review of the proposed submission or presentation. For reports and manuscripts, the disclosing Party will provide the other Party at least thirty (30) 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, Synthetic acknowledges that Intrexon's authorized representative(s), during

regular business hours may (i) examine and inspect Synthetic's facilities and (ii) inspect all data and work products relating to this Agreement, subject to restrictions imposed by applicable laws. Any examination or inspection hereunder shall require five (5) business days written notice from Intrexon to Synthetic. Synthetic 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 Synthetic 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 Synthetic to Intrexon. Intrexon will make itself and the pertinent employees and/or agents available, on a reasonable basis, to Synthetic for the aforementioned compliance review.

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

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

## ARTICLE 8

### REPRESENTATIONS AND WARRANTIES

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

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

**(b) Due Authorization**. Synthetic is duly authorized to execute and deliver this Agreement and to perform its obligations hereunder, and the person executing this Agreement on Synthetic'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 Synthetic 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 Synthetic 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. Synthetic is aware of no action, suit or inquiry or investigation instituted by any governmental agency which questions or threatens the validity of this Agreement.

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

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

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

**(c) Binding Agreement**. This Agreement is a legal and valid obligation binding upon Intrexon and enforceable in accordance with its terms, except as such enforcement may be limited by applicable bankruptcy, insolvency, reorganization, arrangement, moratorium or other similar laws affecting creditors' rights, and subject to general equity principles and to limitations on availability of equitable relief, including specific performance. The execution, delivery and performance of this Agreement by Intrexon does not conflict with any agreement, instrument or understanding, oral or written, to which it is a party or by which it may be bound. Intrexon is aware of no action, suit or inquiry or investigation instituted by any governmental agency which questions or threatens the validity of this Agreement.

**(d) Additional Intellectual Property Representations**.

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

(ii) The Intrexon Patents existing as of the Effective Date constitute all of the Patents Controlled by Intrexon as of such date that are necessary for the development, manufacture and Commercialization of Synthetic Products;

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

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

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

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

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

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

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

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

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

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

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

**8.3 Warranty Disclaimer**. EXCEPT FOR THE EXPRESS WARRANTIES PROVIDED IN THIS ARTICLE 8 OR IN THE EQUITY AGREEMENTS, 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 Synthetic and its Affiliates and their respective directors, officers, employees, and agents (collectively, the "**Synthetic 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 gross negligence or willful misconduct of Intrexon or any of its Affiliates, or their respective employees or agents, (b) the use, handling, storage or transport of Intrexon Materials by or on behalf of Intrexon or its Affiliates, licensees (other than Synthetic) or sublicensees; or (c) breach by Intrexon of any representation, warranty or covenant in this Agreement. Notwithstanding the foregoing, Intrexon shall not have any obligation to indemnify the Synthetic Indemnitees to the extent that a Claim arises from (i) the gross negligence or willful misconduct of Synthetic or any of its Affiliates, licensees, or sublicensees, or their respective employees or agents; or (ii) a breach by Synthetic of a representation, warranty, or covenant of this Agreement.

**9.2 Indemnification by Synthetic**. Synthetic 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 gross negligence or willful misconduct of Synthetic or any of its Affiliates or their respective employees or agents; (b) the use, handling, storage, or transport of Intrexon Materials by or on behalf of Synthetic or its Affiliates, licensees, or sublicensees; (c) breach by Synthetic 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 Synthetic Product by or on behalf of Synthetic or its Affiliates, licensees, or sublicensees. Notwithstanding the foregoing, Synthetic shall not have any obligation to indemnify the Intrexon Indemnitees to the extent that a Claim arises from (i) the gross 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 Synthetic 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, Synthetic shall maintain in effect and good standing a product liability insurance policy issued by a reputable insurance company in amounts considered standard for the industry. Immediately prior to, and during the conduct of any clinical trials, Synthetic shall maintain in effect and good standing a clinical trials liability insurance policy issued by a reputable insurance company in amounts considered standard for the industry. At Intrexon's reasonable request, Synthetic shall provide Intrexon with all details regarding such policies, including without limitation copies of the applicable liability insurance contracts. Synthetic shall use reasonable efforts to include Intrexon as an additional insured on any such policies.

## ARTICLE 10

## TERM; TERMINATION

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

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

**(a)** Either Party shall have the right to terminate this Agreement upon written notice to the other Party if the other Party commits any material breach of this Agreement that such breaching Party fails to cure within sixty (60) days following written notice from the nonbreaching Party specifying such breach; provided, however, that if Synthetic commits any

breach of the provisions of Section 4.10 of this Agreement, Intrexon shall have the right to terminate this Agreement if Synthetic fails after notice from Intrexon to cure such breach within thirty (30) days following written notice thereof.

**(b)** Intrexon shall have the right to terminate this Agreement, at its sole discretion, if any necessary shareholder, member, exchange, and/or board of director approvals of Synthetic have not been obtained, and the Technology Access Fee Shares (as defined in the Equity Agreements) have not been issued, within the time frames set forth in Section 5.1.

**(c)** Intrexon shall have the right to terminate this Agreement under the circumstances set forth in Section 4.5(b) upon written notice to Synthetic, such termination to become effective sixty (60) days following such written notice unless Synthetic 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 Synthetic execute any purported assignment of this Agreement contrary to the prohibitions in Section 12.8, such termination occurring upon Intrexon providing written notice to Synthetic and becoming effective immediately upon such written notice.

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

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

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

(i) the particular Synthetic Product is being sold by Synthetic triggering profit sharing payments therefor under Section 5.4(a) of this Agreement,

(ii) the particular Synthetic Product has received regulatory approval,

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

(iv) the particular Synthetic Product is the subject of at least an ongoing Phase 2 or Phase 3 clinical trial in the Field (in the case of a termination by Intrexon due to a Synthetic uncured breach pursuant to Section 10.2(a) or a termination by Synthetic pursuant to Section 10.3).

Such right to continue development and commercialization shall be subject to Synthetic's full compliance with the payment provisions in Article 5, a continuing obligation for Synthetic 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 Synthetic 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 Synthetic under this Agreement shall terminate and shall revert to Intrexon without further action by either Intrexon or Synthetic. Synthetic's 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 Synthetic Products other than the Retained Products shall be referred to herein as the "**Reverted Products**." Synthetic 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 Synthetic 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. Synthetic 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**. Synthetic shall promptly return, or at Intrexon's request, destroy, any Intrexon Materials in Synthetic's 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**. Synthetic is automatically deemed to grant to Intrexon a worldwide, fully paid, royalty-free, exclusive (even as to Synthetic and its Affiliates), irrevocable, license (with full rights to sublicense) under the Synthetic 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 Synthetic 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**. Synthetic 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. Synthetic 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, Synthetic shall provide copies of the portions of such regulatory filings that relate to Reverted Products and shall reasonably cooperate to assist Intrexon in obtaining the benefits of such regulatory approvals with respect to the Reverted Products.

**(g) Data Disclosure**. Synthetic 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 Synthetic 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, Synthetic shall promptly provide to Intrexon copies of all Third-Party agreements under which Synthetic 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, Synthetic shall promptly work with Intrexon to either (A) assign to Intrexon the Third Party agreement(s), or (B) grant a sublicense (with an appropriate scope) to Intrexon under the Third Party agreement(s). Thereafter Intrexon shall be fully responsible for all obligations due for its actions under the sublicensed or assigned Third Party agreements. Notwithstanding the above, if Intrexon does not wish to assume any financial or other obligations associated with a particular Third Party agreement identified to Intrexon under this Section 10.4(h), then Intrexon shall so notify Synthetic and Synthetic 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, Synthetic shall transfer to Intrexon all quantities of Reverted Product (including active pharmaceutical ingredient or work-in-process) in the possession of Synthetic or its Affiliates. Synthetic 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, Synthetic shall promptly provide to Intrexon copies of all agreements between Synthetic 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, Synthetic 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, Synthetic shall reasonably cooperate to assist Intrexon in obtaining the benefits of such agreements. Synthetic 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 Synthetic's breach. For the avoidance of doubt, Intrexon shall have no obligation to assume any of Synthetic's obligations under any Third Party agreement.

**(k) Commercialization**. Intrexon shall have the right to develop and commercialize the Reverted Products itself or with one or more Third Parties, and shall have the right, without obligation to Synthetic, 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 Synthetic) 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 Synthetic to pay any amount which became due and payable under the terms and conditions of this Agreement prior to expiration or such termination. The following portions of this Agreement shall survive termination or expiration of this Agreement: Sections 3.1 (as applicable with respect to 10.4(b), 5.5, 5.7, 6.1, 6.2 (with subsection (c) surviving only to the extent relating to Intrexon Patents that are relevant to Retained Products that, to Intrexon's knowledge, are being developed or commercialized at such time, if any), 7.1, 7.2, 7.4, 7.5, 10.4, and 10.5; Articles 9, 11, and 12; and any relevant definitions in Article 1. Further, Article 7 and Sections 4.5(a), 4.5(c), 5.2 through 5.8, and 9.5 will survive termination of this Agreement to the extent there are applicable Retained Products.

## ARTICLE 11

## DISPUTE RESOLUTION

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

**11.2 Arbitration**. Any dispute, controversy, difference or claim which may arise between the Parties and not from a Committee, out of or in relation to or in connection with this

Agreement (including, without limitation, arising out of or relating to the validity, construction, interpretation, enforceability, breach, performance, application or termination of this Agreement) that is not resolved pursuant to Section 11.1 shall, subject to Section 11.10, be settled by binding "baseball arbitration" as follows. Either Party, following the end of the thirty (30) day period referenced in Section 11.1, may refer such issue to arbitration by submitting a written notice of such request to the other Party, with the arbitration to be held in the state where the other Party's principal office is located (or some other place as may be mutually agreed by the Parties). Promptly following receipt of such notice, the Parties shall meet and discuss in good faith and seek to agree on an arbitrator to resolve the issue, which arbitrator shall be neutral and independent of both Parties and all of their respective Affiliates, shall have significant experience and expertise in licensing and partnering agreements in the pharmaceutical and biotechnology industries, and shall have some experience in mediating or arbitrating issues relating to such agreements. If the Parties cannot agree on a single arbitrator within fifteen (15) days of request by a Party for arbitration, then each Party shall select an arbitrator meeting the foregoing criteria and the two (2) arbitrators so selected shall select within ten (10) days of their appointment a third arbitrator meeting the foregoing criteria. Within fifteen (15) days after an arbitrator(s) is selected (in the case of the three-person panel, when the third arbitrator is selected), each Party will deliver to both the arbitrator(s) and the other Party a detailed written proposal setting forth its proposed terms for the resolution for the matter at issue (the "**Proposed Terms**" of the Party) and a memorandum (the "**Support Memorandum**") in support thereof. The Parties will also provide the arbitrator(s) a copy of this Agreement, as it may be amended at such time. Within fifteen (15) days after receipt of the other Party's Proposed Terms and Support Memorandum, each Party may submit to the arbitrator(s) (with a copy to the other Party) a response to the other Party's Support Memorandum. Neither Party may have any other communications (either written or oral) with the arbitrator(s) other than for the sole purpose of engaging the arbitrator or as expressly permitted in this Section 11.2; provided that, the arbitrator(s) may convene a hearing if the arbitrator(s) so chooses to ask questions of the Parties and hear oral argument and discussion regarding each Party's Proposed Terms. Within sixty (60) days after the arbitrator's appointment, the arbitrator(s) will select one of the two Proposed Terms (without modification) provided by the Parties that he or she believes is most consistent with the intention underlying and agreed principles set forth in this Agreement. The decision of the arbitrator(s) shall be final, binding, and unappealable. For clarity, the arbitrator(s) must select as the only method to resolve the matter at issue one of the two sets of Proposed Terms, and may not combine elements of both Proposed Terms or award any other relief or take any other action.

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

**11.4 Award**. Any award to be paid by one Party to the other Party as determined by the arbitrator(s) as set forth above under Section 11.2 shall be promptly paid in United States dollars free of any tax, deduction or offset; and any costs, fees or taxes incident to enforcing the award shall, to the maximum extent permitted by law, be charged against the losing Party. Each Party agrees to abide by the award rendered in any arbitration conducted pursuant to this Article

11, and agrees that, subject to the United States Federal Arbitration Act, 9 U.S.C. §§ 1-16, judgment may be entered upon the final award in any United States District Court located in New York and that other courts may award full faith and credit to such judgment in order to enforce such award. The award shall include interest from the date of any damages incurred for breach of the Agreement, and from the date of the award until paid in full, at a rate fixed by the arbitrator(s). With respect to money damages, nothing contained herein shall be construed to permit the arbitrator(s) or any court or any other forum to award consequential, incidental, special, punitive or exemplary damages. By entering into this agreement to arbitrate, the Parties expressly waive any claim for consequential, incidental, special, punitive or exemplary damages. The only damages recoverable under this Agreement are direct compensatory damages.

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

**11.6 Injunctive Relief**. Nothing in this Article 11 will preclude either Party from seeking equitable relief or interim or provisional relief from a court of competent jurisdiction, including a temporary restraining order, preliminary injunction or other interim equitable relief, concerning a dispute either prior to or during any arbitration if necessary to protect the interests of such Party or to preserve the status quo pending the arbitration proceeding. Specifically, the Parties agree that a material breach by either Party of its obligations in Section 3.5 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 3.5 or Article 7, and without further proof of irreparable harm other than this acknowledgement, such non-breaching Party shall be entitled to seek (a) immediate equitable relief, specifically including, but not limited to, both interim and permanent restraining orders and injunctions, without bond, and (b) such other and further equitable relief as the court may deem proper under the circumstances. For the avoidance of doubt, nothing in this Section 11.6 shall otherwise limit a breaching Party's opportunity to cure a material breach as permitted in accordance with Section 10.2.

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

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

**11.9 Jurisdiction**. For the purposes of this Article 11, the Parties acknowledge their diversity and agree to accept the jurisdiction of any United States District Court located in New

York for the purposes of enforcing or appealing any awards entered pursuant to this Article 11 and for enforcing the agreements reflected in this Article 11 and agree not to commence any action, suit or proceeding related thereto except in such courts.

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

## ARTICLE 12

## GENERAL PROVISIONS

**12.1 Use of Name**. No right, express or implied, is granted by this Agreement to either Party to use in any manner the name of the other or any other trade name or trademark of the other in connection with the performance of this Agreement, except that (a) either Party may use the name of the other Party as required by regulations and in press releases accompanying quarterly and annual earnings reports approved by the issuer's Board of Directors, and (b) Synthetic may use the Intrexon Trademarks in accord with 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**. The Parties are not employees or legal representatives 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.

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.

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

| | |
|---|---|
| If to Intrexon: | Intrexon Corporation<br>20358 Seneca Meadows Parkway<br>Germantown, MD 20876<br>Attention: President, Protein Production Division<br>Fax: (301) 556-9901 |
| with a copy to: | Intrexon Corporation<br>20358 Seneca Meadows Parkway<br>Germantown, MD 20876<br>Attention: Legal Department<br>Fax: (301) 556-9902 |
| If to Synthetic: | Synthetic Biologics, Inc.<br>617 Detroit Street, Suite 100<br>Ann Arbor, MI 48104<br>Attention: Chief Executive Officer<br>Fax: (734) 332-7878 |
| with a copy to: | Gracin & Marlow, LLP<br>405 Lexington Avenue<br>New York, NY 10174<br>Attn: Leslie Marlow, Esq.<br>Fax: (212) 208-4657 |

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

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

**12.7 Entire Agreement; Amendment**. This Agreement, including any exhibits attached hereto, constitute the entire, final, complete and exclusive agreement between the Parties and supersede all previous agreements or representations, written or oral, with respect to the subject matter of this Agreement (including any prior confidentiality agreement between the Parties). All information of Intrexon or Synthetic 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 Synthetic nor Intrexon may directly or indirectly solicit in order to offer to employ, engage in any discussion regarding employment with, or hire any employee of the other Party or an individual who was employed by the other party with one (1) year prior to such solicitation, discussion, or hire, without the prior approval of such other Party. General employment solicitations or advertisements shall not be considered direct or indirect solicitations, and are not prohibited under this Agreement.

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

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

*[Remainder of page intentionally left blank.]*

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.

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

**INTREXON CORPORATION**

By: /s/ Saiid Zarrabian

Name: Saiid Zarrabian

Title: President of Protein Production Division and Senior Vice President

**SYNTHETIC BIOLOGICS, INC.**

By: /s/ Jeffrey Riley

Name: Jeffrey Riley

Title: Chief Executive Officer, President, and Director

**Exhibit 10.8**

**EXECUTION COPY**
**CONFIDENTIAL**

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 October 5, 2012 (the "**Effective Date**") by and between **INTREXON CORPORATION**, a Virginia corporation with offices at 20358 Seneca Meadows Parkway, Germantown, MD 20876 ("**Intrexon**"), and **FIBROCELL SCIENCE, INC.,** a Delaware corporation having its principal place of business at 405 Eagleview Boulevard, Exton, PA 19341 ("**Fibrocell**"). Intrexon and Fibrocell 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 and DNA vectors, and the control of peptide expression; and

**WHEREAS,** Fibrocell now desires to become Intrexon's exclusive channel collaborator with respect to such technology for the purpose of developing the Fibroblast Program (as defined herein), and Intrexon is willing to appoint Fibrocell as a channel collaborator in the Field (as defined herein, and subject to amendments to the definition as permitted herein) under the terms and conditions of this Agreement.

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

## ARTICLE 1

## DEFINITIONS

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

**1.1** "**Affiliate**" means, with respect to a particular Party, any other person or entity that directly or indirectly controls, is controlled by, or is in common control with such Party. As used in this Section 1.1, the term "controls" (with correlative meanings for the terms "controlled by" and "under common control with") means the ownership, directly or indirectly, of more than fifty percent (50%) of the voting securities or other ownership interest of an entity, or the possession, directly or indirectly, of the power to direct the management or policies of an entity, whether through the ownership of voting securities, by contract, or otherwise. Notwithstanding the foregoing, Third Security shall be deemed not to be an Affiliate of Intrexon. In addition, any other person, corporation, partnership, or other entity that would be an Affiliate of Intrexon 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.

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

**1.3** "**Authorizations**" has the meaning set forth in Section 8.2(d)(xii).

**1.4** "**CC**" has the meaning set forth in Section 2.2(b).

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

**1.6** "**Claims**" has the meaning set forth in Section 9.1.

**1.7** "**CMCC**" has the meaning set forth in Section 2.2(b).

**1.8** "**COGS Savings**" means the amount of COGS saved in the production of an Improved Product, as determined by subtracting the actual COGS of the Improved Product at the time of its respective sale (including any manufacturing royalties paid to any Third Parties) from the COGS of the Existing Product prior to it being improved under the Fibroblast Program (including any manufacturing royalties paid to any Third Parties). In accord with this Section 1.8, Fibrocell may exclude from COGS Savings any amount of saved COGS that is attributable to a COGS improvement realized in the Improved Product through Fibrocell's efforts independent of the Fibroblast Program and without use of the Intrexon Channel Technology, Intrexon IP, and Intrexon Materials. Before Fibrocell may exclude any amount from COGS Savings under the previous sentence, (i) Fibrocell must provide in advance of any payment due under Section 5.3(c) written documentation to the JSC identifying, and supplying a supporting calculation evidencing, any amount it believes should be excluded from COGS Savings, and (ii) the final amount that will ultimately be excluded will be established by mutual agreement of the Parties. For clarity, the mechanism of the previous sentence for establishing the final amount of any exclusion from COGS Savings is not subject to final decision making authority of the JSC or any other Committee, and if mutual agreement of the Parties cannot be reached any dispute will be resolved in accord with Article 11. Any caclulation by the Parties of COGS Savings under this Agreement shall apply consistent calculations to both the Existing Product and the Improved Product, and shall be exclusive of any payments made to Intrexon pursuant to Section 4.7 and Section 5.3.

**1.9** "**Committees**" has the meaning set forth in Section 2.2(a).

**1.10** "**Commercialize**" or "**Commercialization**" means any activities directed to marketing, promoting, distributing, importing for sale, offering to sell and/or selling Fibrocell Products.

**1.11** "**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.

**1.12 "Complementary In-Licensed Third Party IP**" has the meaning set forth in Section 3.9(a).

**1.13** "**Confidential Information**" means each Party's confidential Information, disclosed pursuant to this Agreement or any other confidentiality agreement between the Parties, regardless of whether in oral, written, graphic or electronic form.

**1.14** "**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.

**1.15** "**Costs of Goods Sold**" or "**COGS**" means all Manufacturing Costs that are directly and reasonably attributable to manufacturing of an Existing Product or an Improved Product, as the case may be, in accordance with US GAAP for commercial sale in the countries where such product has been launched.

**1.16** "**CRC**" has the meaning set forth in Section 2.2(b).

**1.17** "**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 Fibrocell 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.

**1.18** "**Equity Agreements**" has the meaning set forth in Section 5.1.

**1.19** "**Excess Product Liability Costs**" has the meaning set forth in Section 9.3.

**1.20** "**Executive Officer**" means : (i) the Chief Executive Officer of the applicable Party, or (ii) 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.

**1.21** "**Existing Product**" means: (i) Fibrocell's autologous fibroblast therapeutic product indicated for improvement of the appearance of moderate to severe nasolabial fold wrinkles in adults, which was approved and marketed in the United States before the Effective Date under the trade name LAVIV™, and (ii) any product that comprises a new indication for the LAVIV™ product identified under the previous clause "i", excluding an Improved Product or a Fibrocell Product.

**1.22** "**FDA**" has the meaning set forth in Section 8.2(d)(xii).

**1.23** "**Fibroblast Program**" has the meaning set forth in Section 2.1(a).

**1.24** "**Fibrocell Indemnitees**" has the meaning set forth in Section 9.1.

**1.25** "**Fibrocell Product**" means any product in the Field, excepting an Improved Product, that is created, produced, developed, or identified in whole or in part, directly or indirectly, by or on behalf of Fibrocell during the Term through use or practice of Intrexon Channel Technology, Intrexon IP, or the Intrexon Materials.

**1.26** "**Fibrocell Program Patent**" has the meaning set forth in Section 6.2(b).

**1.27** "**Fibrocell Termination IP**" means all Patents or other intellectual property that Fibrocell 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.

**1.28** "**Field Infringement**" has the meaning set forth in Section 6.3(b).

**1.29** "**Field**" means, as of the Effective Date and irrespective of whether such requires regulatory approval, (i) the enhanced production and purification of non-genetically modified human autologous fibroblasts for use in all aesthetic and therapeutic indications; (ii) the enhanced production and purification of non-genetically modified human autologous dermal cells for use in aesthetic and therapeutic treatment of dermal, vocal cord, and periodontal indications; (iii) the development of genetically modified autologous human fibroblasts for use in all aesthetic and therapeutic indications where an autologous fibroblast itself is the principal effector of the product in contrast to the use of autologous fibroblasts as the source of expression of a systemically available therapeutic protein in which that protein (and not the fibroblast per se) is the principal therapeutic effector; and (iv) the development of genetically modified autologous human dermal cells for aesthetic and therapeutic treatment of dermal, vocal cord, and periodontal indications. For clarity, the "Field" does not include inductive pluripotent cell products that are derived from autologous fibroblasts or dermal cells or products that are subject to an existing Intrexon collaboration.

**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 and the terms of Sections 4.6 and 4.7 (as appropriate), Intrexon will bill for its internal direct costs incurred through the use of annualized standard full-time equivalents; such rate shall be based upon the actual fully loaded costs of those personnel directly involved in the provision of such good, product or service. Intrexon may, from time to time, adjust such full-time equivalent rate based on changes to its actual fully loaded costs and will review the accuracy of its full-time equivalent rate at least quarterly. Intrexon shall provide Fibrocell with reasonable documentation indicating the basis for any direct and indirect charges, any allocable overhead, and any such adjustment in full-time equivalent rate.

**1.31 "Improved Product"** means any non-genetically modified autologous fibroblast product in the Field that is created, produced, identified, or modified in whole or in part by or on behalf of Fibrocell during the Term using Intrexon Channel Technology, Intrexon IP, or the Intrexon Materials under the Fibroblast Program to improve the formulation or production process of the Existing Product.

**1.32** "**In-Licensed Program IP**" has the meaning set forth in Section 3.9(a).

**1.33** "**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.

**1.34** "**Infringement**" has the meaning set forth in Section 6.3(a).

**1.35** "**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) LEAP™, (3) DNA and RNA MOD engineering, (4) protein engineering, (5) transcription control chemistry, (6) genome engineering, and (7) cell system engineering.

**1.36** "**Intrexon Indemnitees**" has the meaning set forth in Section 9.2.

**1.37** "**Intrexon IP**" means the Intrexon Patents and Intrexon Know-How.

**1.38** "**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 Fibrocell to conduct the Fibroblast Program. For the avoidance of doubt, the Intrexon Know-How shall include any Information (other than Intrexon Patents) in the Channel-Related Program IP.

**1.39** "**Intrexon Materials**" means the genetic code and associated amino acids and gene constructs used alone or in combination and such other proprietary reagents including but not limited to plasmid vectors, virus stocks, cells and cell lines, antibodies, and ligand-related chemistry, in each case that are reasonably required or provided to Fibrocell by or on behalf of Intrexon to conduct the Fibroblast Program.

**1.40** "**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 Fibrocell to conduct the Fibroblast Program. For the avoidance of doubt, the Intrexon Patents shall include any Patent in the Channel-Related Program IP.

**1.41** "**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.

**1.42** "**Inventions**" has the meaning set forth in Section 6.1(b).

**1.43** "**IPC**" has the meaning set forth in Section 2.2(b).

**1.44** "**JSC**" has the meaning set forth in Section 2.2(b).

**1.45** "**Losses**" has the meaning set forth in Section 9.1.

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

**1.47** "**Net Sales**" means, with respect to any Fibrocell Product, the net sales of such Fibrocell Product by Fibrocell or an Affiliate of Fibrocell (including without limitation net sales of Fibrocell Product to a non-Affiliate sublicensee but not including net sales by such non-Affiliate sublicensee), as determined in accordance with US GAAP as the gross amount invoiced on account of sales of Fibrocell 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 Fibrocell Product is sold to any third party together with other products or services, the price of such product, solely for purposes of the calculation of Net Sales, shall be deemed to be no less than the price at which such product would be sold in a similar transaction to a third party not also purchasing the other products or services.

**1.48** "**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.

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

**1.50** "**Prosecuting Party**" has the meaning set forth in Section 6.2(c).

**1.51** "**Recovery**" has the meaning set forth in Section 6.3(f).

**1.52** "**Retained Product**" has the meaning set forth in Section 10.4(a).

**1.53** "**Reverted Product**" has the meaning set forth in Section 10.4(c).

**1.54** "**SEC**" means the United States Securities and Exchange Commission.

**1.55** "**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 Fibrocell 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 Fibrocell 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 Fibrocell 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); and (c) amounts received from sublicensees in respect of any Fibrocell Product sales that are included in Net Sales.

**1.56** "**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 Fibrocell or others) at such time for the indication and (ii) those therapies that are being actively developed by Fibrocell 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.

**1.57** "**Supplemental In-Licensed Third Party IP**" has the meaning set forth in Section 3.9(a).

**1.58** "**Support Memorandum**" has the meaning set forth in Section 11.2.

**1.59** "**Technology Access Fee**" for the purposes of this Agreement has the meaning as set forth in Section 5.1.

**1.60** "**Term**" has the meaning set forth in Section 10.1.

**1.61** "**Territory**" means the United States of America.

**1.62 "Third Party**" means any individual or entity other than the Parties or their respective Affiliates.

**1.63** "**Third Security**" means Third Security, LLC.

**1.64** "**US GAAP**" means generally accepted accounting principles in the United States.

## ARTICLE 2

## SCOPE OF CHANNEL COLLABORATION; MANAGEMENT

**2.1 Scope.**

**(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 (collectively, the "**Fibroblast Program**"). As provided below, the JSC shall establish, monitor, and govern projects for the Fibroblast Program. Either Party may propose potential projects in the Field for review and consideration by the JSC.

**2.2 Committees**.

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

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

| Committee | Purpose |
|---|---|
| Joint Steering Committee ("**JSC**") | Establish projects for the Fibroblast Program and establish the priorities, as well as approve budgets for such projects. Approve all subcommittee projects and plans. The JSC shall establish budgets not less than on a quarterly basis. |
| Chemistry, Manufacturing and Controls Committee ("**CMCC**") | Establish project plans and review and approve activities and budgets for chemistry, manufacturing, and controls under the Fibroblast Program. |
| Clinical/Regulatory Committee ("**CRC**") | Review and approve all research and development plans, clinical projects and publications, and regulatory filings and correspondence under the Fibroblast Program; review and approve itemized budgets with respect to the foregoing. |
| Commercialization Committee ("**CC**") | Establish project plans and review and approve activities and budgets for Commercialization activities under the Fibroblast Program. |
| Intellectual Property Committee ("**IPC**") | Evaluate intellectual property issues in connection with the Fibroblast 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. For purposes of this Section 2.3, employees of Third Security may, at Intrexon's election, serve as members of a Committee as if they were employees of Intrexon. 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 Fibrocell selecting the chairperson first for the JSC, CRC and CC, and Intrexon selecting the chairperson first for the CMCC and IPC. The chairperson of each Committee shall be responsible for calling meetings, preparing and circulating an agenda in advance of each meeting of such Committee, and preparing and issuing minutes of each meeting within fifteen (15) days thereafter.

**(b) Meetings**. Each Committee shall hold meetings at such times as it elects to do so, but in no event shall such meetings be held less frequently than once every six (6) months, with the caveat that both Parties may agree to suspend activities of a given Committee other than the JSC until such time as one Party informs the other Party of its then desire to reactivate the so-suspended Committee, at which point the Parties will thereafter schedule and hold the next meeting for the reactivated Committee within one (1) month. Meetings of any Committee may be held in person or by means of telecommunication (telephone, video, or web conferences). To the extent that a Committee holds any meetings in person, the Parties will alternate in designating the location for such in-person meetings, with Fibrocell selecting the first meeting location for each Committee. A reasonable number of additional representatives of a Party may attend meetings of a Committee in a non-voting capacity. Each Party shall be responsible for all of its own expenses of participating in any Committee excepting that an Intrexon employee or agent serving on a Committee shall not prevent Intrexon from recouping the Fully Loaded Costs otherwise derived from the labor of that employee or agent in the course of providing manufacturing or support services as set forth in Sections 4.6 and 4.7 below.

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

**(d) Limitations of Committee Powers**. Each Committee shall have only such powers as are specifically delegated to it hereunder or from time to time as agreed to in

writing by the mutual consent of the Parties and shall not be a substitute for the rights of the Parties. Without limiting the generality of the foregoing, no Committee shall have any power to amend this Agreement. Any amendment to the terms and conditions of this Agreement shall be implemented pursuant to Section 12.7 below.

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

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

**(b) Casting Vote at CMCC**. If a dispute at the CMCC is not resolved pursuant to Section 2.4 above, then (i) in the case of any disputes relating to the Intrexon Materials, the manufacture of a Fibrocell Product's active pharmaceutical ingredient, the use of Intrexon Channel Technology or Intrexon IP in the manufacture of an Improved Product's active pharmaceutical ingredient, or the manufacturing of other components of Fibrocell Products or Improved Products contracted for or manufactured by Intrexon or reasonable controls regarding the dissemination of Intrexon Technology, Intrexon IP or Intrexon Materials, 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 Fibrocell 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 Fibrocell 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 Fibrocell shall have the authority to finally resolve such dispute.

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

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

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

## ARTICLE 3

## LICENSE GRANTS

**3.1 Licenses to Fibrocell**.

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

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

**3.2 Sublicensing**. Except as provided below, Fibrocell 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 Fibrocell Products or Improved Products or use or display the Intrexon Trademarks, in each case except with Intrexon's written consent, which written consent may be withheld in Intrexon's sole discretion. Notwithstanding the foregoing, Fibrocell shall have a limited right to sublicense under the circumstances described in Sections 3.2(a) and 3.2(b).

**(a)** Fibrocell may transfer, to the extent reasonably necessary, Intrexon Materials that are or express active pharmaceutical ingredients to a Third Party contractor performing contract manufacturing, fill, and/or finish responsibilities for Fibrocell Products or Improved Products, and may in connection therewith grant limited sublicenses necessary to

enable such Third Party to perform such activities. If Fibrocell transfers any Intrexon Materials under this Section 3.2(a), Fibrocell 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.

**(b)** Fibrocell may, with Intrexon's written consent, which consent cannot be unreasonably withheld, sublicense the rights granted under Section 3.1 to an Affiliate, or transfer the Intrexon Materials to an Affiliate, or grant an Affiliate the right to research, develop, use, or Commercialize Fibrocell Products or Improved Products or use or display the Intrexon Trademarks. In the event that Intrexon consents to any such grant or transfer to an Affiliate, Fibrocell 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 Fibrocell), including any payment obligations owed to Intrexon hereunder.

**3.3 Limitation on Sublicensees**. None of the enforcement rights under the Intrexon Patents that are granted to Fibrocell 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**. Fibrocell 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**. Neither Intrexon nor its Affiliates shall make the Intrexon Channel Technology or Intrexon Materials available to any Third Party for the purpose of developing or Commercializing products in the Field (except as set forth in Section 3.2), 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 Fibroblast Program. Further, other than with respect to developing new indications for the Existing Product outside of the Fibroblast Program, neither Fibrocell nor its Affiliates shall pursue (either by itself or with a Third Party or Affiliate) outside of the Fibroblast Program the research, development or Commercialization of any product for purpose of sale in the Field where such products would compete with Fibrocell Products. For the avoidance of doubt, Fibrocell may pursue development and implementation of manufacturing changes designed to reduce the COGS of the Existing Product outside of the Fibroblast Program so long as such does not utilize Intrexon Channel Technology or utilize Third Party gene or cell modification technology in leiu of using Intrexon Channel Technology.

**3.6 Off Label Use**. For purpose of clarity, (a) following the Commercial Sale of a Fibrocell Product or Improved Product, the use by direct or indirect purchasers or other users of Fibrocell Products or Improved Products outside the Field (i.e. "off label use") shall not constitute a breach by Fibrocell of the terms of Section 3.3, 3.4 or 3.5, provided that neither Fibrocell nor its Affiliate (nor any Third Party under contract with either of them) marketed or

promoted Fibrocell Products or Improved Products for such off-label use; and (b) following the 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, Fibrocell acknowledges that Intrexon has all rights, in Intrexon's sole discretion, to make the Intrexon Materials, Intrexon Channel Technology (including any active pharmaceutical ingredient used in a Fibrocell Product), and Intrexon IP available to Third Party channel partners or collaborators for use in fields outside the Field.

**3.8 Rights to Clinical and Regulatory Data**. Fibrocell shall own and control all clinical data and regulatory filings relating to Commercialization of Fibrocell Products and Improved Products during the Term. Fibrocell shall provide at Intrexon's request full copies of all clinical and non-clinical data and reports, regulatory filings, and communications from regulatory authorities that relate specifically and solely to Fibrocell Products. To the extent that there exist any clinical and non-clinical data and reports, regulatory filings, and communications from regulatory authorities owned by Fibrocell that relate both to Fibrocell Products and other products produced by Fibrocell outside the Field or relate to an Improved Product, Fibrocell shall provide to Intrexon upon Intrexon's request copies of the portions of such data, reports, filings, and communications that relate to Fibrocell Products or relate to Intrexon's contribution to the Improved Product. Subject to its ongoing obligations of exclusivity under Section 3.5 and regarding off label use under 3.6, 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 Fibrocell Products and Improved 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. Notwithstanding the provisions of this Section 3.8, Intrexon shall not, outside of the Fibroblast Program, utilize knowingly any Fibrocell clinical and non-clinical data or reports in support of obtaining regulatory approval for a product for use in the Field.

**3.9 Third Party Licenses**.

**(a)** [*****] shall obtain [*****] any licenses from Third Parties that are required in order to practice the Intrexon Channel Technology in the Field where the licensed intellectual property is reasonably necessary for Intrexon to conduct genetic and cell engineering and related analytic activities under JSC established plans for the Fibroblast Program (but specifically excluding intellectual property directed to any processes or methods for harvesting, culturing, formulating, or otherwise manufacturing Fibrocell Products or Improved Products, or

to any methods of treating humans with fibroblasts or administering fibroblasts for purposes of therapy in the Field) ("**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 Fibrocell 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 Fibrocell 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 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 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 [*****]. For the avoidance of doubt, [*****] may at any time obtain a license under Complementary In-Licensed Third Party IP outside the Field [*****] 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 Fibrocell 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 Fibrocell Products, Fibrocell shall use commercially reasonable efforts to ensure that Fibrocell 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 Fibrocell 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 Fibrocell or shall disclose in writing to Fibrocell all of such terms and conditions that are applicable to Fibrocell. Fibrocell 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 Fibrocell 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, Fibrocell hereby grants to Intrexon a non-exclusive, worldwide, fully-paid, royalty-free license, under any applicable Patents or other intellectual property Controlled by Fibrocell or its Affiliates, solely to the extent necessary for Intrexon to conduct those responsibilities assigned to it under this Agreement, which license shall be sublicensable solely to Intrexon's Affiliates or to any of Intrexon's permitted subcontractors.

**3.11 Restrictions Relating to Intrexon Materials**. Fibrocell and its permitted sublicensees shall use the Intrexon Materials solely for purposes of the Fibroblast 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, Fibrocell shall not, and shall ensure that Fibrocell personnel and permitted sublicensees do not, except as otherwise permitted in 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, Fibrocell shall be solely responsible for the development and Commercialization of Fibrocell Products and Improved Products. Fibrocell shall be responsible for all costs incurred in connection with the Fibroblast 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 a Fibrocell Product, to the extent such allocation, depreciation, and amortization is permitted by US GAAP, it being recognized that the majority of non-facilities scale-up costs cannot be capitalized and amortized under US GAAP); (b) costs of basic research with respect to the Intrexon Channel Technology and Intrexon Materials (i.e., platform improvements) but, for clarity, excluding research described in Section 4.7 or research requested by the JSC for the development of a Fibrocell Product or an Improved Product (which research costs shall be reimbursed by Fibrocell); (c) [*****]; and (d) costs of filing, prosecution and maintenance of Intrexon Patents. The costs encompassed within subsection (a) above shall include the scale-up of Intrexon Materials and related active pharmaceutical ingredients for clinical trials and Commercialization of Fibrocell 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 Fibrocell (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 Information and materials between the Parties.

**4.3 Information and Reporting**. Fibrocell will keep Intrexon informed about Fibrocell's efforts to develop and Commercialize Fibrocell Products and Improved Products, including reasonable and accurate summaries of Fibrocell's (and its Affiliates' and, if applicable, (sub)licensees') development plans (as updated), including preclinical, clinical and regulatory plans, marketing plans (as updated), progress towards meeting the goals and milestones in such plans and explanations of any material deviations, significant developments in the development and/or Commercialization of the Fibrocell Products and Improved Products, including initiation or completion of a clinical trial, submission of a United States or international regulatory filing, receipt of a response to such United States or international regulatory filing, clinical safety event, receipt of Regulatory Approval, or commercial launch, and manufacturing and pricing information, including data evidencing current COGS for any Existing Products. As set forth in Section 3.8 above, Fibrocell 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 Fibrocell as soon as practical after they become available. Intrexon will keep Fibrocell informed about Intrexon's efforts (a) to establish manufacturing capabilities and facilities for Fibrocell Products and Improved 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 Fibroblast 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 Fibrocell and Intrexon will be made in the course of JSC meetings at least once every six (6) months while Fibrocell Products and Improved 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, Fibrocell shall own and maintain, at its own cost, all regulatory filings and regulatory approvals for Fibrocell Products and Improved Products that Fibrocell is developing or Commercializing pursuant to this Agreement. As such, Fibrocell shall be responsible for reporting all adverse events related to such Fibrocell Products and Improved 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 Fibrocell and Intrexon establish and execute a separate safety data exchange agreement, which agreement will address and govern the timely exchange of safety information generated by Fibrocell, Intrexon, and relevant third parties with respect to specific Intrexon Materials. The decision to list or not list Patents in any regulatory filing for a Fibrocell 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 Fibrocell, except with respect to Product Specific Program Patents, which will be mutually determined by the Parties.

**4.5 Diligence**.

**(a)** Fibrocell shall use, and shall require its sublicensees to use, Diligent Efforts to develop and Commercialize Fibrocell Products and Improved Products.

**(b)** Without limiting the generality of the foregoing, Intrexon may, from time to time, notify Fibrocell that it believes it has identified a Superior Therapy, and in such case Intrexon shall provide to Fibrocell its then-available information about such therapy and reasonable written support for its conclusion that the therapy constitutes a Superior Therapy. Fibrocell shall have the following obligations with respect to such proposed Superior Therapy: (i) within sixty (60) days after such notification, Fibrocell shall prepare and deliver to the JSC for review and approval a development plan detailing how Fibrocell will pursue the Superior Therapy (including a proposed budget); (ii) Fibrocell shall revise the development plan as directed by the JSC; and (iii) following approval of the development plan by the JSC, Fibrocell shall use Diligent Efforts to pursue the development of the Superior Therapy under the Fibroblast Program in accordance with such development plan. If Fibrocell fails to comply with the foregoing obligations, or if Fibrocell 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 Fibrocell's Affiliates and any permitted sublicensees shall be attributed to Fibrocell for the purposes of evaluating Fibrocell's 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 Fibroblast Program that relate to the Intrexon Materials. To the extent that Intrexon so elects, Intrexon may request that Fibrocell and Intrexon establish and execute a separate manufacturing and supply agreement, which agreement will establish and govern the production, quality assurance, and regulatory activities associated with manufacture of Intrexon Materials. Except as provided in Section 4.1, any manufacturing undertaken by Intrexon pursuant to the preceding sentence shall be performed in exchange for cash payments equal to Intrexon's Fully Loaded Cost in connection with such manufacturing, on terms to be negotiated by the Parties in good faith. In the event that Intrexon does not manufacture Intrexon Materials, bulk drug product or bulk quantities of other components of Fibrocell Products, then Intrexon shall provide to Fibrocell or a contract manufacturer selected by Fibrocell and approved by Intrexon all Information Controlled by Intrexon that is related to the manufacturing of such Intrexon Materials, bulk drug product or bulk qualities of other components of Fibrocell Products, for use in the Field and is reasonably necessary to enable Fibrocell 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 Fibrocell Products, in each case as manufactured by Intrexon. The costs and expenses incurred by Intrexon in carrying out such transfer shall be borne by Intrexon. Any manufacturing Information transferred hereunder to Fibrocell or its contract manufacturer shall not be further transferred to any Third Party, including any Product Sublicensee, or any Fibrocell Affiliate without the prior written consent of Intrexon; provided, however, that Intrexon shall not unreasonably withhold such consent if necessary to permit Fibrocell to switch manufacturers.

**4.7 Support Services**. The JSC will meet promptly following the Effective Date and establish a plan under which Intrexon will provide support services to Fibrocell for the research and development of Fibrocell Products and Improved Products under the Fibroblast Program, which initial plan may be amended from time to time by the JSC. Fibrocell 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, Fibrocell shall request, or Intrexon may propose, that Intrexon perform certain additional support services with respect to researching and developing new Fibrocell Products or improving the manufacturing or processing methods for the Existing Product to produce Improved Products. To the extent that the Parties mutually agree that Intrexon 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 would be compensated for such services by cash payments equal to Intrexon's Fully Loaded Cost in connection with such services.

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

**4.9 Trademarks and Patent Marking.** To the extent permitted by applicable law and regulations, Fibrocell shall ensure that the packaging, promotional materials, and labeling for Fibrocell Products and Improved Products shall carry, in a conspicuous location, the applicable Intrexon Trademark(s), subject to Fibrocell's reasonable approval of the size, position, and location thereof. Consistent with the U.S. patent laws, Fibrocell shall ensure that Fibrocell Products and Improved Products, or their respective packaging or accompanying literature as appropriate, bear applicable and appropriate patent markings for Intrexon Patent numbers. Fibrocell 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. Fibrocell's use of the Intrexon Trademarks and patent markings shall be subject to prior review and approval of the IPC. Fibrocell acknowledges Intrexon's sole ownership of the Intrexon Trademarks and agrees not to take any action inconsistent with such ownership. Fibrocell covenants that it shall not use any trademark confusingly similar to any Intrexon Trademarks in connection with any products (including any Fibrocell Product or Improved Product). From time to time during the Term, Intrexon shall have the right to obtain from Fibrocell samples of Fibrocell Product or Improved Product sold by Fibrocell 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 Fibrocell Products or Improved 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 Fibrocell in writing thereafter. Fibrocell 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 Fibrocell that Intrexon has reasonably concluded, after consultation with its outside advisors, that Intrexon will have to consolidate Fibrocell's financial statements with its own, for so long as Intrexon reasonably believes that such consolidation is necessary, Fibrocell shall comply with the following additional obligations:

**(a)** Fibrocell shall maintain at its principal place of business or, upon notice to Intrexon, at such other place as Fibrocell shall determine:

(i) a copy of Fibrocell's certificate of incorporation or organizational document and all amendments thereto, together with executed copies of any powers of attorney pursuant to which any amendment has been executed;

(ii) a copy of this Agreement;

(iii) a copy of Fibrocell's federal, state, and local income tax returns and reports, if any; and

(iv) minutes of meetings of Fibrocell's board of directors and shareholders or actions by written consent in lieu thereof, redacted as necessary by Fibrocell to exclude any sensitive or confidential information that Intrexon, by operation of law or contractual stipulation, is not permitted to receive.

**(b)** Fibrocell shall keep its books and records consistent with US GAAP.

**(c)** Intrexon at its own expense and upon reasonable notice, may examine any information it may reasonably request (including, to the extent Fibrocell has the right to provide such, the work papers of Fibrocell's internal and independent auditors) and make copies of and abstracts from the financial and operating records and books of account of Fibrocell, and discuss the affairs, finances and accounts of Fibrocell with Fibrocell and independent auditors of Fibrocell, all at such reasonable times and as often as Intrexon or any agents or representatives of Intrexon may reasonably request. The rights granted pursuant to this Section 4.10(c) are expressly subject to compliance by Intrexon with the safety, security and confidentiality procedures and guidelines of Fibrocell, as such procedures and guidelines may be established from time to time.

**(d)** As soon as available but no later than ninety (90) days after the end of each fiscal year, Fibrocell shall cause to be prepared and Intrexon to be furnished with an audited balance sheet as of the last day of such fiscal year and an audited income statement, a statement of stockholders' equity and statement of cash flows for Fibrocell for such fiscal year and notes associated with each, in each case prepared in accordance with US GAAP, together with a report of Fibrocell's independent auditor that such statements have been prepared in accordance with US GAAP and present fairly, in all material respects, the financial position, results of operations and cash flows of Fibrocell.

**(e)** As soon as available but no later than forty five (45) days after the end of each calendar quarter, Fibrocell shall furnish the following to Intrexon an unaudited balance sheet as of the last day of such period, and an unaudited income statement, a statement of cash flows and a statement of stockholders' equity for Fibrocell for such period, in each case prepared in accordance with US GAAP.

**(f)** As requested by Intrexon on no more than a quarterly basis, a certificate, executed by the Executive Officer of Fibrocell, certifying on behalf of Fibrocell the following:

(i) Fibrocell maintains accurate books and records reflecting its assets and liabilities and maintains proper and adequate internal accounting controls that provide assurance that (1) transactions are executed with management's authorization; (2) transactions

are recorded as necessary to permit preparation of the consolidated financial statements of Fibrocell and to maintain accountability for Fibrocell's consolidated assets; (3) access to the assets of Fibrocell is permitted only in accordance with management's authorization; (4) the reporting of assets of Fibrocell is compared with existing assets at regular intervals; and (5) accounts, notes and other receivables and inventory are recorded accurately, and proper and adequate procedures are implemented to effect the collection of accounts, notes and other receivables on a current and timely basis.

(ii) under the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder; any such controls and procedures are effective to ensure that all material information concerning (ii)Fibrocell is made known on a timely basis to those individuals responsible for the preparation of any filings that may be required to be made by Intrexon with the SEC and other public disclosure documents.

**(g)** Fibrocell shall promptly prepare and furnish to Intrexon any information, whether written or oral, requested by Intrexon that is reasonably necessary for purposes of Intrexon's ongoing compliance with applicable law.

**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 Fibrocell no less than thirty (30) days prior (inclusive of any cure period set forth in Section 10.2(a)) 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 Fibrocell 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 under this Section 4.11.

## ARTICLE 5

### COMPENSATION

**5.1 Technology Access Fee**. In partial consideration for Fibrocell's appointment as an exclusive channel collaborator in the Field and the other rights granted to Fibrocell hereunder, Fibrocell shall issue to Intrexon, as an access fee for commercial license rights to the Intrexon IP granted under Section 3.1, certain equity interests in Fibrocell (each, a "**Technology Access Fee**") in accordance with the terms and conditions of the Stock Issuance Agreement and the Registration Rights Agreement, each of even date herewith (collectively, the "**Equity Agreements**"). As set forth in the Equity Agreements, the Technology Access Fee will be that number of shares of Fibrocell common stock having a value equaling $3,293,800 (the number of shares to be calculated according to the terms of the Equity Agreements), and such shares issuance will occur contemporaneously with the execution of this Agreement and the Equity Agreements. Provided that all closing conditions for the Technology Access Fee Shares (as defined in the Equity Agreements) that are within the reasonable control of Intrexon have been satisfied or waived, the issuance of the Technology Access Fee Shares (as set forth in the Equity Agreements) is a condition subsequent to the effectiveness of this Agreement.

**5.2 Equity Agreements Control.** All issuances of equity interests to Intrexon, or cash payments to Intrexon in lieu of equity, shall be in accordance with the terms and conditions of the Equity Agreements, which Equity Agreements shall control to the extent they may conflict with Section 5.1 of this Agreement.

**5.3 Revenue Sharing**.

**(a)** No later than thirty (30) days after each calendar quarter in which there were positive aggregate Net Sales arising from the sale of Fibrocell Products in the Field and Territory, Fibrocell shall pay to Intrexon a royalty based upon the aggregate net sales for all Fibrocell Products for the preceding calendar quarter as follows: a seven percent (7%) royalty on the first twenty-five million dollars ($25M) of aggregate Net Sales during that quarter, and a fourteen percent (14%) royalty on the portion of aggregate Net Sales during that quarter that exceed twenty-five million dollars ($25M). Commencing with the Effective Date, in the event that there are negative Net Sales for a particular Fibrocell Product in any calendar quarter, neither Fibrocell nor Intrexon shall owe any payments hereunder with respect to such Fibrocell Product. Any negative Net Sales that results from Excess Product Liability Costs may be carried forward to future quarters and offset against positive Net Sales in such future quarters for the same Fibrocell Product. Except as set forth in the preceding sentence, Fibrocell shall not be permitted to carry forward any negative Net Sales to subsequent quarters.

**(b)** No later than thirty (30) days after each calendar quarter in which Fibrocell or any Fibrocell Affiliate receives Sublicensing Revenue, Fibrocell shall pay to Intrexon fifty percent (50%) of such Sublicensing Revenue.

**(c)** No later than thirty (30) days after each calendar quarter in which there were COGS Savings realized from the sale of any Improved Product in the Field, Fibrocell shall pay to Intrexon a royalty equal to one-third (1/3) of the COGS Savings.

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

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

**(a)** gross sales of each Fibrocell Product and each Improved Product (both on a country-by-country basis);

**(b)** itemized calculation of Net Sales, showing all applicable deductions;

**(c)** itemized calculation of Sublicensing Revenue;

**(d)** itemized calculation of COGS Savings, showing the calculation of COGS for the Existing Product prior to being improved under the Fibroblast Program and the COGS calculation for the Improved Product (including any mutually agreed exclusions per Section 1.8);

**(e)** the amount of any negative Net Sales for the applicable calendar quarter, and any negative Net Sales amount carried forward from a prior quarter and applied during the present quarter (as per Section 5.3(a));

**(f)** the amount of the payment (if any) due pursuant to each of Sections 5.3(a) through 5.3(c);

**(g)** the amount of taxes, if any, withheld to comply with any applicable law; and

**(h)** the exchange rates used in any of the foregoing calculations.

For three (3) years after each sale of Fibrocell Product or Improved Product, or after incurring any component item Fibrocell incorporated into its calculation of Net Sales as reported to Intrexon, Fibrocell shall keep (and shall ensure that its Affiliates and, if applicable, (sub)licensees shall keep) complete and accurate records of such sales or component item in sufficient detail to confirm the accuracy of the payment calculations hereunder.

**5.6 Audits**.

**(a)** Upon the written request of Intrexon, Fibrocell shall permit an independent certified public accounting firm of internationally recognized standing selected by Intrexon, and reasonably acceptable to Fibrocell, 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 Fibrocell and its Affiliates to verify the accuracy and timeliness of the reports and payments made by Fibrocell 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, Fibrocell shall pay additional amounts, with interest from the date originally due as set forth in Section 5.8, 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 Fibrocell 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).

**(c)** Intrexon shall (i) treat all information that it receives under this Section 5.6 in accordance with the confidentiality provisions of Article 7 and (ii) cause its accounting firm to enter into an acceptable confidentiality agreement with Fibrocell 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.

**5.7 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. Fibrocell 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 Fibrocell or the appropriate governmental authority (with the assistance of Fibrocell 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 Fibrocell of its obligation to withhold tax, and Fibrocell shall apply the reduced rate of withholding tax, or dispense with withholding tax, as the case may be, provided that Fibrocell 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, Fibrocell withholds any amount, it shall make timely payment to the proper taxing authority of the withheld amount, and send to Intrexon proof of such payment within forty-five (45) days following that latter payment.

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

## ARTICLE 6

### INTELLECTUAL PROPERTY

**6.1 Ownership**.

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

**(b)** Fibrocell 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 Fibroblast 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 made with, using, or otherwise incorporating Intrexon Channel Technology, together with all Patent

rights and other intellectual property rights therein (the "**Channel-Related Program IP**"). Fibrocell hereby assigns all of its right, title and interest in and to the Channel-Related Program IP to Intrexon. Fibrocell 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 Fibrocell 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. Fibrocell shall be under appropriate written agreements with each of its employees, contractors, or agents working on the Fibroblast Program, pursuant to which such person shall grant all rights in the Inventions to Fibrocell (so that Fibrocell may convey certain of such rights to Intrexon, as provided herein) and agree to protect all Confidential Information relating to the Fibroblast Program.

**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 that may be available as a result of the regulatory approval of any Fibrocell Product. At the reasonable request of Intrexon, Fibrocell shall cooperate with Intrexon in connection with such filing, prosecution, and maintenance, at Intrexon's expense. Under no circumstances shall Fibrocell (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 a Fibrocell Product.

**(b)** Fibrocell 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 Fibrocell or its Affiliates and not assigned to Intrexon under Section 6.1(c) ("**Fibrocell Program Patents**"). At the reasonable request of Fibrocell, Intrexon shall cooperate with Fibrocell in connection with such filing, prosecution, and maintenance, at Fibrocell's expense.

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

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

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

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

As used above "**Prosecuting Party**" means Intrexon in the case of Intrexon Patents and Fibrocell in the case of Fibrocell Program Patents.

**6.3 Infringement of Patents by Third Parties**.

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

**(b)** Notwithstanding the foregoing, Fibrocell 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 Fibrocell exercises the foregoing right, Intrexon agrees to be named in any such action if required. If Fibrocell fails to take the appropriate steps to enforce Product-Specific Program

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.

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) [*****]. To the extent Fibrocell shall be entitled to a share of the Recovery a set forth in Section 6.3(f), Intrexon and Fibrocell shall bear the costs and expenses of such enforcement equally. 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 Fibrocell on such determination. For the avoidance of doubt, Intrexon has no obligations under this Agreement to enforce any Intrexon Patents against, or otherwise abate, any Infringement that is not a Field Infringement.

**(d)** In the event a Party pursues an action under this Section 6.3, the other Party shall reasonably cooperate with the enforcing Party with respect to the investigation and prosecution of any alleged, threatened, or actual Infringement, at the enforcing Party's expense (except with respect to an action under Section 6.3(c), where all costs and expenses will be shared equally in accordance with terms thereof).

**(e)** Fibrocell 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 Fibrocell in the Field or adversely affects any Intrexon Patent with respect to the Field without Fibrocell's 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 Fibrocell pursuant to Section 6.3(b), Fibrocell shall retain one hundred percent (100%) of any Recovery, but such Recovery shall be shared with Intrexon as Sublicensing Revenue. In any action initiated by Intrexon or Fibrocell pursuant to Section 6.3(c), the Parties shall share the Recovery equally, and such Recovery shall not be deemed to constitute Sublicensing Revenue.

**(g)** Fibrocell shall promptly notify Intrexon in writing of any suspected, alleged, threatened, or actual Infringement of which it becomes aware, and Intrexon shall promptly notify Fibrocell 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 and can be demonstrated by written records, other than under an obligation of confidentiality, at the time of disclosure by the other Party;

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

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

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

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

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

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

**(a)** complying with applicable laws or regulations or valid court orders, *provided that* the Party making such disclosure provides the other Party with reasonable prior written notice of such disclosure and makes a reasonable effort to obtain, or to assist the other

Party in obtaining, a protective order preventing or limiting the disclosure and/or requiring that the terms and conditions of this Agreement be used only for the purposes for which the law or regulation required, or for which the order was issued;

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

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

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

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

**7.3 Publicity; Publications**. The Parties agree that the public announcement of the execution of this Agreement shall be substantially in the form of a press release and/or the filing of a Form 8-K by Fibrocell, which shall be mutually agreed to by the Parties. Each Party will provide the other Party with the opportunity to review and comment, prior to submission or presentation, on external reports, publications and presentations (e.g., press releases, reports to government agencies, abstracts, posters, manuscripts and oral presentations) that refer to the Fibroblast Program or programs that are approved by the JSC. For such reports, publications, and presentations, the disclosing Party will provide the other Party at least fifteen (15) calendar days for review of the proposed submission or presentation. In the case of a Form 8-K filing, such shall be provided to Intrexon by Fibrocell as soon as practicable prior to filing. 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.

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.

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, Fibrocell acknowledges that Intrexon's authorized representative(s), during regular business hours may (i) examine and inspect Fibrocell's facilities and (ii) inspect all data and work products relating to this Agreement, subject to restrictions imposed by applicable laws. Any examination or inspection hereunder shall require five (5) business days written notice from Intrexon to Fibrocell. Fibrocell 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 Fibrocell 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 Fibrocell to Intrexon. Intrexon will make itself and the pertinent employees and/or agents available, on a reasonable basis, to Fibrocell for the aforementioned compliance review.

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

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

## ARTICLE 8

### REPRESENTATIONS AND WARRANTIES

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

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

**(b) Due Authorization**. Fibrocell is duly authorized to execute and deliver this Agreement and to perform its obligations hereunder, and the person executing this Agreement on Fibrocell'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 Fibrocell 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 Fibrocell 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. Fibrocell is aware of no action, suit or inquiry or investigation instituted by any governmental agency which questions or threatens the validity of this Agreement.

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

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

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

**(c) Binding Agreement**. This Agreement is a legal and valid obligation binding upon Intrexon and enforceable in accordance with its terms, except as such enforcement may be limited by applicable bankruptcy, insolvency, reorganization, arrangement, moratorium or other similar laws affecting creditors' rights, and subject to general equity principles and to limitations on availability of equitable relief, including specific performance. The execution, delivery and performance of this Agreement by Intrexon does not conflict with any agreement, instrument or understanding, oral or written, to which it is a party or by which it may be bound. Intrexon is aware of no action, suit or inquiry or investigation instituted by any governmental agency which questions or threatens the validity of this Agreement.

**(d) Additional Intellectual Property Representations**.

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

(ii) The Intrexon Patents existing as of the Effective Date constitute all of the Patents Controlled by Intrexon as of such date that are necessary for the development, manufacture and Commercialization of Fibrocell Products;

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

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

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

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

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

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

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

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

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

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

such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were materially complete and correct on the date filed (or were corrected or supplemented by a subsequent submission); and (4) has not, either voluntarily or involuntarily, initiated, conducted, or issued or caused to be initiated, conducted or issued, any recall, market withdrawal or replacement, safety alert, post sale warning, "dear doctor" letter, or other notice or action relating to the alleged lack of safety or efficacy of any product or any alleged product defect or violation and, to Intrexon's knowledge, no third party has initiated, conducted or intends to initiate any such notice or action.

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

**8.3 Warranty Disclaimer**. EXCEPT FOR THE EXPRESS WARRANTIES PROVIDED IN THIS ARTICLE 8 OR IN THE EQUITY AGREEMENTS, 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 Fibrocell and its Affiliates and their respective directors, officers, employees, and agents (collectively, the "**Fibrocell 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 gross negligence or willful misconduct of Intrexon or any of its Affiliates, or their respective employees or agents, (b) the use, handling, storage or transport of Intrexon Materials by or on behalf of Intrexon or its Affiliates, licensees (other than Fibrocell) or sublicensees; or (c) breach by Intrexon of any representation, warranty or covenant in this Agreement. Notwithstanding the foregoing, Intrexon shall not have any obligation to indemnify the Fibrocell Indemnitees to the extent that a Claim arises from (i) the gross negligence or willful misconduct of Fibrocell or any of its Affiliates, licensees, or sublicensees, or their respective employees or agents; or (ii) a breach by Fibrocell of a representation, warranty, or covenant of this Agreement.

**9.2 Indemnification by Fibrocell**. Fibrocell 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 gross negligence or willful misconduct of Fibrocell or any of its Affiliates or their respective employees or agents; (b) the use, handling, storage, or transport of Intrexon Materials by or on behalf of Fibrocell or its Affiliates, licensees, or sublicensees; (c) breach by Fibrocell 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 Fibrocell Product or Improved Product by or on behalf of Fibrocell or its Affiliates, licensees, or sublicensees. Notwithstanding the foregoing, Fibrocell shall not have any obligation to indemnify the Intrexon Indemnitees to the extent that a Claim arises from (i) the gross 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 Fibrocell Products or Improved 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, Fibrocell shall maintain in effect and good standing a product liability insurance policy issued by a reputable insurance company in amounts considered standard for the industry. Immediately prior to, and during the conduct of any clinical trials, Fibrocell shall maintain in effect and good standing a clinical trials

liability insurance policy issued by a reputable insurance company in amounts considered standard for the industry. At Intrexon's reasonable request, Fibrocell shall provide Intrexon with all details regarding such policies, including without limitation copies of the applicable liability insurance contracts. Fibrocell shall use reasonable efforts to include Intrexon as an additional insured on any such policies.

## ARTICLE 10

## TERM; TERMINATION

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

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

**(a)** Either Party shall have the right to terminate this Agreement upon written notice to the other Party if the other Party commits any material breach of this Agreement that such breaching Party fails to cure within sixty (60) days following written notice from the nonbreaching Party specifying such breach; provided, however, that if Fibrocell commits any breach of the provisions of Section 4.10 of this Agreement, Intrexon shall have the right to terminate this Agreement if Fibrocell fails after notice from Intrexon to cure such breach within thirty (30) days following written notice thereof.

**(b)** Intrexon shall have the right to terminate this Agreement, at its sole discretion, if any necessary shareholder, member, exchange, and/or board of director approvals of Fibrocell have not been obtained, and the Technology Access Fee Shares (as defined in the Equity Agreements) have not been issued, within the time frames set forth in the Equity Agreements.

**(c)** Intrexon shall have the right to terminate this Agreement under the circumstances set forth in Section 4.5(b) upon written notice to Fibrocell, such termination to become effective sixty (60) days following such written notice unless Fibrocell 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 Fibrocell execute any purported assignment of this Agreement contrary to the prohibitions in Section 12.8, such termination occurring upon Intrexon providing written notice to Fibrocell and becoming effective immediately upon such written notice.

**10.3 Termination by Fibrocell**. Fibrocell shall have the right to voluntarily terminate this Agreement in its entirety upon ninety (90) days written notice to Intrexon at any time.

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

(i) the particular product is an Improved Product,

(ii) the particular product is a Fibrocell Product that is being sold by Fibrocell (or, as may be permitted under this Agreement, its Affiliates and, if applicable, (sub)licensees) triggering profit sharing payments therefor under Section 5.3(a) or (b) of this Agreement,

(iii) the particular product is a Fibrocell Product that has received regulatory approval,

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

(v) the particular product is a Fibrocell Product that is the subject of at least an ongoing Phase 2 or Phase 3 clinical trial in the Field (in the case of a termination by Intrexon due to a Fibrocell uncured breach pursuant to Section 10.2(a) or a termination by Fibrocell pursuant to Section 10.3).

Such right to continue development and Commercialization shall be subject to Fibrocell's full compliance with the payment provisions in Article 5, a continuing obligation for Fibrocell 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 Fibrocell 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 Fibrocell under this Agreement shall terminate and shall revert to Intrexon without further action by either Intrexon or Fibrocell. Fibrocell's 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 Fibrocell Products other than the Retained Products shall be referred to herein as the "**Reverted Products**." Fibrocell 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 Fibrocell 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. Fibrocell 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**. Fibrocell shall promptly return, or at Intrexon's request, destroy, any Intrexon Materials in Fibrocell's 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**. Fibrocell is automatically deemed to grant to Intrexon a worldwide, fully paid, royalty-free, exclusive (even as to Fibrocell and its Affiliates), irrevocable, license (with full rights to sublicense) under the Fibrocell 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 Fibrocell 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**. Fibrocell 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. Fibrocell 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, Fibrocell shall provide copies of the portions of such regulatory filings that relate to Reverted Products and shall reasonably cooperate to assist Intrexon in obtaining the benefits of such regulatory approvals with respect to the Reverted Products.

**(g) Data Disclosure**. Fibrocell 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 Fibrocell 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, Fibrocell shall promptly provide to Intrexon copies of all Third-Party agreements under which Fibrocell 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, Fibrocell shall promptly work with Intrexon to either (A) assign to Intrexon the Third Party agreement(s), or (B) grant a sublicense (with an appropriate scope) to Intrexon under the Third Party agreement(s). Thereafter Intrexon shall be fully responsible for all obligations due for its actions under the sublicensed or assigned Third Party agreements. Notwithstanding the above, if Intrexon does not wish to assume any financial or other obligations associated with a particular Third Party agreement identified to Intrexon under this Section 10.4(h), then Intrexon shall so notify Fibrocell and Fibrocell 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, Fibrocell shall transfer to Intrexon all quantities of Reverted Product (including active pharmaceutical ingredient or work-in-process) in the possession of Fibrocell or its Affiliates. Fibrocell 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, Fibrocell shall promptly provide to Intrexon copies of all agreements between Fibrocell 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, Fibrocell 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, Fibrocell shall reasonably cooperate to assist Intrexon in obtaining the benefits of such agreements. Fibrocell 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 Fibrocell's breach. For the avoidance of doubt, Intrexon shall have no obligation to assume any of Fibrocell's obligations under any Third Party agreement.

**(k) Commercialization**. Intrexon shall have the right to develop and Commercialize the Reverted Products itself or with one or more Third Parties, and shall have the right, without obligation to Fibrocell, 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 Fibrocell) 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 Fibrocell 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), 5.4, 5.6, 6.1, 6.2 (with subsection (c) surviving only to the extent relating to Intrexon Patents that are relevant to Retained Products that, to Intrexon's knowledge, are being developed or Commercialized at such

time, if any), 7.1, 7.2, 7.4, 7.5, 10.4, and 10.5; Articles 9, 11, and 12; and any relevant definitions in Article 1. Further, Article 7 and Sections 4.5(a), 4.5(c), 5.2 through 5.7, and 9.5 will survive termination of this Agreement to the extent there are applicable Retained Products.

## ARTICLE 11

## DISPUTE RESOLUTION

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

**11.2 Arbitration**. Any dispute, controversy, difference or claim which may arise between the Parties and not from a Committee, out of or in relation to or in connection with this Agreement (including, without limitation, arising out of or relating to the validity, construction, interpretation, enforceability, breach, performance, application or termination of this Agreement) that is not resolved pursuant to Section 11.1 shall, subject to Section 11.10, be settled by binding "baseball arbitration" as follows. Either Party, following the end of the thirty (30) day period referenced in Section 11.1, may refer such issue to arbitration by submitting a written notice of such request to the other Party, with the arbitration to be held in the state where the other Party's principal office is located (or some other place as may be mutually agreed by the Parties). Promptly following receipt of such notice, the Parties shall meet and discuss in good faith and seek to agree on an arbitrator to resolve the issue, which arbitrator shall be neutral and independent of both Parties and all of their respective Affiliates, shall have significant experience and expertise in licensing and partnering agreements in the pharmaceutical and biotechnology industries, and shall have some experience in mediating or arbitrating issues relating to such agreements. If the Parties cannot agree on a single arbitrator within fifteen (15) days of request by a Party for arbitration, then each Party shall select an arbitrator meeting the foregoing criteria and the two (2) arbitrators so selected shall select within ten (10) days of their appointment a third arbitrator meeting the foregoing criteria. Within fifteen (15) days after an arbitrator(s) is selected (in the case of the three-person panel, when the third arbitrator is selected), each Party will deliver to both the arbitrator(s) and the other Party a detailed written proposal setting forth its proposed terms for the resolution for the matter at issue (the "**Proposed Terms**" of the Party) and a memorandum (the "**Support Memorandum**") in support thereof. The Parties will also provide the arbitrator(s) a copy of this Agreement, as it may be amended at such time. Within

fifteen (15) days after receipt of the other Party's Proposed Terms and Support Memorandum, each Party may submit to the arbitrator(s) (with a copy to the other Party) a response to the other Party's Support Memorandum. Neither Party may have any other communications (either written or oral) with the arbitrator(s) other than for the sole purpose of engaging the arbitrator or as expressly permitted in this Section 11.2; provided that, the arbitrator(s) may convene a hearing if the arbitrator(s) so chooses to ask questions of the Parties and hear oral argument and discussion regarding each Party's Proposed Terms. Within sixty (60) days after the arbitrator's appointment, the arbitrator(s) will select one of the two Proposed Terms (without modification) provided by the Parties that he or she believes is most consistent with the intention underlying and agreed principles set forth in this Agreement. The decision of the arbitrator(s) shall be final, binding, and unappealable. For clarity, the arbitrator(s) must select as the only method to resolve the matter at issue one of the two sets of Proposed Terms, and may not combine elements of both Proposed Terms or award any other relief or take any other action.

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

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

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

**11.6 Injunctive Relief**. Nothing in this Article 11 will preclude either Party from seeking equitable relief or interim or provisional relief from a court of competent jurisdiction, including a temporary restraining order, preliminary injunction or other interim equitable relief, concerning a dispute either prior to or during any arbitration if necessary to protect the interests of such Party or to preserve the status quo pending the arbitration proceeding. Specifically, the Parties agree that a material breach by either Party of its obligations in Section 3.5 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 3.5 or Article 7, and without further proof of irreparable harm other than this acknowledgement, such non-breaching Party shall be entitled to seek (a) immediate equitable relief, specifically including, but not limited to, both interim and permanent restraining orders and injunctions, without bond, and (b) such other and further equitable relief as the court may deem proper under the circumstances. For the avoidance of doubt, nothing in this Section 11.6 shall otherwise limit a breaching Party's opportunity to cure a material breach as permitted in accordance with Section 10.2.

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

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

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

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

## ARTICLE 12

## GENERAL PROVISIONS

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

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.

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

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

| | |
|---|---|
| If to Intrexon: | Intrexon Corporation<br>20358 Seneca Meadows Parkway<br>Germantown, MD 20876<br>Attention: President, Human Therapeutics Division<br>Fax: (301) 556-9901 |
| with a copy to: | Intrexon Corporation<br>20358 Seneca Meadows Parkway<br>Germantown, MD 20876<br>Attention: Legal Department<br>Fax: (301) 556-9902 |
| If to Fibrocell: | Fibrocell Science, Inc.<br>405 Eagleview Boulevard<br>Exton, PA 19341<br>Attention: Chief Executive Officer<br>Fax: (484) 713-6001 |

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

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

**12.7 Entire Agreement; Amendment**. This Agreement, including any exhibits attached hereto, constitute the entire, final, complete and exclusive agreement between the Parties and supersede all previous agreements or representations, written or oral, with respect to the subject matter of this Agreement (including any prior confidentiality agreement between the Parties). All information of Intrexon or Fibrocell 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 Fibrocell nor Intrexon may directly or indirectly solicit in order to offer to employ, engage in any discussion regarding employment with, or hire any employee of the other Party or an individual who was employed by the other party with one (1) year prior to such solicitation, discussion, or hire, without the prior approval of such other Party. General employment solicitations or advertisements shall not be considered direct or indirect solicitations, and are not prohibited under this Agreement.

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

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

*[Remainder of page intentionally left blank.]*

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

**INTREXON CORPORATION**

By: /s/

Name: Jayson M. Rieger

Title: President of Human Therapeutics Division, and Senior Vice President

**FIBROCELL SCIENCE, INC.**

By: /s/

Name: David Pernock

Title: Chairman and Chief Executive Officer

**Exhibit 10.9**

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 February 14, 2013 (the "**Effective Date**") by and between **INTREXON CORPORATION**, a Virginia corporation with offices at 20358 Seneca Meadows Parkway, Germantown, MD 20876 ("**Intrexon**"), and **AQUABOUNTY TECHNOLOGIES, INC.,** a Delaware corporation having its principal place of business at Two Clock Tower Place, Suite 395, Maynard, MA 01754 ("**AquaBounty**"). Intrexon and AquaBounty 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 and DNA vectors, and the control of peptide expression; and

**WHEREAS**, AquaBounty now desires to become Intrexon's exclusive channel collaborator with respect to such technology for the purpose of developing the Aquaculture Program (as defined herein), and Intrexon is willing to appoint AquaBounty as a channel collaborator in the Field (as defined herein, and subject to amendments to the definition as permitted herein) 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** "**AAA Rules**" has the meaning set forth in Section 11.2.

**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, of more than fifty percent (50%) of the voting securities or other ownership interest of an entity, or the possession, directly or indirectly, of the power to direct the management or policies of an entity, whether through the ownership of voting securities, by contract, or otherwise. Notwithstanding the foregoing, Third Security shall be deemed not to be an Affiliate of Intrexon, 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 Intrexon 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.

**1.3** "**Applicable Laws**" has the meaning set forth in Section 8.2(d)(xii).

**1.4** "**AquaBounty Indemnitees**" has the meaning set forth in Section 9.1.

**1.5** "**AquaBounty 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 AquaBounty during the Term through use or practice of Intrexon Channel Technology, Intrexon IP, or the Intrexon Materials.

**1.6** "**AquaBounty Program Patent**" has the meaning set forth in Section 6.2(b).

**1.7** "**AquaBounty Termination IP**" means all Patents or other intellectual property that AquaBounty 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.

**1.8** "**Aquaculture Program**" has the meaning set forth in Section 2.1(a).

**1.9** "**Authorizations**" has the meaning set forth in Section 8.2(d)(xii).

**1.10** "**Channel-Related Program IP**" has the meaning set forth in Section 6.1(c).

**1.11** "**Claims**" has the meaning set forth in Section 9.1.

**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 AquaBounty Products.

**1.14** "**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.

**1.15** "**Complementary In-Licensed Third Party IP**" has the meaning set forth in Section 3.9(a).

**1.16** "**Confidential Information**" means all Information which is not publicly known, and which is used in or otherwise relates to each Party's business, customers, or financial or other affairs and disclosed by a Party pursuant to this Agreement or any other confidentiality agreement between the Parties, regardless of whether in oral, written, graphic, electronic, or other tangible and intangible forms, including, without limitation, information relating to (a) trade secrets, know-how, ideas, computer systems and computer software; (b) future projects, business development or planning, commercial relationships and negotiations; and (c) the marketing of goods or services including customer names and lists, sales targets and statistics.

**1.17** "**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.

**1.18** "**Costs of Goods Sold**" or "**COGS**" means all Manufacturing Costs that are directly and reasonably attributable to manufacturing of an AquaBounty Product in accordance with US GAAP for commercial sale in the countries where such AquaBounty Product has been launched.

**1.19** "**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 AquaBounty 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.

**1.20** "**Excess Product Liability Costs**" has the meaning set forth in Section 9.3.

**1.21** "**Executive Officer**" means : (a) the Chief Executive Officer of the applicable Party, or (b) another senior executive officer of such Party who has been duly appointed in writing by the Chief Executive Officer to act as the representative of the Party to resolve, as the case may be, (i) 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 (ii) a dispute described in Section 11.1.

**1.22** "**FDA**" has the meaning set forth in Section 8.2(d)(xii).

**1.23** "**Field**" means the development, breeding, hatching, and farming of genetically modified finfish to be used for human food consumption.

**1.24** "**Field Infringement**" has the meaning set forth in Section 6.3(b).

**1.25** "**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 and the terms of Sections 4.5 and 4.6 (as appropriate), Intrexon will bill for its internal direct costs incurred through the use of annualized standard full-time equivalents; such rate shall be based upon the actual fully loaded costs of those personnel directly involved in the provision of such good, product or service. Intrexon may, from time to time, adjust such full-time equivalent rate based on changes to its actual fully loaded costs and will review the accuracy of its full-time equivalent rate at least quarterly, and any increase to the full-time equivalent rate must be communicated in advance to AquaBounty. Intrexon shall provide AquaBounty with documentation reasonably acceptable to AquaBounty indicating the basis for any direct and indirect charges, any allocable overhead, and any such adjustment in full-time equivalent rate.

**1.26** "**Gross Profit**" means, with respect to sales of a particular product by a seller who is the producer of such product, the gross revenues derived by that seller or an Affiliate of

that seller (including without limitation net sales of the product to a non-Affiliate sublicensee but not including net sales by such non-Affiliate sublicensee), as determined in accordance with US GAAP as the gross amount invoiced on account of sales of the product less COGS 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, Gross Profit 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 an AquaBounty Product is sold to any Third Party together with other products or services, the price of such product, solely for purposes of the calculation of Gross Profit, 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.

**1.27** "**In-Licensed Program IP**" has the meaning set forth in Section 3.9(a).

**1.28** "**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 regulatory test data, analytical and quality control data, stability data, studies and procedures, and patent and other legal information or descriptions.

**1.29** "**Infringement**" has the meaning set forth in Section 6.3(a).

**1.30** "**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) LEAP™, (3) DNA and RNA MOD engineering, (4) protein engineering, (5) transcription control chemistry, (6) genome engineering, and (7) cell system engineering.

**1.31** "**Intrexon Indemnitees**" has the meaning set forth in Section 9.2.

**1.32** "**Intrexon IP**" means the Intrexon Patents and Intrexon Know-How.

**1.33** "**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 AquaBounty to conduct the Aquaculture Program. For the avoidance of doubt, the Intrexon Know-How shall include any Information (other than Intrexon Patents) in the Channel-Related Program IP.

**1.34** "**Intrexon Materials**" means the 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 useful for and provided to AquaBounty by or on behalf of Intrexon to conduct the Aquaculture Program.

**1.35** "**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 AquaBounty to conduct the Aquaculture Program. For the avoidance of doubt, the Intrexon Patents shall include any Patent in the Channel-Related Program IP.

**1.36** "**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.

**1.37** "**Inventions**" has the meaning set forth in Section 6.1(b).

**1.38** "**IPC**" has the meaning set forth in Section 2.2(b).

**1.39** "**JSC**" has the meaning set forth in Section 2.2(b).

**1.40** "**Losses**" has the meaning set forth in Section 9.1.

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

**1.42** "**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.

**1.43** "**Product-Specific Program Patent**" means any issued Intrexon Patent where all the claims are directed to Inventions that relate solely and specifically to AquaBounty

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

**1.44** "**Product Sublicense**" has the meaning set forth in Section 3.2(c).

**1.45** "**Product Sublicensee**" has the meaning set forth in Section 3.2(c).

**1.46** "**Proposed Terms**" has the meaning set forth in Section 11.2.

**1.47** "**Prosecuting Party**" has the meaning set forth in Section 6.2(c).

**1.48** "**Recovery**" has the meaning set forth in Section 6.3(f).

**1.49** "**Retained Product**" has the meaning set forth in Section 10.4(a).

**1.50** "**Reverted Product**" has the meaning set forth in Section 10.4(c).

**1.51** "**SEC**" means the United States Securities and Exchange Commission.

**1.52** "**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 AquaBounty 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 AquaBounty 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 AquaBounty 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); and (c) amounts received from sublicensees in respect of any AquaBounty Product sales that are included in the calculation of revenue sharing payments made to Intrexon under Section 5.1(a).

**1.53** "**Superior Animal Product**" means a genetically modified animal product in the Field that, based on the data then available, (a) demonstrably appears to offer either superior farming yield or safety or significantly lower cost of production, as compared with both (i) those animal products that are marketed (either by AquaBounty or others) at such time for similar commercial use and (ii) those animal products that are being actively developed by AquaBounty for such indication; (b) demonstrably appears to represent a substantial improvement over such existing animal products; and (c) has intellectual property protection and a regulatory approval pathway that, in each case, would not present a significant barrier to commercial development.

**1.54** "**Supplemental In-Licensed Third Party IP**" has the meaning set forth in Section 3.9(a).

**1.55** "**Support Memorandum**" has the meaning set forth in Section 11.2.

**1.56** "**Term**" has the meaning set forth in Section 10.1.

**1.57** "**Territory**" means the world.

**1.58** "**Third Party**" means any individual or entity other than the Parties or their respective Affiliates.

**1.59** "**Third Security**" means Third Security, LLC.

**1.60** "**US GAAP**" means generally accepted accounting principles in the United States.

## ARTICLE 2

## SCOPE OF CHANNEL COLLABORATION; MANAGEMENT

**2.1 Scope**.

**(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 (collectively, the "**Aquaculture Program**"). As provided below, the JSC shall establish, monitor, and govern projects for the Aquaculture Program. Either Party may propose potential projects in the Field for review and consideration by the JSC.

**2.2 Committees**.

**(a) Generally**. The Parties desire to establish several committees (collectively, "**Committees**") to oversee the Aquaculture 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 a Joint Steering Committee ("**JSC**") and an Intellectual Property Committee ("**IPC**"). The JSC shall have authority, subject to Section 2.5 and except as otherwise delegated to the IPC, to (i) establish research and development projects for the Aquaculture Program (including establishing the priorities and budgets for such projects), (ii) oversee manufacturing and controls for AquaBounty Products, (iii) review and approve all regulatory trial projects and associated regulatory filings and correspondence under the Aquaculture Program (including reviewing and approving itemized budgets with respect to the foregoing), (iv) establish project plans and review and approve activities and budgets for Commercialization activities under the Aquaculture Program, and (v) approve the projects and plans of any subcommittee it establishes consistent with this authority. The IPC shall have authority, subject to Section 2.5, to evaluate all intellectual property issues and approve

associated collaborative activities in connection with the Aquaculture Program, including the protection of Inventions or Confidential Information, the filing of Patents, licensing of Third Party intellectual property, the establishment or enforcement of controls concerning the dissemination or use of intellectual property (including Intrexon Channel Technology, Intrexon IP, or Intrexon Materials) for the development or manufacturing of AquaBounty Products.

**(c) JSC Governance Activities**. Promptly following creation of the JSC, the JSC shall meet and deliberate on a regular basis as set forth in Section 2.3 below. The JSC shall review information and make recommendations as necessary to the Parties to implement the Aquaculture Program and, subject to Section 2.5, authorize activities of the Parties under the Aquaculture Program consistent with the terms and provisions of this Agreement. The activities of the JSC shall include, from time to time as warranted or necessary: (i) preparation of written plans for each Aquaculture Program project detailing for each project its purpose and objectives, the activities to be performed, a timeline for achievement of such activities and a budget (including Intrexon activities and associated budget for support services), and timing for the transfer of relevant Information and materials between the Parties; (ii) preparation of research and development plans associated with any necessary regulatory approvals for any projects for the Aquaculture Program, all associated publications, and all regulatory filings and correspondence related to gaining regulatory approval for new AquaBounty Projects under the Aquaculture Program; (iii) review of the overall progress of a project against any approved plan and advising the Parties accordingly; (iv) establishment of procedures for any necessary technology transfer between the Parties; (v) preparation of plans relating to regulatory approval and Commercialization activities under the Aquaculture Program; and (vi) establishment and oversight of any subcommittees as it deems appropriate (and within its authority) for carrying out activities under this Agreement. The representatives from each Party to the JSC shall be responsible for reporting to their respective Party and obtaining any necessary delegations, authorizations or approvals required by their respective Party in accordance with Section 2.5.

**2.3 General Committee Membership and Procedure**.

**(a) Membership**. For each Committee, each Party shall designate an equal number of representatives (not to exceed three (3) 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 by 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. For purposes of this Section 2.3, employees of Third Security may, at Intrexon's election, serve as members of a Committee as if they were employees of Intrexon. 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 AquaBounty selecting the chairperson first

for the JSC, and Intrexon selecting the chairperson first for the IPC. The chairperson of each Committee shall be responsible for calling meetings, preparing and circulating an agenda in advance of each meeting of such Committee, and preparing and issuing minutes of each meeting within fifteen (15) days thereafter.

**(b) Meetings**. Each Committee shall hold meetings at such times as it elects to do so, but in no event shall such meetings be held less frequently than once every six (6) months. 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 AquaBounty 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 4.5 and 4.6 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 accept as otherwise properly authorized, approved, or delegated by such Party in accordance with Section 2.5.

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.

**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 Executive 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 AquaBounty shall have the authority to finally resolve such dispute.

**(b) 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).

**(c) Other Committees**. If any additional Committee or subcommittee 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.

**(d) 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 Committee representative shall be able to bind his or her respective appointing Party via any Committee vote or other material Committee activity only to the extent such vote or other activity (a) has been previously approved by the Party, (b) is within the authority duly delegated to the representative by the respective Party, or (c) 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 by a Party's representative at any Committee without valid authority shall be considered null and void and shall be without effect unless subsequently and expressly approved by the Party appointing the representative on the Committee.

## ARTICLE 3

## LICENSE GRANTS

**3.1 Licenses to AquaBounty**.

**(a)** Subject to the terms and conditions of this Agreement, Intrexon hereby grants to AquaBounty a license under the Intrexon IP to research, develop, use, make, have made, sell, import, and offer for sale AquaBounty Products in the Field in the Territory. Such license shall be exclusive (even as to Intrexon) with respect to any development, selling, making or having made (except as permitted in Section 4.5), using (except for uses in connection with research), importing, offering for sale or other Commercialization of AquaBounty Products in the Field, and shall be otherwise non-exclusive.

**(b)** Subject to the terms and conditions of this Agreement, Intrexon hereby grants to AquaBounty a non-exclusive, royalty-free license to use and display the Intrexon Trademarks, solely in connection with the Commercialization of AquaBounty Products in the promotional materials, packaging, and labeling for AquaBounty Products, as provided under and in accordance with Section 4.8.

**3.2 Sublicensing**. Except as provided in this Section 3.2, AquaBounty 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 AquaBounty Products or use or display the Intrexon Trademarks, in each case except with Intrexon's written consent, which written consent may be withheld in Intrexon's sole discretion. Notwithstanding the foregoing, AquaBounty (and its Product Sublicensees only to the extent explicitly 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).

**(a)** AquaBounty may transfer, to the extent reasonably necessary and after providing Intrexon with reasonable advance notice thereof, Intrexon Materials to a Third Party contractor performing (i) farming, cultivation, or harvesting of food animals from AquaBounty Products under bailment from AquaBounty or (ii) contract manufacturing, fill, and/or finish responsibilities for AquaBounty Products, and may in connection therewith grant limited sublicenses necessary to enable such Third Party to perform such activities. If AquaBounty transfers any Intrexon Materials under this Section 3.2(a), AquaBounty 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 such Third Party contractor. A Product Sublicensee may transfer, to the extent reasonably necessary and upon the consent of Intrexon (which consent shall not be unreasonably withheld), Intrexon Materials that are ingredients for the AquaBounty Product sublicensed by the Product Sublicensee to a Third Party contractor performing on behalf of that Product Sublicensee (A) farming, cultivation, or harvesting of food animals from AquaBounty Products under bailment from AquaBounty or (B) contract manufacturing, fill, and/or finish responsibilities for AquaBounty Products, and may in connection therewith grant limited sublicenses to the extent necessary to enable such Third Party to perform such activities. AquaBounty 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)** AquaBounty may, with Intrexon's written consent, which consent shall not be unreasonably withheld, 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 display the Intrexon Trademarks. In the event that Intrexon consents to any such grant or transfer to an Affiliate, AquaBounty 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 AquaBounty), including any payment obligations owed to Intrexon hereunder.

**(c)** AquaBounty may grant a sublicense of the rights granted under Section 3.1 (and not including a right to sublicense under this Section 3.1(c)) to a Third Party licensee of any AquaBounty Product (a "**Product Sublicensee**") to the extent necessary to permit such Third Party to research, develop, use, import, export, make, have made, sell, and offer for sale that AquaBounty Product (a "**Product Sublicense**"), provided that (i) such Product Sublicense is expressly limited to the appropriate AquaBounty Product, (ii) such Product Sublicense does not grant the Product Sublicensee any rights to Intrexon IP other than as incorporated into the AquaBounty Product at the time of the Product Sublicense, (iii) such Product Sublicense does not purport to relieve AquaBounty 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 through 3.6, 3.8, 3.10, and 3.11 and Articles 6, 7, and 10), and (v) the Product Sublicense is presented in full to the JSC by AquaBounty before execution by AquaBounty 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.

**3.3 Limitation on Sublicensees**. None of the enforcement rights under the Intrexon Patents that are granted to AquaBounty 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**. AquaBounty 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**. Neither Intrexon nor its Affiliates shall make the Intrexon Channel Technology or Intrexon Materials available to any Third Party for the purpose of developing or Commercializing products in the Field (except as set forth in Section 3.2), 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 commercial use or sale in the Field, outside of the Aquaculture Program. Further, neither AquaBounty nor its Affiliates shall pursue (either by itself or with a Third Party or Affiliate) outside of the Aquaculture Program the research, development or Commercialization of any genetically modified product for purpose of commercial use or sale in the Field where such genetically modified products would compete with AquaBounty Products.

**3.6 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, AquaBounty acknowledges that Intrexon has all rights, in Intrexon's sole discretion, to make the Intrexon Materials, Intrexon Channel Technology (including any genetic materials used in an AquaBounty Product), and Intrexon IP available to Third Party channel partners or collaborators for use in fields outside the Field.

**3.7 Rights to Regulatory Data**. AquaBounty shall own and control all regulatory trial data and regulatory filings relating to Commercialization of AquaBounty Products (except to the extent such become Reverted Products). AquaBounty shall provide (or shall cause an applicable Product Sublicensee to provide) to Intrexon, upon its request, access to review all trial data and reports, regulatory filings, and communications from regulatory authorities that relate specifically and solely to AquaBounty Products. To the extent that there exist any trial data and reports, regulatory filings, and communications from regulatory authorities owned by AquaBounty (or a Product Sublicensee) that relate both to AquaBounty Products and other products produced by AquaBounty (or a Product Sublicensee) outside the Field or outside the Aquaculture Program, upon Intrexon's request, AquaBounty shall provide (or shall cause an applicable Product Sublicensee to provide) to Intrexon access to review the portions of such data, reports, filings, and communications that relate to AquaBounty 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 these data, reports, filings, and communications relating to AquaBounty Products in regulatory filings made to obtain regulatory approval for products 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. Notwithstanding the provisions of this Section 3.7, Intrexon shall not, outside of the Aquaculture Program, utilize knowingly any AquaBounty trial data or reports in support of obtaining regulatory approval for a product for use in the Field.

**3.8 Third Party Licenses**.

(a) [*****] shall obtain [*****] any licenses from Third Parties that are required in order to practice the Intrexon Channel Technology in the Field where the licensed intellectual property is reasonably necessary for Intrexon to conduct genetic and cell engineering and related analytic activities under JSC-approved project plans for the Aquaculture Program (but specifically excluding intellectual property directed to any specific target genes, genetic transformation methodologies, or processes or methods for harvesting, culturing, formulating, or otherwise manufacturing AquaBounty Products) ("**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 AquaBounty 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 AquaBounty Products and to the Field. As provided above in Section 3.8(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 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 (to the extent such threats would reasonably be considered to subject the Third Party owner or licensee to declaratory judgment 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 3.8(c), [*****] shall have the right to pursue a license under Complementary In-Licensed Third Party IP [*****]. [*****] hereby covenants that during the Term it shall not directly license Complementary In-Licensed IP in the Field except in cooperation with [*****] and for the benefit of an AquaBounty Product or the Aquaculture Program. For the avoidance of doubt, [*****] may at any time obtain a license under Complementary In-Licensed Third Party IP outside the Field [*****] 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 3.8 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 [*****] except as set forth in Section 10.4(h).

**(d)** For any Third Party license under which AquaBounty 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 AquaBounty Products, AquaBounty shall use commercially reasonable efforts to ensure that AquaBounty 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 AquaBounty under Section 3.1 may include sublicenses under Intrexon IP that has been or will be licensed to Intrexon by one or more Third Parties. Any such sublicenses may be subject to the terms and conditions set forth in the applicable upstream license agreement, subject to the cost allocation set forth in Section 3.8(c), provided that Intrexon shall either provide unredacted copies of such upstream license agreements to AquaBounty or shall disclose in writing to AquaBounty all of such terms and conditions that are applicable to AquaBounty. AquaBounty 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 AquaBounty 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.

**3.9 Licenses to Intrexon**. Subject to the terms and conditions of this Agreement, AquaBounty hereby grants to Intrexon a non-exclusive, worldwide, fully-paid, royalty-free license, under any applicable Patents or other intellectual property Controlled by AquaBounty 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 accordance with Section 4.5 or as otherwise permitted to be used by Intrexon in conjunction with support services under Section 4.6 (subject to JSC research plan approval).

**3.10 Restrictions Relating to Intrexon Materials**. AquaBounty and its permitted sublicensees shall use the Intrexon Materials solely for purposes of the Aquaculture 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, AquaBounty shall not, and shall ensure that AquaBounty personnel and permitted sublicensees do not, except as otherwise permitted in this Agreement (a) distribute, sell, lend or otherwise transfer such Intrexon Materials to any Third Party; (b) except as is reasonably necessary for the Commercialization of AquaBounty Products, 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 4.5 and 4.6, AquaBounty shall be solely responsible for the development and Commercialization of AquaBounty Products. AquaBounty shall be responsible for all costs incurred in connection with the Aquaculture 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 4.5 (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 AquaBounty 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 (i.e., improvements to Intrexon's synthetic biology platforms) but, for clarity, excluding research described in Section 4.6 or research requested by AquaBounty for the development of an AquaBounty Product (which research costs shall be reimbursed by AquaBounty); (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 AquaBounty Products undertaken pursuant to Section 4.5, 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 AquaBounty (with Intrexon's consent).

**4.2 Information and Reporting**. AquaBounty will keep Intrexon informed about AquaBounty's efforts to develop and Commercialize AquaBounty Products, including reasonable and accurate summaries of AquaBounty's (and its Affiliates' and, if applicable, (sub)licensees') development plans (as updated), including regulatory plans, marketing plans (as updated), progress towards meeting the goals and milestones in such plans and explanations of any material deviations, significant developments in the development and/or Commercialization of the AquaBounty Products, including initiation or completion of a regulatory trial, submission of a United States or international regulatory filing, receipt of a response to such United States or international regulatory filing, product safety event, receipt of Regulatory Approval, or commercial launch, and manufacturing costs and pricing information. As set forth in Section 3.7 above, AquaBounty shall also provide Intrexon access to all final regulatory trial protocols and reports, and regulatory correspondence and filings generated by AquaBounty as soon as practical after they become available. Intrexon will keep AquaBounty informed about Intrexon's efforts (a) to establish manufacturing capabilities and facilities for AquaBounty Products (and Intrexon Materials relevant thereto) and (b) to undertake discovery-stage research for the Aquaculture Program with respect to the Intrexon Channel Technology and Intrexon Materials. Unless otherwise provided herein or directed by the JSC in accordance with Section 4.2 above, such disclosures by AquaBounty and Intrexon will be coordinated by the JSC and made in connection with JSC meetings at least once every six (6) months while AquaBounty Products are being developed or Commercialized anywhere in the world, and shall be reflected in the minutes of such meetings.

**4.3 Regulatory Matters**. At all times after the Effective Date, AquaBounty shall own and maintain, at its own cost, all regulatory filings and regulatory approvals for AquaBounty Products that AquaBounty is developing or Commercializing pursuant to this Agreement. As such, AquaBounty shall be responsible for reporting all adverse events related to such AquaBounty 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 AquaBounty and Intrexon enter into a separate safety data exchange agreement governing the timely exchange of safety information generated by AquaBounty, Intrexon, and relevant third parties with respect to specific Intrexon Materials.

**4.4 Diligence**.

**(a)** AquaBounty shall use, and shall require its sublicensees to use, Diligent Efforts to develop and Commercialize AquaBounty Products. Intrexon shall use, and shall require its sublicensees to use, Diligent Efforts in conducting any activities undertaken by Intrexon in support of any JSC-approved research plan for the Aquaculture Program.

**(b)** Without limiting the generality of the foregoing, Intrexon may, from time to time, notify AquaBounty that it believes it has identified a Superior Animal Product, and in such case Intrexon shall provide to AquaBounty its then-available information about such animal product and reasonable written support for its conclusion that the animal product constitutes a Superior Animal Product. AquaBounty shall have the following obligations with respect to such proposed Superior Animal Product: (i) within sixty (60) days after such notification, AquaBounty, in conjunction with the members of the JSC, shall prepare and deliver to the JSC for review and approval a development plan detailing how AquaBounty will pursue the Superior Animal Product (including a proposed budget); (ii) AquaBounty shall revise the development plan as directed by the JSC; and (iii) following approval of the development plan by the JSC, AquaBounty shall use Diligent Efforts to pursue the development of the Superior Animal Product under the Aquaculture Program in accordance with such development plan. If AquaBounty fails to comply with the foregoing obligations, or if AquaBounty unreasonably exercises its casting vote at the JSC to either (x) prevent the approval of a development plan for a Superior Animal Product; (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 Animal Product, then Intrexon shall have the termination right set forth in Section 10.2(b) (subject to the limitation set forth therein). For clarity, any dispute arising under this 4.4, including any dispute as to whether a proposed project constitutes a Superior Animal Product (as with any other dispute under this Agreement) shall be subject to dispute resolution in accordance with Article 11.

**(c)** The activities of AquaBounty's Affiliates and any permitted sublicensees shall be attributed to AquaBounty for the purposes of evaluating AquaBounty's fulfillment of the obligations set forth in this Section 4.4, and the activities of Intrexon's Affiliates and any permitted sublicensees shall be attributed to Intrexon for the purposes of evaluating Intrexon's fulfillment of the obligations set forth in this Section 4.4.

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.

**4.5 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 Aquaculture 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 AquaBounty and Intrexon establish and execute a separate manufacturing and supply agreement, which agreement will establish and govern the production, quality assurance, and regulatory activities associated with manufacture of Intrexon Materials. Except as provided in Section 4.1, any manufacturing undertaken by Intrexon pursuant to the preceding sentence shall be performed in exchange for cash payments equal to Intrexon's Fully Loaded Cost in connection with such manufacturing, on terms to be negotiated by the Parties in good faith. In the event that Intrexon does not manufacture Intrexon Materials or bulk quantities of other components of AquaBounty Products, then Intrexon shall provide to AquaBounty or a contract manufacturer selected by AquaBounty and approved by Intrexon (such approval not to be unreasonably withheld) all Information Controlled by Intrexon that is (a) related to the manufacturing of such Intrexon Materials or bulk qualities of other components of AquaBounty Products for use in the Field and (b) reasonably necessary to enable AquaBounty or such contract manufacturer (as appropriate) for the sole purpose of manufacturing such Intrexon Materials or bulk quantities of other components of AquaBounty Products. The costs and expenses incurred by Intrexon in carrying out such transfer shall be borne by Intrexon. Any manufacturing Information transferred hereunder to AquaBounty or its contract manufacturer shall not be further transferred to any Third Party, including any Product Sublicensee, or any AquaBounty Affiliate without the prior written consent of Intrexon; provided, however, that Intrexon shall not unreasonably withhold such consent if necessary to permit AquaBounty to switch manufacturers.

**4.6 Support Services**. Subject to Section 2.4, the JSC will meet promptly following the Effective Date and establish a plan under which Intrexon will provide support services to AquaBounty for the research and development of AquaBounty Products under the Aquaculture Program, which initial plan may be amended from time to time by the JSC. AquaBounty 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, AquaBounty may request, or Intrexon may propose, that Intrexon perform certain additional support services with respect to researching and developing new AquaBounty Products or improving the manufacturing or processing methods for any existing AquaBounty Products. To the extent that the Parties mutually agree that Intrexon 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 would be compensated for such services by cash payments equal to Intrexon's Fully Loaded Cost in connection with such services.

**4.7 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 Aquaculture Program, including without limitation those relating to the transport, storage, and handling of Intrexon Materials and AquaBounty Products.

**4.8 Trademarks and Patent Marking**. To the extent permitted by applicable law and regulations, AquaBounty shall ensure that the packaging, promotional materials, and

labeling for AquaBounty Products, as appropriate, shall carry, in a conspicuous location, the applicable Intrexon Trademark(s), subject to AquaBounty's reasonable approval of the size, position, and location thereof. Consistent with the U.S. patent laws, AquaBounty shall ensure that AquaBounty Products, or their respective packaging or accompanying literature, as appropriate, bear applicable and appropriate patent markings for Intrexon Patent numbers. AquaBounty 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. AquaBounty's use of the Intrexon Trademarks and patent markings shall be subject to prior review and approval of the IPC. AquaBounty acknowledges Intrexon's sole ownership of the Intrexon Trademarks and agrees not to take any action inconsistent with such ownership. AquaBounty covenants that it shall not use any trademark confusingly similar to any Intrexon Trademarks in connection with any products (including any AquaBounty Product). From time to time during the Term, Intrexon shall have the right to obtain from AquaBounty samples of AquaBounty Product sold by AquaBounty 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 AquaBounty Products, the use of the Intrexon Trademarks, or the accuracy of the patent markings. In the event that Intrexon inspects under this Section 4.8, Intrexon shall notify the result of such inspection to AquaBounty in writing thereafter. AquaBounty shall comply with commercially reasonable policies provided by Intrexon from time-to-time to maintain the goodwill and value of the Intrexon Trademarks.

## ARTICLE 5

### COMPENSATION

**5.1 Revenue Sharing**.

**(a)** No later than thirty (30) days after each calendar quarter in which there are positive aggregate Gross Profits arising from the sale of AquaBounty Products in the Field and Territory, AquaBounty shall pay to Intrexon a royalty equal to sixteen point sixty-six percent (16.66%) of such Gross Profits during that calendar quarter. Commencing with the Effective Date, in the event that there are negative Gross Profits for a particular AquaBounty Product in any calendar quarter, neither AquaBounty nor Intrexon shall owe any payments hereunder with respect to such AquaBounty Product. Any negative Gross Profits for a given AquaBounty Product, including any that result from Excess Product Liability Costs, may be carried forward to future quarters and offset against positive Gross Profits in such future quarters for the same AquaBounty Product. Except as set forth in the preceding sentence, AquaBounty shall not be permitted to carry forward any negative Gross Profits to subsequent quarters.

**(b)** No later than thirty (30) days after each calendar quarter in which AquaBounty or any AquaBounty Affiliate receives Sublicensing Revenue, AquaBounty shall pay to Intrexon fifty percent (50%) of such Sublicensing Revenue.

**5.2 Method of Payment**. Payments due to Intrexon under this Agreement shall be paid in United States dollars by wire transfer to a bank in the United States designated in writing by Intrexon. All references to "dollars" or "$" herein shall refer to United States dollars.

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.

**5.3 Payment Reports and Records Retention**. Within thirty (30) days after the end of each calendar quarter during which Gross Profits have been generated, during which Sublicensing Revenue has been received, or during which negative Gross Profits have occurred, AquaBounty shall deliver to Intrexon a written report that shall contain at a minimum for the applicable calendar quarter:

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

**(b)** itemized calculation of Gross Profits, showing all applicable COGS deductions;

**(c)** itemized calculation of Sublicensing Revenue;

**(d)** the amount of any negative Gross Profits for the applicable calendar quarter, and any negative Gross Profits amount carried forward from a prior quarter and applied during the present quarter (as per Section 5.1(a));

**(e)** the amount of the payment (if any) due pursuant to each of Sections 5.1(a) and 5.1(b);

**(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 of AquaBounty Product, or after incurring any component item AquaBounty incorporated into its calculation of Sublicensing Revenues, Gross Profits or COGS as reported to Intrexon, AquaBounty shall keep (and shall ensure that its Affiliates and, if applicable, (sub)licensees shall keep) complete and accurate records of such sales or component item in sufficient detail to confirm the accuracy of the payment calculations hereunder.

**5.4 Audits**.

**(a)** Upon no less than thirty (30) days' prior written request from Intrexon, AquaBounty shall permit an independent certified public accounting firm of internationally recognized standing selected by Intrexon, and reasonably acceptable to AquaBounty, 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 AquaBounty and, if applicable, its Affiliates to verify the accuracy and timeliness of the reports and payments made by AquaBounty 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, provided that such records for any given year are not subject to re-review in a subsequent audit for the same AquaBounty Product. 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.

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.

**(b)** If such accounting firm concludes that additional amounts were owed during such period, AquaBounty shall pay additional amounts, with interest from the date originally due as set forth in Section 5.6, 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 AquaBounty 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).

**(c)** Intrexon shall (i) treat all information that it receives under this Section 5.4 in accordance with the confidentiality provisions of Article 7 and (ii) cause its accounting firm to enter into a confidentiality agreement with and acceptable to AquaBounty, such confidentiality agreement 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.

**5.5 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. AquaBounty 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 AquaBounty or the appropriate governmental authority (with the assistance of AquaBounty 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 AquaBounty of its obligation to withhold tax, and AquaBounty shall apply the reduced rate of withholding tax, or dispense with withholding tax, as the case may be, provided that AquaBounty 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, AquaBounty withholds any amount, (a) 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, and (b) Intrexon agrees to indemnify and hold harmless AquaBounty from and against any loss, damage, liability, penalty or expense, including reasonable attorneys' fees and expenses, which AquaBounty may incur by reason of, or in connection with, any failure to withhold or make payment based upon the instruction of Intrexon.

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

## ARTICLE 6

### INTELLECTUAL PROPERTY

**6.1 Ownership**.

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

**(b)** AquaBounty 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 Aquaculture 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 applicable United States patent laws. Except as otherwise provided in this Section 6.1, ownership of Inventions shall be dictated by inventorship.

**(c)** Intrexon shall solely own all right, title and interest in all Inventions made with, using, or otherwise incorporating Intrexon Channel Technology, together with all Patent rights and other intellectual property rights therein (the "**Channel-Related Program IP**"). AquaBounty hereby assigns all of its right, title and interest in and to the Channel-Related Program IP to Intrexon. AquaBounty 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 AquaBounty 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. AquaBounty shall be under appropriate written agreements with each of its employees, contractors, or agents working on the Aquaculture Program, pursuant to which such person shall grant all rights in the Inventions to AquaBounty (so that AquaBounty may convey certain of such rights to Intrexon, as provided herein) and agree to protect all Confidential Information relating to the Aquaculture Program.

**6.2 Patent Prosecution**.

**(a)** Intrexon shall have the sole right, but not the obligation, to (i) conduct and control the filing, prosecution and maintenance of the Intrexon Patents, and (ii) conduct and control the filing, prosecution, and maintenance of any applications for patent term extension and/or supplementary protection certificates that may be available as a result of the regulatory approval of any AquaBounty Product. At the reasonable request of Intrexon, AquaBounty shall cooperate with Intrexon in connection with such filing, prosecution, and maintenance, at

Intrexon's expense. Under no circumstances shall AquaBounty (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 AquaBounty Product.

**(b)** AquaBounty 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 AquaBounty or its Affiliates and not assigned to Intrexon under Section 6.1(c) ("**AquaBounty Program Patents**"). At the reasonable request of AquaBounty, Intrexon shall cooperate with AquaBounty in connection with such filing, prosecution, and maintenance, at AquaBounty's expense. Under no circumstances shall Intrexon (i) 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 an Invention owned by AquaBounty, or (ii) 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 AquaBounty Product.

**(c)** As used in this Section, "**Prosecuting Party**" means Intrexon in the case of Intrexon Patents and AquaBounty in the case of AquaBounty 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 AquaBounty Program Patents, as applicable. The Prosecuting Party shall:

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

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

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

**(d)** If, for an Invention that (i) comprises Channel-Related Program IP, and (ii) covers an AquaBounty Product in development or Commercialization, Intrexon determines in its discretion to refrain from filing a patent application on such Invention or to abandon (without re-filing) or to discontinue prosecution of (without re-filing) or maintenance of any Intrexon Patent claiming such Invention, Intrexon shall notify AquaBounty in writing, at least thirty (30) days prior to the final, non-extendable date by which any action must be taken to preserve such patent application or Patent, of Intrexon's determination so as to provide AquaBounty with an opportunity to assume responsibility for such filing, prosecution, or maintenance. If AquaBounty elects to assume, at its sole discretion and expense, such responsibility, AquaBounty shall notify Intrexon in writing to that effect and Intrexon shall cooperate with AquaBounty to effect a smooth transfer of such responsibilities to AquaBounty. Such transfer of responsibility shall not otherwise modify the rights, license and obligations of the Parties hereunder.

**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, AquaBounty 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 AquaBounty exercises the foregoing right, Intrexon agrees to be named in any such action if required. If AquaBounty 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) [*****]. To the extent AquaBounty shall be

entitled to a share of the Recovery as set forth in Section 6.3(f), Intrexon and AquaBounty shall bear the costs and expenses of such enforcement equally. The determination of which Intrexon Patent(s) to assert shall be made by Intrexon in its sole discretion after consulting in good faith with AquaBounty on such determination. For the avoidance of doubt, Intrexon has no obligations under this Agreement to enforce any Intrexon Patents against, or otherwise abate, any Infringement that is not a Field Infringement.

**(d)** In the event a Party pursues an action under this Section 6.3, the other Party shall reasonably cooperate with the enforcing Party with respect to the investigation and prosecution of any alleged, threatened, or actual Infringement, at the enforcing Party's expense (except with respect to an action under Section 6.3(c), where all costs and expenses will be shared equally in accordance with terms thereof).

**(e)** AquaBounty 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 AquaBounty in the Field or adversely affects any Intrexon Patent with respect to the Field without AquaBounty's 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 AquaBounty pursuant to Section 6.3(b), AquaBounty shall retain one hundred percent (100%) of any Recovery, but such Recovery shall be shared with Intrexon as Sublicensing Revenue. In any action initiated by Intrexon or AquaBounty pursuant to Section 6.3(c), the Parties shall share the Recovery equally, and such Recovery shall not be deemed to constitute Sublicensing Revenue.

**(g)** AquaBounty shall promptly notify Intrexon in writing of any suspected, alleged, threatened, or actual Infringement of which it becomes aware, and Intrexon shall promptly notify AquaBounty 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, as can be demonstrated by written records, other than under an obligation of confidentiality, at the time of disclosure by the other Party;

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

**(c)** became generally available to the public or otherwise part of the public domain after its disclosure 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 regulatory trials, or to gain regulatory approval, of AquaBounty 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, advisors, or agents (such as CROs) 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 a Party to collaborators and other channel partners or collaborators who agree to be bound by obligations of confidentiality and non-use at least equivalent in scope to those set forth in this Article 7.

**7.3 Publicity; Publications**. The Parties agree that the public announcement of the execution of this Agreement shall be substantially in the form of a press release and/or the filing of a Form 8-K by AquaBounty, which shall be mutually agreed to by the Parties. Each Party will provide the other Party with the opportunity to review and comment, prior to submission or presentation, on external reports, publications and presentations (e.g., press releases, reports to government agencies, abstracts, posters, manuscripts and oral presentations) that refer to the Aquaculture Program or programs that are approved by the JSC. For such reports, publications, and presentations, the disclosing Party will provide the other Party at least fifteen (15) calendar days for review of the proposed submission or presentation. In the case of a Form 8-K filing, such shall be provided to Intrexon by AquaBounty as soon as practicable prior to filing. 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, AquaBounty acknowledges that Intrexon's authorized representative(s), during

regular business hours may (i) examine and inspect AquaBounty's facilities and (ii) inspect all data and work products relating to this Agreement, subject to restrictions imposed by applicable laws. Any examination or inspection hereunder shall require five (5) business days written notice from Intrexon to AquaBounty. AquaBounty 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 AquaBounty 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 AquaBounty to Intrexon. Intrexon will make itself and the pertinent employees and/or agents available, on a reasonable basis, to AquaBounty for the aforementioned compliance review.

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

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

## ARTICLE 8

### REPRESENTATIONS AND WARRANTIES

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

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

**(b) Due Authorization**. AquaBounty is duly authorized to execute and deliver this Agreement and to perform its obligations hereunder, and the person executing this Agreement on AquaBounty'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 AquaBounty 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 AquaBounty 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. AquaBounty is aware of no action, suit or inquiry or investigation instituted by any governmental agency which questions or threatens the validity of this Agreement.

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

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

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

**(c) Binding Agreement**. This Agreement is a legal and valid obligation binding upon Intrexon and enforceable in accordance with its terms, except as such enforcement may be limited by applicable bankruptcy, insolvency, reorganization, arrangement, moratorium or other similar laws affecting creditors' rights, and subject to general equity principles and to limitations on availability of equitable relief, including specific performance. The execution, delivery and performance of this Agreement by Intrexon does not conflict with any agreement, instrument or understanding, oral or written, to which it is a party or by which it may be bound. Intrexon is aware of no action, suit or inquiry or investigation instituted by any governmental agency which questions or threatens the validity of this Agreement.

**(d) Additional Intellectual Property Representations**.

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

(ii) The Intrexon Patents existing as of the Effective Date constitute all of the Patents Controlled by Intrexon as of such date that are necessary for the development, manufacture and Commercialization of AquaBounty Products;

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

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

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

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

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

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

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

(x) To Intrexon's knowledge, no former or current employee or contractor of Intrexon is the subject of any claim or proceeding involving a violation of any term of any 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 or other Third Party (A) where the basis of such violation relates to such employee's employment or contractor's contractual relationship with Intrexon or actions undertaken by the employee or contractor while employed or under contract, as applicable, with Intrexon and (B) where such violation is relevant to the use of the Intrexon Channel Technology in the Field;

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

(xii) Except as otherwise disclosed in writing to AquaBounty, Intrexon: (A) is in material compliance with all statutes, rules or regulations applicable to the ownership, testing, development, manufacture, packaging, processing, use, distribution, marketing, labeling, promotion, sale, offer for sale, storage, import, export or disposal of any product that is under

development, manufactured or distributed by Intrexon in the Field ("**Applicable Laws**"); (B) has not received any FDA Form 483, notice of adverse finding, warning letter, untitled letter or other correspondence or notice from the United States Food and Drug Administration (the "**FDA**") or any other federal, state, local or foreign governmental or regulatory authority alleging or asserting material noncompliance with any Applicable Laws or any licenses, certificates, approvals, clearances, authorizations, permits and supplements or amendments thereto required by any such Applicable Laws ("**Authorizations**"), which would, 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, letters to customers, 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; and

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

**8.3 Warranty Disclaimer**. EXCEPT FOR THE EXPRESS WARRANTIES PROVIDED IN THIS ARTICLE 8, 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 AquaBounty and its Affiliates and their respective directors, officers, employees, and agents (collectively, the "**AquaBounty 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 gross negligence or willful misconduct of Intrexon or any of its Affiliates, or their respective employees or agents; (b) the use, handling, storage or transport of Intrexon Materials by or on behalf of Intrexon or its Affiliates, licensees (other than AquaBounty) or sublicensees; or (c) breach by Intrexon of any representation, warranty, covenant, or other material provision in this Agreement. Notwithstanding the foregoing, Intrexon shall not have any obligation to indemnify the AquaBounty Indemnitees to the extent that a Claim arises from (i) the gross negligence or willful misconduct of AquaBounty or any of its Affiliates, licensees, or sublicensees, or their respective employees or agents; or (ii) a breach by AquaBounty of a representation, warranty, covenant, or other material provision of this Agreement.

**9.2 Indemnification by AquaBounty**. AquaBounty 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 gross negligence or willful misconduct of AquaBounty or any of its Affiliates or their respective employees or agents; (b) the use, handling, storage, or transport of Intrexon Materials by or on behalf of AquaBounty or its Affiliates, licensees, or sublicensees; (c) breach by AquaBounty of any material representation, warranty, covenant, or other material provision in this Agreement; or (d) the design, development, manufacture, regulatory approval, handling, storage, transport, distribution, sale or other disposition of any AquaBounty Product by or on behalf of AquaBounty or its Affiliates, licensees, or sublicensees. Notwithstanding the foregoing, AquaBounty shall not have any obligation to indemnify the Intrexon Indemnitees to the extent that a Claim arises from (i) the gross 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, covenant, or other material provision 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 AquaBounty 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.

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.

**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, provided that, no delay in giving or failure to give notice by the indemnified Party to the indemnifying Party of any Claims that may be subject to indemnification under this Agreement will adversely affect any of the other rights or remedies that the indemnified Party has under this Agreement, or alter or relieve the indemnifying Party of its obligation to indemnify the indemnified Party, except to the extent that the indemnifying Party is prejudiced thereby. 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, provided that, in the case of a conflict of interest, the indemnified Party may be represented by separate counsel of its choosing at the indemnifying Party's expense. The indemnified Party shall cooperate with the indemnifying Party in such defense. Except in the case of a conflict as provided above, 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, which consent shall not 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 AquaBounty Products, AquaBounty shall maintain in effect and good standing a product liability insurance policy issued by a reputable insurance company in amounts considered standard for the industry. Immediately prior to, and during the conduct of any regulatory trials, AquaBounty shall maintain in effect and good standing a regulatory trials liability insurance policy issued by a reputable insurance company in amounts considered standard for the industry. At Intrexon's reasonable request, AquaBounty shall provide Intrexon with all details regarding such policies, including without limitation copies of the applicable liability insurance contracts. AquaBounty shall use commercially 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 4.4(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 any provision of this

Agreement that such breaching Party fails to cure within sixty (60) days following written notice from the nonbreaching Party specifying such breach. Notwithstanding the foregoing, if a breach is capable of being cured, but is not reasonably capable of being cured within the sixty (60) day period above, such cure period shall be extended to such time as needed to cure the breach within a reasonable timeframe thereafter if (i) the breaching Party proposed within such relevant cure period a written notice thereof and plan reasonably acceptable to the non-breaching party to cure the breach and, (ii) the breaching Party uses Diligent Efforts to implement such written cure plan.

**(b)** Intrexon shall have the right to terminate this Agreement under the circumstances set forth in Section 4.4(b) upon written notice to AquaBounty, such termination to become effective (i) sixty (60) days following such written notice unless AquaBounty remedies the circumstances giving rise to such termination within such sixty (60) day period, or (ii) in the event that the Parties have commenced a dispute resolution process pursuant to Section 4.4(b) and Article 11, in accordance with any determination made with respect to termination of this Agreement as part of that proceeding.

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

**10.3 Termination by AquaBounty**. AquaBounty shall have the right to voluntarily terminate this Agreement in its entirety upon ninety (90) days' written notice to Intrexon at any time. Additionally, AquaBounty has the right to terminate this Agreement within those ninety (90) days if it fails to receive equity financing in an amount of at least six million dollars ($6,000,000) from existing or new shareholders, said amount including any amount received by AquaBounty from Intrexon by way of the Subscription Agreement, dated as of even date herewith, by and between AquaBounty and Intrexon, as may be amended from time to time.

**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**. AquaBounty shall be permitted, but not obligated, to continue the development and Commercialization in the Field of any product resulting from the Aquaculture Program that, at the time of termination, satisfies at least one of the following criteria (a "**Retained Product**"):

(i) the particular product is an AquaBounty Product that is being sold by AquaBounty (or, as may be permitted under this Agreement, its Affiliates and, if applicable, (sub)licensees) triggering profit sharing payments therefor under Section 5.1(a) or (b) of this Agreement,

(ii) the particular product is an AquaBounty Product that has received regulatory approval, or

(iii) the particular product is an AquaBounty Product that is the subject of an application for regulatory approval in the Field, including, but not limited to, a filed application for an Investigational New Animal Drug, that is pending before the applicable regulatory authority.

Such right to continue development and Commercialization shall be subject to AquaBounty's full compliance with the payment provisions in Article 5, a continuing obligation for AquaBounty to use in accordance 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**. After the Term, all rights and licenses granted to AquaBounty shall continue only for Retained Products in the Field as permitted by Section 10.4(a), all rights and licenses granted by Intrexon to AquaBounty under this Agreement shall terminate and shall revert to Intrexon without further action by either Intrexon or AquaBounty. AquaBounty's 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 AquaBounty Products other than the Retained Products shall be referred to herein as the "**Reverted Products**." AquaBounty 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 AquaBounty 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. AquaBounty 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**. AquaBounty shall promptly return, or at Intrexon's request, destroy, any Intrexon Materials in AquaBounty's 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**. AquaBounty is automatically deemed to grant to Intrexon a worldwide, fully paid, royalty-free (except for any payment due to Third Parties to license AquaBounty Termination IP, as applicable), exclusive (even as to AquaBounty and its Affiliates), irrevocable license (with full rights to sublicense upon AquaBounty's prior written consent, which consent shall not be unreasonably withheld) under the AquaBounty 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 AquaBounty 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. For clarity, with respect to Reverted Products, Intrexon shall be responsible for any license payments due to any Third Party under an AquaBounty license with such Third Party for portions of the AquaBounty Termination IP to the extent that such license payments are attributable to such AquaBounty Termination IP being used by or on behalf of Intrexon in the Commercialization of Reverted Products.

**(f) Regulatory Filings**. AquaBounty 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. AquaBounty 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, AquaBounty shall provide copies of the portions of such regulatory filings that relate to Reverted Products and shall reasonably cooperate to assist Intrexon in obtaining the benefits of such regulatory approvals with respect to the Reverted Products.

**(g) Data Disclosure**. AquaBounty shall provide to Intrexon copies of the relevant portions of all material reports and data, including regulatory trial data and reports, obtained or generated by or on behalf of AquaBounty 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, AquaBounty shall promptly provide to Intrexon copies of all Third Party agreements under which AquaBounty 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, AquaBounty shall promptly work with Intrexon to either, as appropriate, (i) assign to Intrexon the Third Party agreement(s), or (ii) 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 AquaBounty and AquaBounty 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, AquaBounty shall transfer to Intrexon all quantities of Reverted Product (including final products or work-in-process) in the possession of AquaBounty or its Affiliates. AquaBounty 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, AquaBounty shall promptly provide to Intrexon copies of all agreements between AquaBounty 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, AquaBounty shall promptly: (i) with respect to such Third Party agreements relating solely to the applicable Reverted Products and permitting assignment without consent of such Third Party, immediately assign (or cause to be assigned), such agreements to Intrexon, and (ii) with respect to all other such Third Party agreements, AquaBounty shall use its commercially reasonable efforts to assist Intrexon in obtaining the benefits of such agreements. AquaBounty 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 AquaBounty's breach. For the avoidance of doubt, Intrexon shall have no obligation to assume any of AquaBounty's obligations under any Third Party agreement.

**(k) Commercialization**. Intrexon shall have the right to develop and Commercialize the Reverted Products itself or with one or more Third Parties, and shall have the right, without obligation to AquaBounty, 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 AquaBounty) 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 AquaBounty 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)), 5.2, 5.4, 6.1, 6.2 (with subsection (c) surviving only to the extent relating to Intrexon Patents that are relevant to Retained Products that, to Intrexon's knowledge, are being developed or Commercialized at such time, if any), 7.1, 7.2, 7.4, 7.5, 10.4, and 10.5; Articles 9, 11, and 12; and any relevant definitions in Article 1. Further, Article 7 and Sections 4.4(a), 4.4(c), 5.1 through 5.5, and 9.4 will survive termination of this Agreement to the extent there are applicable Retained Products.

## ARTICLE 11

## DISPUTE RESOLUTION

**11.1 Disputes**. It is the objective of the Parties to establish procedures to facilitate the resolution of disputes arising under this Agreement in an expedient manner by mutual cooperation and without resort to litigation. In the event of any disputes, controversies or differences which may arise between the Parties out of or in relation to or in connection with this Agreement (other than disputes arising from a Committee, except for disputes at the IPC with respect to Product-Specific Program Patents, as provided in Section 2.4(b)), including, without limitation, any alleged failure to perform, or breach, of this Agreement, or any issue relating to the interpretation or application of this Agreement, then upon the request of either Party by written notice, the Parties agree to meet and discuss in good faith a possible resolution thereof,

which good faith efforts shall include at least one in-person meeting between the Executive Officers of each Party. If the matter is not resolved within thirty (30) days following the written request for discussions, either Party may then invoke the provisions of Section 11.2. For the avoidance of doubt, any disputes, controversies or differences arising from a Committee pursuant to Article 2 shall be resolved solely in accordance with Section 2.4.

**11.2 Arbitration**. Any dispute, controversy, difference or claim which may arise between the Parties and not from a Committee, out of or in relation to or in connection with this Agreement (including, without limitation, arising out of or relating to the validity, construction, interpretation, enforceability, breach, performance, application or termination of this Agreement) that is not resolved pursuant to Section 11.1 shall, subject to Section 11.10, be settled by binding "baseball arbitration" as follows. Either Party, following the end of the thirty (30) day period referenced in Section 11.1, may refer such issue to arbitration by submitting a written notice of such request to the other Party, with the arbitration to be held in the state where the other Party's principal office is located (or some other place as may be mutually agreed by the Parties). Promptly following receipt of such notice, the Parties shall meet and discuss in good faith and choose one arbitrator from a list of arbitrators provided by the American Arbitration Association in accordance with its Commercial Arbitration Rules (the "**AAA Rules**") as being suitable to arbitrate the Parties' dispute. The Parties agree that the chosen arbitrator shall be neutral and independent of both Parties and all of their respective Affiliates, and shall have significant experience and expertise in licensing and partnering agreements in the biotechnology industry and concerning related intellectual property rights (as appropriate in light of the subject matter of the Parties' disputed issues), and shall have some experience in mediating or arbitrating issues relating to such agreements and/or related intellectual property rights. The AAA Rules shall govern the arbitration between the Parties, except as set forth in, and to the extent not inconsistent with, this Section 11.2. Within fifteen (15) days after an arbitrator is selected, each Party will deliver to both the arbitrator 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 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 (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 other than for the sole purpose of engaging the arbitrator or as expressly permitted in this Section 11.2; provided that, the arbitrator may convene a hearing if the arbitrator 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 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 shall be final, binding, and unappealable. For clarity, the arbitrator must select as the only method to resolve the matter at issue one of the two sets of Proposed Terms, and may not combine elements of both Proposed Terms or award any other relief or take any other action.

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

**11.4 Award**. Any award to be paid by one Party to the other Party as determined by the arbitrator 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. With respect to money damages, nothing contained herein shall be construed to permit the arbitrator 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 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 3.5 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 3.5 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 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 to make) any public announcement with respect to the proceedings or decision of the arbitrator without prior written consent of the other Party. The existence of any dispute submitted to arbitration, and the award, shall be kept in confidence by the Parties and the arbitrator, except as required in connection with the enforcement of such award or as otherwise required by applicable law.

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.

**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 non-exclusive jurisdiction of any United States District Court located in the Southern District of 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.

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

## ARTICLE 12

## GENERAL PROVISIONS

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

**12.2 LIMITATION OF LIABILITY**. EXCEPT FOR FRAUD, 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**. The Parties are not employees or legal representatives of the other Party for any purpose. Neither Party shall have the authority to enter into any contracts in the name of or on behalf of the other Party. This Agreement shall not constitute, create, or in any way be interpreted as a joint venture, partnership, or business organization of any kind.

**12.4 Notice**. All notices, including notices of address change, required or permitted to be given under this Agreement shall be in writing and deemed to have been given (a) 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), (b) on the business day after dispatch if sent by a nationally-recognized overnight courier and (c) 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 in accordance with this Section 12.4):

| | |
|---|---|
| If to Intrexon: | Intrexon Corporation<br>20358 Seneca Meadows Parkway<br>Germantown, MD 20876<br>Attention: President, Animal Sciences Division<br>Fax: (301) 556-9901 |
| with a copy to: | Intrexon Corporation<br>20358 Seneca Meadows Parkway<br>Germantown, MD 20876<br>Attention: Legal Department<br>Fax: (301) 556-9902 |
| If to AquaBounty: | AquaBounty Technologies, Inc.<br>Two Clock Tower Place, Suite 395<br>Maynard, MA 01754<br>Attention: Chief Executive Officer<br>Fax: (978) 897-3217 |

**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, constitutes the entire, final, complete and exclusive agreement between the Parties and supersede all previous agreements or representations, written or oral, with respect to the subject matter of this Agreement (including any prior confidentiality agreement between the Parties). All information of Intrexon or AquaBounty 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 AquaBounty 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 the hiring of any employee as a result of such general solicitations or advertisements is not prohibited under this Agreement.

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

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

*[Remainder of page intentionally left blank.]*

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

| **INTREXON CORPORATION** | **AQUABOUNTY TECHNOLOGIES, INC.** |
|---|---|
| By: /s/ Thomas R. Kasser | By: /s/ David Frank |
| Name: Thomas R. Kasser | Name: David Frank |
| Title: Senior Vice President | Title: Chief Financial Officer and Secretary |

**Exhibit 10.10**

**THIS RELATIONSHIP AGREEMENT** (this "Agreement") is made on 2012 by and between **Intrexon Corporation**, incorporated in Virginia, USA, with offices at [ ] (**"Intrexon"**), and **AquaBounty Technologies, Inc.**, incorporated in Delaware, USA, with offices atx 935 Main Street, Waltham, Mass 02451, USA (the **"Company"**).

**RECITALS**

(A) On 31 October 2012, Intrexon agreed to acquire shares constituting 47.56% of the current issued share capital of AquaBounty from Linnaeus Capital Partners B.V. and Tethys Ocean B.V., which acquisition was completed on 16 November 2012 with Intrexon becoming the owner of such shares.

(B) In accordance with the Company's Certificate of Incorporation, Intrexon intends to make a conditional cash offer for any and all shares of common stock of AquaBounty not already owned by Intrexon (the "**Mandatory Offer**").

(C) The parties to this Agreement wish to record the current and future basis of Intrexon's relationship with the Company as a major shareholder.

**OPERATIVE PROVISIONS**

1. **DEFINITIONS AND INTERPRETATION**

1.1 In this Agreement the following words and expressions shall have the following meanings unless they are inconsistent with the context:

**"Affiliate"** means, as to any person, any other person or entity that, directly or indirectly through one or more intermediaries, controls, or is controlled by such person;

**"Board"** means the board of directors of the Company from time to time;

**"Business Day"** means any day (other than Saturday or Sunday) on which clearing banks are open for a full range of banking transactions in both London and New York City;

**"Closing Date"** means the date on which the Mandatory Offer becomes or is declared unconditional in all respects or lapses or is withdrawn in accordance with its terms;

**"Confidential Information"** means all information which is not publicly known, and which is used in or otherwise relates to the Company's business, customers, or financial or other affairs, including, without limitation, information relating to:

(a) trade secrets, know-how, ideas, computer systems and computer software;

(b) future projects, business development or planning, commercial relationships and negotiations; and

(c) the marketing of goods or services including customer names and lists, sales targets and statistics;

**"Director"** means a director of the Company from time to time;

**"First Annual Meeting"** has the meaning given in clause 2.1.

**"Intrexon Director"** has the meaning given in clause 2.5;

"**Intrexon Nominee**" has the meaning given in clause 2.2(a);

"**Intrexon Representative**" has the meaning given in clause 2.5; and

"**Mandatory Offer**" has the meaning given in Recital (B).

1.2 In this Agreement:

(a) references to clauses and parties are, unless otherwise stated, to the clauses of and the parties to this Agreement;

(b) words importing the singular include the plural and vice versa, words importing a gender include every gender and references to persons include bodies corporate or unincorporated;

(c) the headings to the clauses are for convenience only and shall not affect the construction or interpretation of this Agreement; and

(d) references to any statute or statutory provision include, unless the context otherwise requires, a reference to the statute or statutory provision as modified, replaced or reenacted and in force from time to time prior to the date hereof and any subordinate legislation made under the relevant statute or statutory provision (as so modified, replaced or re-enacted) in force prior to the date hereof.

2. **INTREXON NOMINEE; INTREXON REPRESENTATIVE**

2.1 As soon as practicable after the Closing Date, and in any case no later than the later of (x) ten (10) Business Days after the Closing Date and (y) thirty (30) days after the date on which Intrexon submits names to the Company's Nominated Advisor, the Company shall take or cause to be taken all necessary actions to (A) increase the size of the Board from three (3) to six (6) directors and (B) appoint three (3) nominees of Intrexon (each an **"Intrexon Nominee"** and together the **"Intrexon Nominees"**) as directors of the Company with terms expiring at the next annual meeting of the shareholders of the Company occurring after the date of such appointment (the **"First Annual Meeting"**); provided, however that if as a result of the Mandatory Offer Intrexon becomes the beneficial owner of greater than 50% of the outstanding common stock of the Company, the Company shall take or cause to be taken all necessary actions to (A) increase the size of the Board from three (3) to seven (7) directors and (B) appoint four (4) Intrexon Nominees as directors of the Company with terms expiring at the First Annual Meeting. Intrexon shall have the right to nominate each Intrexon Nominee from among the officers and directors of Intrexon (or any such other persons with at least similar stature and experience, in the reasonable judgment of the Board), provided, however, that for so long as the Company is listed on the AIM Market of the London Stock Exchange that (i) Intrexon acknowledges the obligation of the Company's Nominated Advisor under the AIM Rules to undertake due diligence on any prospective Intrexon Nominee and agrees to cooperate with the Nominated Advisor's reasonable enquiries and (ii) Intrexon will not exercise its voting rights in a manner designed to prevent the Company from having on the Board at all times two directors who are independent of Intrexon and the Company.

2.2 The Company agrees that so long as (i) this Agreement continues in full force and effect and has not been terminated pursuant to clause 6 (*Duration*) and (ii) Intrexon itself or together with its Affiliates control 25% or more of the voting rights exercisable at meetings of the shareholders of the Company, the Company will procure that the Board will, in advance of the First Annual Meeting and thereafter in advance of each annual meeting of the shareholders of the Company:

(a) nominate such number of Intrexon Nominees as may be designated by Intrexon for election as directors of the Company at each forthcoming annual meeting of shareholders of the Company occurring after the date of such nomination so that Intrexon shall have representation on the Board proportional to Intrexon's percentage shareholding in the capital of the Company rounded up to the nearest whole person in the event that Intrexon's representation on the Board would not as a result constitute at least a majority of the directors on the Board and rounded arithmetically to the nearest whole person in the event that Intrexon's representation on the Board would as a result constitute a majority of the Board; provided, that each such nomination shall not include any individual whose membership on the Board would be a violation of law and shall be in accordance with the Bylaws of the Company then in effect; and provided, further, that should the Board determine that any such designee of Intrexon is inappropriate, consistent with the standards set forth in this clause 2.2(a), Intrexon shall be entitled to designate, as a substitute, an additional individual for election as a director of the Company that shall meet the standards set forth in this clause 2.2(a) and such individual shall be deemed an Intrexon Nominee; and

(b) recommend that the shareholders of the Company vote to elect each such Intrexon Nominee as a director of the Company at the next annual meeting of shareholders of the Company occurring after the date of such nomination.

2.3 In the event that an Intrexon Nominee, nominated for election to the Board in accordance with clause 2.2(a), fails to be elected to the Board by the shareholders at the applicable annual meeting, the Company shall, as an ongoing obligation, procure that the Board take such steps as are permitted by the Bylaws and any applicable law to appoint such Intrexon Nominee to fill any vacancy.

2.4 If a member of the Board that has been designated by Intrexon resigns or is removed from the Board and Intrexon indicates that it does not wish to designate a nominee to fill the vacancy or fails to nominate a designee that meets the standards set forth in clause 2.2(a) to replace such individual within ten (10) Business Days following receipt of notice of such resignation or removal, the Company will take or cause to be taken all necessary actions to reduce the size of the Board so that there is no vacancy as a result thereof and then to promptly increase the size of the Board to create a vacancy at such time as Intrexon indicates that it wishes to designate a nominee to fill the vacancy that meets the standards set forth in clause 2.2(a). Upon termination of this Agreement pursuant to clause 6 (*Duration*), Intrexon shall, upon the written request of the Board, cause such member(s) of the Board that have been designated by Intrexon to resign from the Board, effective immediately.

2.5 Intrexon shall be entitled to, and the Company shall procure that it may, send a representative (an **"Intrexon Representative"**) to attend and speak at, but not to vote at, any meetings of the board of subsidiary of the Company if at such time it has no Intrexon-appointed director serving on the board of directors of that subsidiary (any such Intrexon-appointed director, an **"Intrexon Director"**).

2.6 The Company agrees that, for so long as there is an Intrexon Nominee on the Board, it will procure director insurance of a type and at a level of coverage that is customary for members of a board of directors of a publicly listed company and reasonably acceptable to Intrexon.

2.7 The Company agrees that, for so long as there is an Intrexon Nominee on the Board, it will enter into a customary form of indemnification agreement with each Intrexon Nominee in a form reasonably acceptable to Intrexon.

3. **REPORTING COMPLIANCE.**

3.1 For so long as Intrexon itself or together with its Affiliates controls 10% or more of the voting rights exercisable at meetings of the shareholders of the Company, for any time period for which Intrexon has notified AquaBounty that Intrexon has reasonably concluded, after consultation with its outside advisors, that Intrexon is required to consolidate or include AquaBounty's financial statements with its own, AquaBounty shall comply with the following additional obligations:

(a) AquaBounty shall maintain at its principal place of business or, upon notice to Intrexon, at such other place as AquaBounty shall determine:

(i) a copy of AquaBounty's Certificate of Incorporation or organizational document and all amendments thereto, together with executed copies of any powers of attorney pursuant to which any amendment has been executed;

(ii) a copy of this Agreement;

(iii) a copy of AquaBounty's federal, state, and local income tax returns and reports, if any; and

(iv) minutes of meetings of AquaBounty's board of directors and shareholders or actions by written consent in lieu thereof, redacted as necessary by AquaBounty to exclude any sensitive or confidential information that Intrexon, by operation of law or contractual stipulation, is not permitted to receive.

(b) AquaBounty shall keep its books and records consistent with United States generally accepted accounting principles (US GAAP).

(c) Intrexon at its own expense and upon reasonable notice, may examine any information it may reasonably request (including, to the extent AquaBounty has the right to provide such, the work papers of AquaBounty's internal and independent auditors) and make copies of and abstracts from the financial and operating records and books of account of AquaBounty, and discuss the affairs, finances and accounts of AquaBounty with AquaBounty and independent auditors of AquaBounty, all at such reasonable times and as often as Intrexon or any agents or representatives of Intrexon may reasonably request. The rights granted pursuant to this clause 3.1(c) are expressly subject to compliance by Intrexon with the safety, security and confidentiality procedures and guidelines of AquaBounty, as such procedures and guidelines may be established from time to time.

(d) Unless waived by Intrexon, in its sole discretion, as soon as available but no later than ninety (90) days after the end of each fiscal year, AquaBounty shall cause to be prepared and Intrexon to be furnished with an audited balance sheet as of the last day of such fiscal year and an audited income statement, a statement of stockholders' equity and statement of cash flows for AquaBounty for such fiscal year and notes associated with each, in each case prepared in accordance with US GAAP, together with a report of AquaBounty's independent auditor that such statements have been prepared in accordance with US GAAP and present fairly, in all material respects, the financial position, results of operations and cash flows of AquaBounty.

(e) As soon as available but no later than forty five (45) days after the end of each calendar quarter, AquaBounty shall furnish the following to Intrexon an unaudited balance sheet as of the last day of such period, and an unaudited income statement, a statement of cash flows and a statement of stockholders' equity for AquaBounty for such period, in each case prepared in accordance with US GAAP.

(f) As requested by Intrexon on no more than a quarterly basis, a certificate, executed by the Chief Executive Officer or Chief Financial Officer of AquaBounty, certifying on behalf of AquaBounty the following:

(i) AquaBounty maintains accurate books and records reflecting its assets and liabilities and maintains proper and adequate internal accounting controls that provide assurance that (1) transactions are executed with management's authorization; (2) transactions are recorded as necessary to permit preparation of the consolidated financial statements of AquaBounty and to maintain accountability for AquaBounty's consolidated assets; (3) access to the assets of AquaBounty is permitted only in accordance with management's authorization; (4) the reporting of assets of AquaBounty is compared with existing assets at regular intervals; and (5) accounts, notes and other receivables and inventory are recorded accurately, and proper and adequate procedures are implemented to effect the collection of accounts, notes and other receivables on a current and timely basis.

(ii) under the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder; any such controls and procedures are adequate to ensure that all material information concerning AquaBounty is made known on a timely basis to those individuals responsible for the preparation of any filings that may be required to be made by Intrexon with the SEC and other public disclosure documents.

(iii) AquaBounty shall promptly prepare and furnish to Intrexon any information, whether written or oral, requested by Intrexon that is reasonably necessary for purposes of Intrexon's ongoing compliance with applicable law.

3.2 The parties agree that the delivery deadlines in clause 3.1 will be modified to the extent necessary to ensure that such deliverables are provided by AquaBounty no less than thirty (30) days 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 AquaBounty with notice as promptly as practicable regarding any changes in Intrexon's disclosure obligations that would require a change in delivery deadlines under this clause 3.

4. **CONFIDENTIALITY**

4.1 The parties acknowledge the existence and continuing effect of the Mutual Confidentiality Agreement effective January 13, 2012 between Intrexon and the Company, as amended June 25, 2012 and as further amended by this Section 4.1 (the "Mutual Confidentiality Agreement"). The first section of Section 3 of the Mutual Confidentiality Agreement is hereby replaced in its entirety with the following "The disclosure period of this Agreement shall expire on the date that the Relationship Agreement dated [ ], 2012 between Intrexon and

AquaBounty Technologies terminates (the **"Disclosure Period"**), unless such Disclosure Period is extended by the agreement of the parties in writing." The definition of "Confidential Information" in Section 1 of the Mutual Confidentiality Agreement is hereby amended to replace the period at the end of such definition with the following: "; provided, however, that Confidential Information shall not include any such information that Intrexon can demonstrate was developed by Intrexon independently of and without reference to any Confidential Information or became known to Intrexon (independently of disclosure by the Company) on a non-confidential basis from a third party lawfully possessing and entitled to disclose such information.".

4.2 For the avoidance of doubt, information shared by or on behalf of the Company with an Intrexon Nominee is deemed to be shared with such individual in his or her capacity as an Intrexon Nominee and not in his or her capacity as an employee, consultant or agent of Intrexon; provided, however, that each Intrexon Nominee shall be entitled to disclose to Intrexon such information concerning the Company as he or she thinks fit, to the extent permitted by applicable law, and that information that constitutes Confidential Information under the Confidentiality Agreement that is disclosed to Intrexon shall be subject to the terms of the Confidentiality Agreement.

5. **CAPACITY AND LIABILITY**

Each party warrants and represents to the other that it has the power to enter into this Agreement and to exercise its rights and to perform its obligations hereunder and all corporate and other action required to authorise its execution of this Agreement and its performance of its obligations hereunder has been duly taken.

6. **DURATION**

This Agreement will continue in full force and effect until Intrexon itself or together with its Affiliates ceases to control 10% or more of the voting rights exercisable at meetings of the shareholders of the Company, save that the provisions of clauses 4 (*Confidentiality*), 10 (*Notices*) and 13 (*Governing Law*) shall survive termination of this Agreement.

7. **ENTIRE AGREEMENT**

This Agreement (together with any documents referred to herein) constitutes the entire agreement between the parties hereto in connection with the subject matter of this Agreement.

8. **WAIVERS AND AMENDMENTS**

8.1 No waiver of any term, provision or condition of this Agreement shall be effective unless such waiver is evidenced in writing and signed by the waiving party.

8.2 No omission or delay on the part of any party to this Agreement in exercising any right, power or privilege under this Agreement shall operate as a waiver thereof, nor shall any single or partial exercise of any such right, power or privilege preclude any other or further exercise thereof or of any other right, power or privilege. The rights and remedies in this Agreement are cumulative with and not exclusive of any rights or remedies provided by law.

8.3 No amendment or modification to this Agreement shall be effective unless in writing and signed by all parties.

9. **ASSIGNMENT**

No party to this Agreement may assign, transfer or charge all or any of the other parties' obligations nor any of its rights or benefits arising under this Agreement without the prior written consent of the other party; except that Intrexon may assign, transfer or charge all or any of its obligations, rights and benefits arising under this Agreement without the prior written consent of the Company to (i) an Affiliate of Intrexon or (ii) to the transferee in the event Intrexon sells, conveys, disposes or otherwise transfers all of its shares of AquaBounty common stock.

10. **NOTICES**

Any demand, notice or other communication in connection with this Agreement will be in writing and will, if otherwise given or made in accordance with this clause 10, be deemed to have been duly given or made as follows:

(a) if sent by prepaid first class post to the recipient at its registered office (or such other address as may be notified to the other parties by a recipient in writing), on the second Business Day after the date of posting;

(b) if sent by air mail to the recipient at its registered office (or such other address as may be notified to the other parties by a recipient in writing), on the sixth Business Day after the date of posting; or

(c) if delivered by hand, upon delivery to the recipient at its registered office (or such other address as may be notified to the other parties by a recipient in writing),

provided that, if it is delivered by hand or sent by facsimile on a day which is not a Business Day or after 4 p.m. (at the location of the recipient) on a Business Day, it will instead be deemed given or made on the next Business Day.

11. **INVALIDITY**

If at any time any one or more of the provisions of this Agreement is or becomes invalid, illegal or unenforceable in any respect under any law, the validity, legality and enforceability of the remaining provisions shall not be in any way affected or impaired thereby.

12. **COUNTERPARTS**

This Agreement may be executed in any number of counterparts and by the parties on separate counterparts, each of which when so executed and delivered shall be an original, but all the counterparts shall together constitute one and the same instrument.

13. **GOVERNING LAW**

All questions concerning the construction, validity, enforcement and interpretation of this Agreement shall be governed by and construed and enforced in accordance with the internal laws of the State of Delaware, without regard to the principles of conflicts of law thereof. Each party agrees that all Proceedings concerning the interpretations, enforcement and defense of the transactions contemplated by this Agreement (whether brought against a party hereto or its respective affiliates, employees or agents) shall be commenced exclusively in the New York Courts. Each party hereto hereby irrevocably submits to the exclusive jurisdiction of the New York Courts for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and

hereby irrevocably waives, and agrees not to assert in any Proceeding, any claim that it is not personally subject to the jurisdiction of any such New York Court, or that such Proceeding has been commenced in an improper or inconvenient forum. Each party hereto hereby irrevocably waives personal service of process and consents to process being served in any such Proceeding by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) to such party at the address in effect for notices to it under this Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. Each party hereto hereby irrevocably waives, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to this Agreement or the transactions contemplated hereby. For the purposes of this Agreement, “Proceeding” means an action, claim, suit, investigation or proceeding (including, without limitation, an investigation or partial proceeding, such as a deposition), whether commenced or threatened.

[Signatures Appear on the Following Page]

**THIS AGREEMENT** is executed and delivered on the date stated at the beginning of this Agreement.

## Intrexon Corporation

By: /s/ Thomas R. Kasser
Name: Thomas R. Kasser
Title: President, Animal Science Division
SVP, Intrexon Corporation

## AquaBounty Technologies, Inc.

By: /s/ David A. Frank
Name: David A. Frank
Title: Chief Financial Officer

**Exhibit 10.11**

**EXECUTION COPY**
**CONFIDENTIAL**

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 March 29, 2013 (the "**Effective Date**") by and between **INTREXON CORPORATION**, a Virginia corporation with offices at 20358 Seneca Meadows Parkway, Germantown, MD 20876 ("**Intrexon**"), and **AMPLIPHI BIOSCIENCES CORPORATION,** a Washington corporation having a place of business at 800 E. Leigh St., Suite 54, Richmond, VA, 23219 ("**Ampliphi**"). Intrexon and Ampliphi 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 and DNA vectors, and the control of peptide expression; and

**WHEREAS,** Ampliphi now desires to become Intrexon's exclusive channel collaborator with respect to such technology for the purpose of developing the Bacteriophage Program (as defined herein), and Intrexon is willing to appoint Ampliphi as its exclusive channel collaborator in the Field (as defined herein, and subject to amendments to the definition as permitted herein) under the terms and conditions of this Agreement.

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

## ARTICLE 1

## DEFINITIONS

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

**1.1** "**Affiliate**" means, with respect to a particular Party, any other person or entity that directly or indirectly controls, is controlled by, or is in common control with such Party. As used in this Section 1.1, the term "controls" (with correlative meanings for the terms "controlled by" and "under common control with") means the ownership, directly or indirectly, of more than fifty percent (50%) of the voting securities or other ownership interest of an entity, or the possession, directly or indirectly, of the power to direct the management or policies of an entity, whether through the ownership of voting securities, by contract, or otherwise. Notwithstanding the foregoing, Third Security shall be deemed not to be an Affiliate of Intrexon, 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 Intrexon 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.

**1.2** "**Ampliphi Indemnitees**" has the meaning set forth in Section 9.1.

**1.3** "**Ampliphi Product**" means any product in the Field that is created, produced, developed, or identified in whole or in part during the Term through use or practice of Intrexon Channel Technology, Intrexon IP, or the Intrexon Materials.

**1.4** "**Ampliphi Program Patent**" has the meaning set forth in Section 6.2(b).

**1.5** "**Ampliphi Termination IP**" means all Patents or other intellectual property that Ampliphi 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.

**1.6** "**Applicable Laws**" has the meaning set forth in Section 8.2(d)(xii).

**1.7** "**Authorizations**" has the meaning set forth in Section 8.2(d)(xii).

**1.8** "**Bacteriophage Program**" has the meaning set forth in Section 2.1(a).

**1.9** "**CC**" has the meaning set forth in Section 2.2(b).

**1.10** "**Channel-Related Program IP**" has the meaning set forth in Section 6.1(c).

**1.11** "**Claims**" has the meaning set forth in Section 9.1.

**1.12** "**CMCC**" has the meaning set forth in Section 2.2(b).

**1.13** "**Committees**" has the meaning set forth in Section 2.2(a).

**1.14** "**Commercialize**" or "**Commercialization**" means any activities directed to marketing, promoting, distributing, importing for sale, offering to sell and/or selling Ampliphi Products.

**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 "Complementary In-Licensed Third Party IP**" has the meaning set forth in Section 3.8(a).

**1.17** "**Confidential Information**" means each Party's confidential Information, disclosed pursuant to this Agreement or any other confidentiality agreement between the Parties, regardless of whether in oral, written, graphic or electronic form.

**1.18** "**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.

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.

**1.19** "**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) an Ampliphi 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 potential, taking into account all relevant factors including market potential, profit potential, strategic value and/or proprietary protection, competition, regulatory risk and manufacturing feasibility, all 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.

**1.20** "**Equity Agreement**" has the meaning set forth in Section 5.1.

**1.21** "**Excess Product Liability Costs**" has the meaning set forth in Section 9.3.

**1.22** "**Executive Officer**" means : (a) the Chief Executive Officer of the applicable Party, or (b) 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, (i) 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 (ii) a dispute described in Section 11.1.

**1.23** "**FDA**" has the meaning set forth in Section 8.2(d)(xii).

**1.24** "**Field**" means genetically modified bacteriophages using synthetic biology, and the production of bacteriophages using synthetic biology, for bacteriophage-containing human therapeutics for use (i) in the treatment of bacterial infections associated with acute and chronic wounds, and (ii) the treatment of acute and chronic *Pseudomonas aeruginosa* lung infections, and (iii) the treatment of infections of *Clostridium difficile*. For clarity, the Field does not include the development or production of bacteriophage-containing human therapeutics in which the only bacteriophages included in such therapeutic are (A) not genetically modified, (B) not developed, selected or produced through the use of Intrexon IP, and (C) not developed or selected without the use of synthetic biology technology (such as in the case of bacteriophages selected through screening libraries, evolutionary selection, from the environment or other techniques that do not involve recombinant manipulation techniques).

**1.25** "**Field Infringement**" has the meaning set forth in Section 6.3(b).

**1.26** "**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 and the terms of Sections 4.6 and 4.7 (as appropriate), Intrexon will

bill for its internal direct costs incurred through the use of annualized standard full-time equivalents; such rate shall be based upon the actual fully loaded costs of those personnel directly involved in the provision of such good, product or service. Intrexon may, from time to time, adjust such full-time equivalent rate based on changes to its actual fully loaded costs and will review the accuracy of its full-time equivalent rate at least quarterly. Intrexon shall provide Ampliphi with reasonable documentation indicating the basis for any direct and indirect charges, any allocable overhead, and any such adjustment in full-time equivalent rate.

**1.27** "**In-Licensed Program IP**" has the meaning set forth in Section 3.9(a).

**1.28** "**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 regulatory test data, analytical and quality control data, stability data, studies and procedures, and patent and other legal information or descriptions.

**1.29** "**Infringement**" has the meaning set forth in Section 6.3(a).

**1.30** "**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) LEAP™, (3) DNA and RNA MOD engineering, (4) protein engineering, (5) transcription control chemistry, (6) genome engineering, and (7) cell system engineering.

**1.31** "**Intrexon Indemnitees**" has the meaning set forth in Section 9.2.

**1.32** "**Intrexon IP**" means the Intrexon Patents and Intrexon Know-How.

**1.33** "**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 Ampliphi to conduct the Bacteriophage Program. For the avoidance of doubt, the Intrexon Know-How shall include any Information (other than Intrexon Patents) in the Channel-Related Program IP.

**1.34** "**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 Ampliphi by or on behalf of Intrexon to conduct the Bacteriophage Program.

**1.35** "**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 Ampliphi to conduct the Bacteriophage Program. For the avoidance of doubt, the Intrexon Patents shall include any Patent in the Channel-Related Program IP.

**1.36** "**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.

**1.37** "**Inventions**" has the meaning set forth in Section 6.1(b).

**1.38** "**IPC**" has the meaning set forth in Section 2.2(b).

**1.39** "**JSC**" has the meaning set forth in Section 2.2(b).

**1.40** "**Losses**" has the meaning set forth in Section 9.1.

**1.41** "**Net Sales**" means, with respect to any Ampliphi Product, the net sales of such Ampliphi Product by Ampliphi or an Affiliate of Ampliphi (including without limitation net sales of Ampliphi Product to a non-Affiliate sublicensee but not including net sales by such non-Affiliate sublicensee), as determined in accordance with US GAAP.

**1.42** "**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.

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

**1.44** "**Proposed Terms**" has the meaning set forth in Section 11.2.

**1.45** "**Prosecuting Party**" has the meaning set forth in Section 6.2(c).

**1.46** "**RC**" has the meaning set forth in Section 2.2(b).

**1.47** "**Recovery**" has the meaning set forth in Section 6.3(f).

**1.48** "**Reserved ECC Field**" means genetically engineered bacteriophages for, and the production of bacteriophages using synthetic biology for, bacteriophage-containing veterinary therapeutics for use in the treatment of bacterial infections.

**1.49** "**Retained Product**" has the meaning set forth in Section 10.4(a).

**1.50** "**Reverted Product**" has the meaning set forth in Section 10.4(c).

**1.51** "**SEC**" means the United States Securities and Exchange Commission.

**1.52** "**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 Ampliphi 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 Ampliphi Products, but excluding: (a) any amounts paid as bona fide reimbursement or prepayment 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 Ampliphi 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); and (c) amounts received from sublicensees in respect of any Ampliphi Product sales that are included in the calculation of royalty payments made to Intrexon under Section 5.4(a).

**1.53** "**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 Ampliphi or others) at such time for the indication or, as evidenced to Intrexon by Ampliphi, have been in human clinical trials for the same indication by Third Parties, and (ii) those therapies that are being actively developed by Ampliphi for such indication or known by Ampliphi to be or have been in human clinical trials for the same indication by others; (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.

**1.54** "**Supplemental In-Licensed Third Party IP**" has the meaning set forth in Section 3.8(a).

**1.55** "**Support Memorandum**" has the meaning set forth in Section 11.2.

**1.56** "**Technology Access Fee**" for the purposes of this Agreement has the meaning as set forth in Section 5.1.

**1.57** "**Term**" has the meaning set forth in Section 10.1.

**1.58** "**Territory**" means the world.

**1.59 "Third Party**" means any individual or entity other than the Parties or their respective Affiliates.

**1.60** "**Third Security**" means Third Security, LLC.

**1.61** "**US GAAP**" means generally accepted accounting principles in the United States.

## ARTICLE 2

## SCOPE OF CHANNEL COLLABORATION; MANAGEMENT

**2.1 Scope.**

**(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 Ampliphi Products for use in the Field (collectively, the "**Bacteriophage Program**"). As provided below, the JSC shall establish, monitor, and govern projects for the Bacteriophage Program. Either Party may propose potential projects in the Field for review and consideration by the JSC.

**(b) Reservation of Bactgeriophage Veterninary Applications**. Intrexon and Ampliphi desire to provide a limited time period for the Parties after the Effecive Date to consider entering into a second exclusive channel collaboration agreement pertaining to certain veterinary applications in the Reserved Field. For a time period of one year immediately following the Effective Date, neither Intrexon nor its Affiliates shall make the Intrexon Channel Technology or Intrexon Materials available to any Third Party for the purpose of developing or Commercializing products in the Reserved Field, and neither Intrexon nor any Affiliate shall pursue (either by itself or with a Third Party or Affiliate) the Commercialization of any product for purpose of commercial use or sale in the Reserved Field. For clarity, nothing in the preceding sentence, however, shall prevent Intrexon from performing general research and development that may be applicable to the Reserved Field. During the one-year period following the Effective Date, Intrexon will not propose, negotiate, or enter into any collaboration or Commercialization agreement with a Third Party within the Reserved Field, and will, at Ampliphi's request, enter into negotiations directed toward the execution of a second exlcusive channel collaboration between the parties, which second exclusive channel collaboration will be directed to the Reserved Field (or a subset of the Reserved Field as mutually agreed by the Parties). The terms of this second exclusive channel collaboration agreement will be subject to good faith negotiation of the parties with respect to any terms relating to consideration (up-front, milestones, and royalty payments) that will be due to Intrexon, the scope of exclusive field within the Reserved Field, and the relative rights of the Parties to continue products following any termination, but otherwise will contain similar terms, rights and obligations of the parties as set forth herein.

**2.2 Committees**.

**(a) Generally**. The Parties desire to establish several committees (collectively, "**Committees**") to oversee the Bacteriophage 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.

| **Committee** | **Purpose** |
|---|---|
| Joint Steering Committee ("**JSC**") | Establish projects for the Bacteriophage Program and establish the priorities, as well as approve budgets for such projects. Approve all subcommittee projects and plans (except for decisions of the IPC). The JSC shall establish budgets not less than on a quarterly basis. |
| Chemistry, Manufacturing and Controls Committee ("**CMCC**") | Establish project plans and review and approve activities and budgets for chemistry, manufacturing, and controls under the Bacteriophage Program. |
| Regulatory Committee ("**RC**") | 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 for new Ampliphi Products under the Bacteriophage 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 Bacteriophage Program. |

| Committee | Purpose |
|---|---|
| Intellectual Property Committee **("IPC")** | Evaluate all intellectual property issues in connection with the Bacteriophage 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 three (3) 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. 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. For purposes of this Section 2.3, employees of Third Security may, at Intrexon's election, serve as members of a Committee as if they were employees of Intrexon. 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, provided that any replacement shall be qualified as set forth above. 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 Ampliphi selecting the chairperson first for the JSC, RC and CC, and Intrexon selecting the chairperson first for the CMCC and IPC. The chairperson of each Committee shall be responsible for calling meetings, preparing and circulating an agenda in advance of each meeting of such Committee, and preparing and issuing minutes of each meeting within fifteen (15) days thereafter.

**(b) Meetings**. Each Committee shall hold meetings at such times as it elects to do so, but in no event shall such meetings be held less frequently than once every six (6) months, with the caveat that both Parties may agree to suspend activities of a given Committee other than the JSC until such time as one Party informs the other Party of its then desire to reactivate the so-suspended Committee, at which point the Parties will thereafter schedule and hold the next meeting for the reactivated Committee within one (1) month. Meetings of any Committee may be held in person or by means of telecommunication (telephone, video, or web conferences). To the extent that a Committee holds any meetings in person, the Parties will alternate in designating the location for such in-person meetings, with Ampliphi selecting the first meeting location for each Committee. A reasonable number of additional representatives of a Party may attend meetings of a Committee in a non-voting capacity. Each Party shall be responsible for all of its own expenses of participating in any Committee excepting that an

Intrexon employee or agent serving on a Committee shall not prevent Intrexon from recouping the Fully Loaded Costs otherwise derived from the labor of that employee or agent in the course of providing manufacturing or support services as set forth in Sections 4.6 and 4.7 below.

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

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

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

**(b) Casting Vote at CMCC**. If a dispute at the CMCC is not resolved pursuant to Section 2.4 above, then (i) in the case of any disputes relating to the Intrexon Materials, the manufacture of an Ampliphi Product through the use of Intrexon Channel Technology or Intrexon IP, or the manufacturing of other components of Ampliphi Products contracted for or manufactured by Intrexon or reasonable controls regarding the dissemination of Intrexon Technology, Intrexon IP or Intrexon Materials, 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 Ampliphi shall have the authority to finally resolve such dispute.

**(c) Casting Vote at RC**. If a dispute at the RC is not resolved pursuant to Section 2.4 above, then the Executive Officer of Ampliphi 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 Ampliphi 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 or subcommittee other than those set forth in Section 2.2(b) is formed, then the Parties shall, at the time of such formation, agree on which Party shall have the authority to finally resolve a dispute that is not resolved pursuant to Section 2.4 above.

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

## ARTICLE 3

## LICENSE GRANTS

### 3.1 Licenses to Ampliphi.

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

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

**3.2 Sublicensing**. Except as provided in this Section 3.2, Ampliphi 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 Ampliphi Products or use or display the Intrexon Trademarks, in each case except with Intrexon's written consent, which written consent may be withheld in Intrexon's sole discretion. Notwithstanding the foregoing, Ampliphi shall have a limited right to sublicense under the circumstances described in Sections 3.2(a), 3.2(b) and 3.2(c).

**(a)** Ampliphi may transfer, to the extent reasonably necessary and after providing Intrexon with reasonable advance notice thereof, Intrexon Materials that are or express Ampliphi Products to a Third Party contractor performing contract manufacturing, fill, and/or finish responsibilities for Ampliphi Products, and may in connection therewith grant limited sublicenses necessary to enable such Third Party to perform such activities. If Ampliphi transfers any Intrexon Materials under this Section 3.2(a), Ampliphi 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.

**(b)** Ampliphi may, with Intrexon's written consent, which consent shall not be unreasonably withheld 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 display the Intrexon Trademarks. In the event that Intrexon consents to any such grant or transfer to an Affiliate, Ampliphi 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 Ampliphi), including any payment obligations owed to Intrexon hereunder.

**(c)** Ampliphi may, upon approval of the JSC and with Intrexon's written consent, which consent shall not be unreasonably withheld or delayed, sublicense the rights granted under Section 3.1 to a Third-Party, or transfer the Intrexon Materials to a Third Party, in each case who is providing services to Ampliphi in connection with Ampliphi's exercise of rights under this Agreement, provided that such sublicense or use of Intrexon Materials shall be limited to those rights or uses necessary for such Third Party to provide such services. In the event that Intrexon consents to any such grant or transfer to such a Third Party, Ampliphi shall remain responsible for the performance by any such Third Party and shall cause such Third Party to comply with the provisions of this Agreement in connection with such performance (as though such Third Party were Ampliphi).

**3.3 Limitation on Sublicensees**. None of the enforcement rights under the Intrexon Patents that are granted to Ampliphi 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**. Ampliphi 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**. Neither Intrexon nor its Affiliates shall make the Intrexon Channel Technology or Intrexon Materials available to any Third Party for the purpose of developing or Commercializing products in the Field (except as set forth in Section 3.2), 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 commercial use or sale in the Field, outside of the Bacteriophage Program. Further, neither Ampliphi nor its Affiliates shall pursue (either by itself or with a Third Party or Affiliate) outside of the Bacteriophage Program the research, development or Commercialization of any product for purpose of commercial use or sale in the Field. For clarity, the foregoing sentence shall not restrict Ampliphi's rights to research, develop or Commercialize any bacteriophage therapeutic product in which the only bacteriophages included in such therapeutic are developed, selected, or produced without the use of synthetic DNA technology, including bacteriophages selected through screening libraries, evolutionary selection or other techniques that do not involve the direct manipulation of nucleic acid sequences.

**3.6 No Prohibition on Intrexon**. Except as explicitly set forth in Sections 2.1(b), 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, Ampliphi acknowledges that, except as set forth in Section 2.1(b) with respect to the Reserved Field, Intrexon has all rights, in Intrexon's sole discretion, to use or make the Intrexon Materials, Intrexon Channel Technology (including any genetic materials used in an Ampliphi Product), and Intrexon IP available to Third Party channel partners or collaborators for use in fields outside the Field.

**3.7 Rights to Regulatory Data**. Ampliphi shall own and control all regulatory trial data and regulatory filings relating to Commercialization of Ampliphi Products (except to the extent such become Reverted Products). Ampliphi shall provide to Intrexon at Intrexon's request full copies of all trial data and reports, regulatory filings, and communications from regulatory authorities that relate specifically and solely to Ampliphi Products. To the extent that there exist any trial data and reports, regulatory filings, and communications from regulatory authorities owned by Ampliphi that relate both to Ampliphi Products and other products produced by Ampliphi outside the Field or outside the Bacteriophage Program, upon Intrexon's request Ampliphi shall provide to Intrexon copies of the portions of such data, reports, filings, and communications that relate to Ampliphi Products, provided any such materials shall be Confidential Information of Ampliphi (except to the extent such become Reverted 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 Ampliphi Products in regulatory filings made to obtain regulatory approval for products 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. Notwithstanding the provisions of this Section 3.7, Intrexon shall not, outside of the Bacteriophage Program, utilize any Ampliphi trial data or reports in support of obtaining regulatory approval for a product for use in the Field.

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.

**3.8 Third Party Licenses.**

**(a)** [*****] shall obtain [*****] any licenses from Third Parties that are required in order to practice the Intrexon Channel Technology in the Field where the licensed intellectual property is reasonably necessary for Intrexon to conduct genetic and cell engineering and related analytic activities under JSC established plans for the Bacteriophage Program (but specifically excluding intellectual property directed to any specific target genes, methods of treatment or therapy, cell lines, active pharmaceutical ingredients, delivery or packaging methods or apparatuses, or processes or methods for commercially manufacturing Ampliphi Products) ("**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 Ampliphi 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 Ampliphi Products and to the Field. As provided above in Section 3.8(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 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 (to the extent such threats would reasonably be considered to subject the Third Party owner or licensee to declaratory judgment 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 3.8(c), [*****] shall have the right to pursue a license under Complementary In-Licensed Third Party IP [*****]. For the avoidance of doubt, [*****] may at any time obtain a license under Complementary In-Licensed Third Party IP outside the Field [*****] 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. Notwithstanding the foregoing sentence, [*****] shall have the right to acquire exclusive rights to Supplemental In-Licensed Third Party IP outside the Field if (i) such rights outside the Field are limited specifically to non-genetically modified bacteriophages and, (ii) [*****] provides [*****] with thirty days notice prior to execution of any such exclusive rights to Supplemental In-Licensed Third Party IP. Any Party that is pursuing a license to any In-Licensed Program IP with respect to the Field under this Section 3.8 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 Ampliphi 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 Ampliphi Products, Ampliphi shall use commercially reasonable efforts to ensure that Ampliphi 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 Ampliphi 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 3.8(c), provided that Intrexon shall either provide unredacted copies of such upstream license agreements to Ampliphi or shall disclose in writing to Ampliphi all of such terms and conditions that are applicable to Ampliphi. Ampliphi 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 Ampliphi 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.

**3.9 Licenses to Intrexon.** Subject to the terms and conditions of this Agreement, Ampliphi hereby grants to Intrexon a non-exclusive, worldwide, fully-paid, royalty-free license, under any applicable Patents or other intellectual property Controlled by Ampliphi 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).

**3.10 Restrictions Relating to Intrexon Materials**. Ampliphi and its permitted sublicensees shall use the Intrexon Materials solely for purposes of the Bacteriophage 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, Ampliphi shall not, and shall ensure that Ampliphi personnel and permitted sublicensees do not, except as otherwise permitted in 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, Ampliphi shall be solely responsible for the development and Commercialization of Ampliphi Products. Ampliphi shall be responsible for all costs incurred in connection with the Bacteriophage 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 Ampliphi Product, to the extent such allocation, depreciation, and amortization is permitted by US GAAP, it being recognized that the majority of non-facilities scale-up costs cannot be capitalized and amortized under US GAAP); (b) costs of basic research with respect to the Intrexon Channel Technology and Intrexon Materials (i.e., platform improvements) but, for clarity, excluding research described in Section 4.7 or research requested by the JSC for the development of an Ampliphi Product (which research costs shall be reimbursed by Ampliphi); (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 Ampliphi 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 Ampliphi (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 materials between the Parties.

**4.3 Information and Reporting**. Ampliphi will keep Intrexon informed about Ampliphi's efforts to develop and Commercialize Ampliphi Products, including reasonable and accurate summaries of Ampliphi's (and its Affiliates' and, if applicable, (sub)licensees') development plans (as updated), including regulatory plans, marketing plans (as updated),

progress towards meeting the goals and milestones in such plans and explanations of any material deviations, significant developments in the development and/or Commercialization of the Ampliphi Products, including initiation or completion of a regulatory trial, submission of a United States or international regulatory filing, receipt of a response to such United States or international regulatory filing, product safety event, receipt of Regulatory Approval, or commercial launch, and manufacturing costs and pricing information. As set forth in Section 3.7 above, Ampliphi shall also provide to Intrexon copies of all final regulatory trial protocols and reports, and regulatory correspondence and filings generated by Ampliphi as soon as practical after they become available. Intrexon will keep Ampliphi informed about Intrexon's efforts (a) to establish manufacturing capabilities and facilities for Ampliphi 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 Bacteriophage 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 Ampliphi and Intrexon will be coordinated by the JSC and made in connection with JSC meetings at least once every six (6) months while Ampliphi 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, Ampliphi shall own and maintain, at its own cost, all regulatory filings and regulatory approvals for Ampliphi Products that Ampliphi is developing or Commercializing pursuant to this Agreement. As such, Ampliphi shall be responsible for reporting all adverse events related to such Ampliphi 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 Ampliphi and Intrexon establish and execute a separate safety data exchange agreement, which agreement will address and govern the timely exchange of safety information generated by Ampliphi, Intrexon, and relevant third parties with respect to specific Intrexon Materials.

**4.5 Diligence.**

**(a)** Ampliphi shall use, and shall require its sublicensees to use, Diligent Efforts to develop and Commercialize Ampliphi Products.

**(b)** Without limiting the generality of the foregoing, Intrexon may, from time to time, notify Ampliphi that it believes it has identified a Superior Therapy, and in such case Intrexon shall provide to Ampliphi its then-available information about such therapy and reasonable written support for its conclusion that the therapy constitutes a Superior Therapy. Ampliphi shall have the following obligations with respect to such proposed Superior Therapy: (i) within sixty (60) days after such notification, Ampliphi shall prepare and deliver to the JSC for review and approval a development plan detailing how Ampliphi will pursue the Superior Therapy (including a proposed budget), provided that if Amplphi reasonably requests supplemental information in support of the determination that the proposed Ampliphi Product is a Superior Therapy, such period shall be extended to sixty (60) days after Ampliphi receives

such supplemental inforation; (ii) Ampliphi shall revise the development plan as directed by the JSC; and (iii) following approval of the development plan by the JSC, Ampliphi shall use Diligent Efforts to pursue the development of the Superior Therapy under the Bacteriophage Program in accordance with such development plan. If Ampliphi fails to comply with the foregoing obligations, or if Ampliphi 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 Ampliphi's Affiliates and any permitted sublicensees shall be attributed to Ampliphi for the purposes of evaluating Ampliphi's 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 Bacteriophage 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 Ampliphi and Intrexon establish and execute a separate manufacturing and supply agreement, which agreement will establish and govern the production, quality assurance, and regulatory activities associated with manufacture of Intrexon Materials. Except as provided in Section 4.1, any manufacturing undertaken by Intrexon pursuant to the preceding sentence shall be performed in exchange for cash payments equal to Intrexon's Fully Loaded Cost in connection with such manufacturing, on terms to be negotiated by the Parties in good faith. In the event that Intrexon does not manufacture Intrexon Materials or bulk quantities of other components of Ampliphi Products, then Intrexon shall provide to Ampliphi or a contract manufacturer selected by Ampliphi and approved by Intrexon all Information Controlled by Intrexon that is (a) related to the manufacturing of such Intrexon Materials or bulk qualities of other components of Ampliphi Products for use in the Field and (b) reasonably necessary to enable Ampliphi or such contract manufacturer (as appropriate) for the sole purpose of manufacturing such Intrexon Materials or bulk quantities of other components of Ampliphi Products. The costs and expenses incurred by Intrexon in carrying out such transfer shall be borne by Intrexon. Any manufacturing Information transferred hereunder to Ampliphi or its contract manufacturer shall not be further transferred to any Third Party, including any sublicensee of Ampliphi, or any Ampliphi Affiliate without the prior written consent of Intrexon; provided, however, that Intrexon shall not unreasonably withhold such consent if necessary to permit Ampliphi to switch manufacturers.

**4.7 Support Services**. The JSC will meet promptly following the Effective Date and establish a plan under which Intrexon will provide support services to Ampliphi for the research and development of Ampliphi Products under the Bacteriophage Program, which initial

plan may be amended from time to time by the JSC. Ampliphi 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, Ampliphi shall request, or Intrexon may propose, that Intrexon perform certain additional support services with respect to researching and developing new Ampliphi Products or improving the manufacturing or processing methods for any existing Ampliphi Products. To the extent that the Parties mutually agree that Intrexon 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 would be compensated for such services by cash payments equal to Intrexon's Fully Loaded Cost in connection with such services.

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

**4.9 Trademarks and Patent Marking.** To the extent permitted by applicable law and regulations, Ampliphi shall ensure that the packaging, promotional materials, and labeling for Ampliphi Products, as appropriate, shall carry the applicable Intrexon Trademark(s), subject to Ampliphi's reasonable approval of the size, position, and location thereof. Consistent with the U.S. patent laws, Ampliphi shall ensure that Ampliphi Products, or their respective packaging or accompanying literature as appropriate, bear applicable and appropriate patent markings for Intrexon Patent numbers. Ampliphi 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. Ampliphi's use of the Intrexon Trademarks and patent markings shall be subject to prior review and approval of the IPC. Ampliphi acknowledges Intrexon's sole ownership of the Intrexon Trademarks and agrees not to take any action inconsistent with such ownership. Ampliphi covenants that it shall not use any trademark confusingly similar to any Intrexon Trademarks in connection with any products (including any Ampliphi Product). From time to time during the Term, Intrexon shall have the right to obtain from Ampliphi samples of Ampliphi Product sold by Ampliphi 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 Ampliphi 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 Ampliphi in writing thereafter. Ampliphi shall comply with reasonable policies provided by Intrexon from time-to-time to maintain the goodwill and value of the Intrexon Trademarks.

## ARTICLE 5

### COMPENSATION

**5.1 Technology Access Fee**. In partial consideration for Ampliphi's appointment as an exclusive channel collaborator in the Field and the other rights granted to Ampliphi

hereunder, Ampliphi shall issue to Intrexon, as an access fee for commercial license rights to the Intrexon IP granted under Section 3.1, certain equity interests in Ampliphi (each, a "**Technology Access Fee**") in accordance with the terms and conditions of the Stock Issuance Agreement of even date herewith (collectively, the "**Equity Agreement**"). As set forth in the Equity Agreement, the Technology Access Fee will be that number of shares of Ampliphi common stock having a value equaling $3,000,000 (the number of shares to be calculated according to the terms of the Equity Agreement), and such shares issuance will occur contemporaneously with the execution of this Agreement and the Equity Agreement. Provided that all closing conditions for the Technology Access Fee Shares (as defined in the Equity Agreement) that are within the reasonable control of Intrexon have been satisfied or waived, the issuance of the Technology Access Fee Shares (as set forth in the Equity Agreement) is a condition subsequent to the effectiveness of this Agreement.

**5.2 Commercialization Milestones**. Upon the attainment of certain milestone events by an Ampliphi Product (whether such attainment is achieved by Ampliphi, an Affiliate of Ampliphi, or sublicensee of Ampliphi), Ampliphi has agreed to make certain milestone payments to Intrexon as generally set forth below in Sections 5.2(a) and 5.2(b), which payments (subject to the terms and conditions of the Equity Agreement) shall be either in cash or in Ampliphi common stock at Ampliphi's sole discretion.

**(a) Clinical Milestone**. Within thirty (30) days of the achievement of the Phase II Milestone Event (as defined in the Equity Agreement), Ampliphi will pay to Intrexon, according to the timelines and procedures set forth in the Equity Agreement, one of the following: (i) [*****] in cash, or (ii) the Phase II Milestone Shares (as defined in the Equity Agreement).

**(b) Approval Milestone**. Within thirty (30) days of the achievement of the Approval Milestone Event (as defined in the Equity Agreement), Ampliphi will pay to Intrexon, according to the timelines and procedures set forth in the Equity Agreement, one of the following: (i) [*****] in cash, or (ii) the Approval Milestone Shares (as defined in the Equity Agreement).

**5.3 Equity Agreement Controls.** All issuances of equity interests to Intrexon shall be in accordance with the terms and conditions of the Equity Agreement, which Equity Agreement shall control to the extent they may conflict with Sections 5.1 or 5.2 of this Agreement.

**5.4 Royalties.**

**(a)** No later than thirty (30) days after each calendar quarter in which there are positive Net Sales arising from the sale of any Ampliphi Product in the Field in the Territory, Ampliphi shall pay to Intrexon on an Ampliphi Product-by-Ampliphi Product basis a [*****] royalty on the first fifty million dollars ($50M) of annual Net Sales (cumulative worldwide for all Ampliphi Products), an [*****] royalty on the portion of annual Net Sales (cumulative worldwide for all Ampliphi Products) exceeding fifty million dollars ($50M) up to

and including one hundred million dollars ($100M) of annual Net Sales (cumulative worldwide for all Ampliphi Products), a [*****] royalty on the portion of annual Net Sales exceeding one hundred million dollars ($100M) up to and including two-hundred million dollars ($200M) of annual Net Sales (cumulative worldwide for all Ampliphi Products), and a [*****] royalty on the portion of annual Net Sales exceeding two-hundred million dollars ($200M) of annual Net Sales (cumulative worldwide for all Ampliphi Products). Commencing with the Effective Date, in the event that are negative Net Sales for a particular Ampliphi Product in any calendar quarter, neither Ampliphi nor Intrexon shall owe any payments hereunder with respect to such Ampliphi Product.

**(b)** No later than thirty (30) days after each calendar quarter in which Ampliphi or any Ampliphi Affiliate receives Sublicensing Revenue, Ampliphi shall pay to Intrexon [*****] of such Sublicensing Revenue.

**5.5 Method of Payment**. Payments due to Intrexon under this Agreement shall be paid in United States dollars by wire transfer to a bank in the United States designated in writing by Intrexon. All references to “dollars” or “$” herein shall refer to United States dollars.

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

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

**(b)** itemized calculation of Net Sales, showing all applicable deductions;

**(c)** itemized calculation of any payment due under Section 5.4(b), including an identification of the Ampliphi Product involved, the quantity so used, the prevailing market price being used by Ampliphi, and an indication of how Ampliphi determined such prevailing market price;

**(d)** itemized calculation of Sublicensing Revenue;

**(e)** the amount of any negative Net Sales for the applicable calendar quarter;

**(f)** the amount of the payment (if any) due pursuant to each of Sections 5.4(a) and 5.4(b);

**(g)** the amount of taxes, if any, withheld to comply with any applicable law; and

**(h)** the exchange rates used in any of the foregoing calculations.

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.

For three (3) years after each sale or other commercial use of Ampliphi Product, or after incurring any component item Ampliphi incorporated into its calculation of Net Sales or Sublicensing Revenues, or otherwise impacting Ampliphi's calculations with regard to payments made to Intrexon in accord with Section 5.4(a) or 5.4(b), Ampliphi 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, Ampliphi shall permit an independent certified public accounting firm of internationally recognized standing selected by Intrexon, and reasonably acceptable to Ampliphi, 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 Ampliphi and its Affiliates to verify the accuracy and timeliness of the reports and payments made by Ampliphi 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, Ampliphi shall pay additional amounts, with interest from the date originally due as set forth in Section 5.9, within thirty (30) days of receipt of the accounting firm's written report. If the amount of the underpayment is greater than five percent (5%) of the total amount actually owed for the period audited, then Ampliphi 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).

**(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 Ampliphi 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. Ampliphi 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 Ampliphi or the appropriate governmental authority (with the assistance of Ampliphi 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 Ampliphi of its obligation to withhold tax, and Ampliphi shall apply the reduced rate of withholding tax, or dispense with withholding tax, as the case may be, provided that Ampliphi 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, Ampliphi withholds any amount, it shall make timely payment to the proper taxing authority of the withheld amount, and send to Intrexon proof of such payment within forty-five (45) days following that latter payment.

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

## ARTICLE 6

## INTELLECTUAL PROPERTY

**6.1 Ownership.**

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

**(b)** Ampliphi 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 Bacteriophage 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 made with, using, or otherwise incorporating Intrexon Channel Technology, together with all Patent rights and other intellectual property rights therein (the "**Channel-Related Program IP**"). Ampliphi hereby assigns all of its right, title and interest in and to the Channel-Related Program IP to Intrexon. Ampliphi 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 Ampliphi 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. Ampliphi shall be under appropriate written agreements with each of its employees, contractors, or agents working on the Bacteriophage Program, pursuant to which such person shall grant all rights in the Inventions to Ampliphi (so that Ampliphi may convey certain of such rights to Intrexon, as provided herein) and agree to protect all Confidential Information relating to the Bacteriophage Program.

**6.2 Patent Prosecution.**

**(a)** Intrexon shall have the sole right, but not the obligation, to (i) conduct and control the filing, prosecution and maintenance of the Intrexon Patents, and (ii) conduct and control the filing, prosecution, and maintenance of any applications for patent term extension and/or supplementary protection certificates that may be available as a result of the regulatory approval of any Ampliphi Product. At the reasonable request of Intrexon, Ampliphi shall cooperate with Intrexon in connection with such filing, prosecution, and maintenance, at Intrexon's expense. Under no circumstances shall Ampliphi (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, or (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 Ampliphi Product.

**(b)** Ampliphi 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 Ampliphi or its Affiliates and not assigned to Intrexon under Section 6.1(c) ("**Ampliphi Program Patents**"). At the reasonable request of Ampliphi, Intrexon shall cooperate with Ampliphi in connection with such filing, prosecution, and maintenance, at Ampliphi's expense.

**(c)** As used in this Section, "**Prosecuting Party**" means Intrexon in the case of Intrexon Patents and Ampliphi in the case of Ampliphi 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 Ampliphi Program Patents, as applicable. The Prosecuting Party shall:

(i) regularly provide the other Party in advance with reasonable information relating to the Prosecuting Party's prosecution of Patents hereunder, including by providing copies of substantive communications, notices and actions submitted to or received from the relevant patent authorities and copies of drafts of filings and correspondence that the

Prosecuting Party proposes to submit to such patent authorities (it being understood that, to the extent that any such information is readily accessible to the public, the Prosecuting Party may, in lieu of directly providing copies of such information to such other Party, provide such other Party with sufficient information that will permit such other Party to access such information itself directly);

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

(iii) consult with the non-Prosecuting Party before taking any action that would reasonably be expected to have a material adverse impact on the scope of claims within the Intrexon Patents and Ampliphi 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, Ampliphi 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 Ampliphi exercises the foregoing right, Intrexon agrees to be named in any such action if required. If Ampliphi 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) [*****]. To the extent Ampliphi shall be entitled to a share of the Recovery a set forth in Section 6.3(f), Intrexon and Ampliphi shall bear the costs and expenses of such enforcement equally. 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 Ampliphi on such determination. For the avoidance of doubt, Intrexon has no obligations under this Agreement to enforce any Intrexon Patents against, or otherwise abate, any Infringement that is not a Field Infringement.

**(d)** In the event a Party pursues an action under this Section 6.3, the other Party shall reasonably cooperate with the enforcing Party with respect to the investigation and prosecution of any alleged, threatened, or actual Infringement, at the enforcing Party's expense (except with respect to an action under Section 6.3(c), where all costs and expenses will be shared equally in accordance with terms thereof).

**(e)** Ampliphi 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 Ampliphi in the Field or adversely affects any Intrexon Patent with respect to the Field without Ampliphi's 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 Ampliphi pursuant to Section 6.3(b), Ampliphi shall retain one hundred percent (100%) of any Recovery, but such Recovery shall be shared with Intrexon as Net Sales. In any action initiated by Intrexon or Ampliphi pursuant to Section 6.3(c), the Parties shall share the Recovery equally, and such Recovery shall not be deemed to constitute Sublicensing Revenue.

**(g)** Ampliphi shall promptly notify Intrexon in writing of any suspected, alleged, threatened, or actual Infringement of which it becomes aware, and Intrexon shall promptly notify Ampliphi 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 and can be demonstrated by written records, other than under an obligation of confidentiality, at the time of disclosure by the other Party;

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

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

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

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

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

**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 regulatory trials, or to gain regulatory approval, of Ampliphi 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) who agree to be bound by obligations of confidentiality and non-use at least equivalent in scope to those set forth in this Article 7; and

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

**7.3 Publicity; Publications**. The Parties agree that the public announcement of the execution of this Agreement shall be substantially in the form of a press release and/or the filing of a Form 8-K by Ampliphi, which shall be mutually agreed to by the Parties. Each Party will provide the other Party with the opportunity to review and comment, prior to submission or presentation, on external reports, publications and presentations (e.g., press releases, reports to government agencies, abstracts, posters, manuscripts and oral presentations) that refer to the Bacteriophage Program or programs that are approved by the JSC. For such reports, publications, and presentations, the disclosing Party will provide the other Party at least fifteen (15) calendar days for review of the proposed submission or presentation. In the case of a Form 8-K filing, such shall be provided to Intrexon by Ampliphi as soon as practicable prior to filing. 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, Ampliphi acknowledges that Intrexon's authorized representative(s), during regular business hours may (i) examine and inspect Ampliphi's facilities and (ii) inspect all data and work products relating to this Agreement, subject to restrictions imposed by applicable laws. Any examination or inspection hereunder shall require five (5) business days written notice from Intrexon to Ampliphi. Ampliphi 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 4.5, and the confidentiality obligations under Article 7, Intrexon acknowledges that Ampliphi 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 Ampliphi to Intrexon. Intrexon will make itself and the pertinent employees and/or agents available, on a reasonable basis, to Ampliphi for the aforementioned compliance review.

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

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

## ARTICLE 8

### REPRESENTATIONS AND WARRANTIES

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

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

**(b) Due Authorization**. Ampliphi is duly authorized to execute and deliver this Agreement and to perform its obligations hereunder, and the person executing this Agreement on Ampliphi'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 Ampliphi 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 Ampliphi 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. Ampliphi is aware of no action, suit or inquiry or investigation instituted by any governmental agency which questions or threatens the validity of this Agreement.

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

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

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

**(c) Binding Agreement**. This Agreement is a legal and valid obligation binding upon Intrexon and enforceable in accordance with its terms, except as such enforcement may be limited by applicable bankruptcy, insolvency, reorganization, arrangement, moratorium or other similar laws affecting creditors' rights, and subject to general equity principles and to limitations on availability of equitable relief, including specific performance. The execution, delivery and performance of this Agreement by Intrexon does not conflict with any agreement, instrument or understanding, oral or written, to which it is a party or by which it may be bound. Intrexon is aware of no action, suit or inquiry or investigation instituted by any governmental agency which questions or threatens the validity of this Agreement.

**(d) Additional Intellectual Property Representations**.

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

(ii) The Intrexon Patents existing as of the Effective Date constitute all of the Patents Controlled by Intrexon as of such date that are necessary for the development, manufacture and Commercialization of Ampliphi Products;

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

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

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

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

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

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

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

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

(xi) None of the Intrexon Patents owned by Intrexon or its Affiliates, and, to Intrexon's knowledge, the Intrexon Patents licensed to Intrexon or its Affiliates, have been adjudged invalid or unenforceable by a court of competent jurisdiction or applicable

government agency, in whole or in part, and there is no pending or, to Intrexon's knowledge, threatened action, suit, proceeding or claim by others challenging the validity or scope of any such Intrexon Patents; and

(xii) Except as otherwise disclosed in writing to Ampliphi, Intrexon: (A) is in material compliance with all statutes, rules or regulations applicable to the ownership, testing, development, manufacture, packaging, processing, use, distribution, marketing, labeling, promotion, sale, offer for sale, storage, import, export or disposal of any product that is under development, manufactured or distributed by Intrexon in the Field ("**Applicable Laws**"); (B) has not received any FDA Form 483, notice of adverse finding, warning letter, untitled letter or other correspondence or notice from the United States Food and Drug Administration (the "**FDA**") or any other federal, state, local or foreign governmental or regulatory authority alleging or asserting material noncompliance with any Applicable Laws or any licenses, certificates, approvals, clearances, authorizations, permits and supplements or amendments thereto required by any such Applicable Laws ("**Authorizations**"), which would, 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, letters to customers, or other notice or action relating to the alleged lack of safety or efficacy of any product or any alleged product defect or violation and, to Intrexon's knowledge, no third party has initiated, conducted or intends to initiate any such notice or action.

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

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

## ARTICLE 9

### INDEMNIFICATION

**9.1 Indemnification by Intrexon**. Intrexon agrees to indemnify, hold harmless, and defend Ampliphi and its Affiliates and their respective directors, officers, employees, and agents (collectively, the "**Ampliphi 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 gross negligence or willful misconduct of Intrexon or any of its Affiliates, or their respective employees or agents, (b) the use, handling, storage or transport of Intrexon Materials by or on behalf of Intrexon or its Affiliates, licensees (other than Ampliphi) or sublicensees; or (c) breach by Intrexon of any representation, warranty or covenant in this Agreement. Notwithstanding the foregoing, Intrexon shall not have any obligation to indemnify the Ampliphi Indemnitees to the extent that a Claim arises from (i) the gross negligence or willful misconduct of Ampliphi or any of its Affiliates, licensees, or sublicensees, or their respective employees or agents; or (ii) a breach by Ampliphi of a representation, warranty, or covenant of this Agreement.

**9.2 Indemnification by Ampliphi**. Ampliphi 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 gross negligence or willful misconduct of Ampliphi or any of its Affiliates or their respective employees or agents; (b) the use, handling, storage, or transport of Intrexon Materials by or on behalf of Ampliphi or its Affiliates, licensees, or sublicensees; (c) breach by Ampliphi 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 Ampliphi Product by or on behalf of Ampliphi or its Affiliates, licensees, or sublicensees. Notwithstanding the foregoing, Ampliphi shall not have any obligation to indemnify the Intrexon Indemnitees to the extent that a Claim arises from (i) the gross 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 Ampliphi 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 Ampliphi Products, Ampliphi shall maintain in effect and good standing a product liability insurance policy issued by a reputable insurance company in amounts considered standard for the industry. Immediately prior to, and during the conduct of any regulatory trials, Ampliphi shall maintain in effect and good standing a regulatory trials liability insurance policy issued by a reputable insurance company in amounts considered standard for the industry. At Intrexon's reasonable request, Ampliphi shall provide Intrexon with all details regarding such policies, including without limitation copies of the applicable liability insurance contracts. Ampliphi shall use reasonable efforts to include Intrexon as an additional insured on any such policies.

## ARTICLE 10

### TERM; TERMINATION

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

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

**(a)** Either Party shall have the right to terminate this Agreement upon written notice to the other Party if the other Party commits any material breach of this Agreement that such breaching Party fails to cure within sixty (60) days following written notice from the nonbreaching Party specifying such breach; provided, however, that if Ampliphi commits any breach of the provisions of Section 4.10 of this Agreement, Intrexon shall have the right to terminate this Agreement if Ampliphi fails after notice from Intrexon to cure such breach within thirty (30) days following written notice thereof.

**(b)** Intrexon shall have the right to terminate this Agreement, at its sole discretion, if any necessary shareholder, member, exchange, and/or board of director approvals of Ampliphi have not been obtained, and the Technology Access Fee Shares (as defined in the Equity Agreement) have not been issued, within the time frames set forth in the Equity Agreement.

**(c)** Intrexon shall have the right to terminate this Agreement under the circumstances set forth in Section 4.5(b) upon written notice to Ampliphi, such termination to become effective sixty (60) days following such written notice unless Ampliphi 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 Ampliphi execute any purported assignment of this Agreement contrary to the prohibitions in Section 12.8, such termination occurring upon Intrexon providing written notice to Ampliphi and becoming effective immediately upon such written notice.

**10.3 Termination by Ampliphi**. Ampliphi shall have the right to voluntarily terminate this Agreement in its entirety upon ninety (90) days written notice to Intrexon at any time.

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

(i) the particular product is an Ampliphi Product that is being sold by Ampliphi (or, as may be permitted under this Agreement, its Affiliates and, if applicable, (sub)licensees) triggering royalty payments therefor under Section 5.4(a) or (b) of this Agreement,

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

(iii) the particular product is an Ampliphi 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 an Ampliphi Product that is the subject of an ongoing or completed phase 2 or phase 3 clinical trial in the Field; or

(v) in the event of termination by Ampliphi pursuant to Section 10.2, the particular product is an Ampliphi Product that is the subject of an effective investigational new drug application with the FDA, or is an Ampliphi Product for which Ampliphi has commenced at least one JSC-authorized *in vivo* good laboratory practices animal study that is expected to be used for filing an investigational new drug application for such Ampliphi Product.

Such right to continue development and Commercialization shall be subject to Ampliphi's full compliance with the payment provisions in Article 5, a continuing obligation for Ampliphi 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 Ampliphi to continue to obtain regulatory approval for, 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 Ampliphi under this Agreement shall terminate and shall revert to Intrexon without further action by either Intrexon or Ampliphi. Ampliphi's 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 Ampliphi Products other than the Retained Products shall be referred to herein as the "**Reverted Products**." Ampliphi 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 Ampliphi 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. Ampliphi 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**. Ampliphi shall promptly return, or at Intrexon's request, destroy, any Intrexon Materials in Ampliphi's 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**. Ampliphi is automatically deemed to grant to Intrexon a worldwide, fully paid, royalty-free, exclusive (even as to Ampliphi and its Affiliates), irrevocable, license (with full rights to sublicense) under the Ampliphi 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 Ampliphi 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**. Ampliphi 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. Ampliphi 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, Ampliphi shall provide copies of the portions of such regulatory filings that relate to Reverted Products and shall reasonably cooperate to assist Intrexon in obtaining the benefits of such regulatory approvals with respect to the Reverted Products.

**(g) Data Disclosure**. Ampliphi shall provide to Intrexon copies of the relevant portions of all material reports and data, including regulatory trial data and reports, obtained or generated by or on behalf of Ampliphi 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, Ampliphi shall promptly provide to Intrexon copies of all Third Party agreements under which Ampliphi 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, Ampliphi shall promptly work with Intrexon to either, as appropriate (i) assign to Intrexon the Third Party agreement(s), or (ii) 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 Ampliphi and Ampliphi 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, Ampliphi shall transfer to Intrexon all quantities of Reverted Product (including final products or work-in-process) in the possession of Ampliphi or its Affiliates. Ampliphi 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, Ampliphi shall promptly provide to Intrexon copies of all agreements between Ampliphi 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, Ampliphi shall promptly: (i) 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 (ii) with respect to all other such Third Party agreements, Ampliphi shall reasonably cooperate to assist Intrexon in obtaining the benefits of such agreements. Ampliphi 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 Ampliphi's breach. For the avoidance of doubt, Intrexon shall have no obligation to assume any of Ampliphi's obligations under any Third Party agreement.

**(k) Commercialization**. Intrexon shall have the right to develop and Commercialize the Reverted Products itself or with one or more Third Parties, and shall have the right, without obligation to Ampliphi, 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 Ampliphi) 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 Ampliphi 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)), 5.6 through 5.8, 6.1, 6.2 (with subsection (c) surviving only to the extent relating to Intrexon Patents that are relevant to Retained Products that, to Intrexon's knowledge, are being developed or Commercialized at such time, if any), 7.1, 7.2, 7.4, 7.5, 10.4, and 10.5; Articles 9, 11, and 12; and any relevant definitions in Article 1. Further, Article 7 and Sections 4.5(a), 4.5(c), 5.2 through 5.9, and 9.5 will survive termination of this Agreement to the extent there are applicable Retained Products.

## ARTICLE 11

## DISPUTE RESOLUTION

**11.1 Disputes**. It is the objective of the Parties to establish procedures to facilitate the resolution of disputes arising under this Agreement in an expedient manner by mutual cooperation and without resort to litigation. In the event of any disputes, controversies or

differences which may arise between the Parties out of or in relation to or in connection with this Agreement, including, without limitation, any alleged failure to perform, or breach, of this Agreement, or any issue relating to the interpretation or application of this Agreement, then upon the request of either Party by written notice, the Parties agree to meet and discuss in good faith a possible resolution thereof, which good faith efforts shall include at least one in-person meeting between the Executive Officers of each Party. If the matter is not resolved within thirty (30) days following the written request for discussions, either Party may then invoke the provisions of Section 11.2.

**11.2 Arbitration**. Any dispute, controversy, difference or claim which may arise between the Parties, 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, with the arbitration to be held in the state where the other Party's principal office is located (or some other place as may be mutually agreed by the Parties). Promptly following receipt of such notice, the Parties shall meet and discuss in good faith and seek to agree on an arbitrator to resolve the issue, which arbitrator shall be neutral and independent of both Parties and all of their respective Affiliates, shall have significant experience and expertise in licensing and partnering agreements in the pharmaceutical and biotechnology industries, and shall have some experience in mediating or arbitrating issues relating to such agreements. If the Parties cannot agree on a single arbitrator within fifteen (15) days of request by a Party for arbitration, then each Party shall select an arbitrator meeting the foregoing criteria and the two (2) arbitrators so selected shall select within ten (10) days of their appointment a third arbitrator meeting the foregoing criteria. Within fifteen (15) days after an arbitrator(s) is selected (in the case of the three-person panel, when the third arbitrator is selected), each Party will deliver to both the arbitrator(s) and the other Party a detailed written proposal setting forth its proposed terms for the resolution for the matter at issue (the "**Proposed Terms**" of the Party) and a memorandum (the "**Support Memorandum**") in support thereof. The Parties will also provide the arbitrator(s) a copy of this Agreement, as it may be amended at such time. Within fifteen (15) days after receipt of the other Party's Proposed Terms and Support Memorandum, each Party may submit to the arbitrator(s) (with a copy to the other Party) a response to the other Party's Support Memorandum. Neither Party may have any other communications (either written or oral) with the arbitrator(s) other than for the sole purpose of engaging the arbitrator or as expressly permitted in this Section 11.2; provided that, the arbitrator(s) may convene a hearing if the arbitrator(s) so chooses to ask questions of the Parties and hear oral argument and discussion regarding each Party's Proposed Terms. Within sixty (60) days after the arbitrator's appointment, the arbitrator(s) will select one of the two Proposed Terms (without modification) provided by the Parties that he or she believes is most consistent with the intention underlying and agreed principles set forth in this Agreement. The decision of the arbitrator(s) shall be final, binding, and unappealable. For clarity, the arbitrator(s) must select as the only method to resolve the matter at issue one of the two sets of Proposed Terms, and may not combine elements of both Proposed Terms or award any other relief or take any other action.

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

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

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

**11.6 Injunctive Relief**. Nothing in this Article 11 will preclude either Party from seeking equitable relief or interim or provisional relief from a court of competent jurisdiction, including a temporary restraining order, preliminary injunction or other interim equitable relief, concerning a dispute either prior to or during any arbitration if necessary to protect the interests of such Party or to preserve the status quo pending the arbitration proceeding. Specifically, the Parties agree that a material breach by either Party of its obligations in Section 3.5 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 3.5 or Article 7, and without further proof of irreparable harm other than this acknowledgement, such non-breaching Party shall be entitled to seek (a) immediate equitable relief, specifically including, but not limited to, both interim and permanent restraining orders and injunctions, without bond, and (b) such other and further equitable relief as the court may deem proper under the circumstances. For the avoidance of doubt, nothing in this Section 11.6 shall otherwise limit a breaching Party's opportunity to cure a material breach as permitted in accordance with Section 10.2.

**11.7 Confidentiality**. The arbitration proceeding shall be confidential and the arbitrator(s) shall issue appropriate protective orders to safeguard each Party's Confidential Information. Except as required by law, no Party shall make (or instruct the arbitrator(s) to make) any public announcement with respect to the proceedings or decision of the arbitrator(s)

without prior written consent of the other Party. The existence of any dispute submitted to arbitration, and the award, shall be kept in confidence by the Parties and the arbitrator(s), except as required in connection with the enforcement of such award or as otherwise required by applicable law.

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

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

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

## ARTICLE 12

## GENERAL PROVISIONS

**12.1 Use of Name**. No right, express or implied, is granted by this Agreement to either Party to use in any manner the name of the other or any other trade name or trademark of the other in connection with the performance of this Agreement, except that (a) either Party may use the name of the other Party as required by regulations and in press releases accompanying quarterly and annual earnings reports approved by the issuer's Board of Directors, and (b) Ampliphi may use the Intrexon Trademarks in accord with 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**. The Parties are not employees or legal representatives of the other Party for any purpose. Neither Party shall have the authority to enter into any contracts in the name of or on behalf of the other Party. This Agreement shall not constitute, create, or in any way be interpreted as a joint venture, partnership, or business organization of any kind.

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

| | |
|---|---|
| If to Intrexon: | Intrexon Corporation<br>20358 Seneca Meadows Parkway<br>Germantown, MD 20876<br>Attention: President, Human Therapeutics Division<br>Fax: (301) 556-9901 |
| with a copy to: | Intrexon Corporation<br>20358 Seneca Meadows Parkway<br>Germantown, MD 20876<br>Attention: Legal Department<br>Fax: (301) 556-9902 |
| If to Ampliphi: | Ampliphi Biosciences<br>800 E. Leigh St., Suite 54<br>Richmond, VA 23219<br>Attention: Chief Executive Officer<br>Fax: |

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

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

**12.7 Entire Agreement; Amendment**. This Agreement, including any exhibits attached hereto, constitute the entire, final, complete and exclusive agreement between the Parties and supersede all previous agreements or representations, written or oral, with respect to the subject matter of this Agreement (including any prior confidentiality agreement between the Parties). All information of Intrexon or Ampliphi 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 Ampliphi 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.

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

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

*[Remainder of page intentionally left blank.]*

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

| **INTREXON CORPORATION** | **AMPLIPHI BIOSCIENCES CORPORATION** |
|---|---|
| By: /s/ Jayson Rieger | By: /s/ Philip Young |
| Name: Jayson M. Rieger, Ph.D. | Name: Philip Young |
| Title: President of Human Therapeutics Division and Senior Vice President | Title: CEO |

**Exhibit 10.12**

**EXECUTION COPY**

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 March 29, 2013 (the "**Effective Date**") by and between **INTREXON CORPORATION**, a Virginia corporation with offices at 20358 Seneca Meadows Parkway, Germantown, MD 20876 ("**Intrexon**"), and **GENOPAVER, LLC,** a Delaware limited liability company having a place of business at 2875 South Ocean Boulevard, Suite 214, Palm Beach, FL 33480 ("**Genopaver**"). Intrexon and Genopaver 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 and DNA vectors, and the control of peptide expression; and

**WHEREAS**, Genopaver now desires to become Intrexon's exclusive channel collaborator with respect to such technology for the purpose of developing Genopaver Products (as defined herein), and Intrexon is willing to appoint Genopaver as a channel collaborator in the Field (as defined herein, and subject to amendments to the definition as permitted herein) 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** "**Active Pharmaceutical Ingredient**" means a compound, whether naturally occurring, chemically synthesized, or biologically produced, that is regulated as a drug by the FDA.

**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 1.1, the term "controls" (with correlative meanings for the terms "controlled by" and "under common control with") means the ownership, directly or indirectly, of 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 Genopaver, 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 Intrexon or Genopaver 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 Genopaver.

**1.3** "**Alkaloid**" means the compounds, commonly referred to as true alkaloids, that contain a nitrogen heterocycle and originate from amino acids included in the following classes of compounds: pyrrolidine derivatives, tropane derivatives, pyrrolizidine derivatives, piperidine derivatives, quinolizidine derivatives, indolizidine derivatives, pyridine derivatives, isoquinoline derivatives, oxazole derivatives, isoxazole derivatives, thiazone derivatives, quinazoline derivatives, acridine derivatives, quinoline derivatives, indole derivatives, imadazole derivatives, and purine derivatives.

**1.4** "**Alkaloid Program**" means the channel collaboration between the Parties as established and governed by this Agreement.

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

**1.6** "**Authorizations**" has the meaning set forth in Section 8.2(d)(xii).

**1.7** "**CC**" has the meaning set forth in Section 2.2(b).

**1.8** "**Channel-Related Program IP**" has the meaning set forth in Section 6.1(c).

**1.9** "**Claims**" has the meaning set forth in Section 9.1.

**1.10** "**CMCC**" has the meaning set forth in Section 2.2(b).

**1.11** "**Committees**" has the meaning set forth in Section 2.2(a).

**1.12** "**Commercialize**" or "**Commercialization**" means any activities directed to marketing, promoting, distributing, importing for sale, offering to sell and/or selling Genopaver Products.

**1.13** "**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.

**1.14 "Complementary In-Licensed Third Party IP**" has the meaning set forth in Section 3.8(a).

**1.15** "**Confidential Information**" means each Party's confidential Information, disclosed pursuant to this Agreement or any other confidentiality agreement between the Parties, regardless of whether in oral, written, graphic or electronic form.

**1.16** "**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.

**1.17** "**Costs of Goods Sold**" or "**COGS**" means all Manufacturing Costs that are directly and reasonably attributable to manufacturing of an Genopaver Product in accordance with US GAAP for commercial sale in the countries where such Genopaver Product has been launched.

**1.18** "**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 Genopaver 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.

**1.19** "**Excess Product Liability Costs**" has the meaning set forth in Section 9.3.

**1.20** "**Executive Officer**" means : (a) the Chief Executive Officer of the applicable Party, or (b) 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, (i) 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 (ii) a dispute described in Section 11.1.

**1.21** "**FDA**" has the meaning set forth in Section 8.2(d)(xii).

**1.22** "**Field**" means the fermentative production of Alkaloids through genetically modified cell-lines and substrate feeds for use as Active Pharmaceutical Ingredients or as commercially-sold intermediates in the manufacture of Active Pharmaceutical Ingredients. The Field specifically excludes the use of Alkaloids for the manufacture of diacylhydrazines or any other molecule that controls an ecdysone-based switch. For clarity, the Field does not include the production of Alkaloids in genetically modified whole plants.

**1.23** "**Field Infringement**" has the meaning set forth in Section 6.3(b).

**1.24** "**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 and the terms of Section 4.5, Intrexon will bill for its internal direct costs incurred through the use of annualized standard full-time equivalents; such rate shall be based upon the actual fully loaded costs of those personnel directly involved in the provision of such good, product or service. Intrexon may, from time to time, adjust such full-time equivalent rate based on changes to its actual fully loaded costs and will review the accuracy of its full-time equivalent rate at least quarterly. Intrexon shall provide Genopaver with reasonable documentation indicating the basis for any direct and indirect charges, any allocable overhead, and any such adjustment in full-time equivalent rate.

**1.25** "**Genopaver Indemnitees**" has the meaning set forth in Section 9.1.

**1.26** "**Genopaver 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 Genopaver during the Term through use or practice of Intrexon Channel Technology, Intrexon IP, or the Intrexon Materials.

**1.27** "**Genopaver Program Patent**" has the meaning set forth in Section 6.2(b).

**1.28** "**Genopaver Termination IP**" means all Patents or other intellectual property that Genopaver 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.

**1.29** "**Gross Profit**" means, with respect to sales of a particular product by a seller who is the producer of such product, the gross revenues derived by that seller or an Affiliate of that seller (including without limitation net sales of the product to a non-Affiliate sublicensee but not including net sales by such non-Affiliate sublicensee), as determined in accordance with US GAAP as the gross amount invoiced on account of sales of the product less COGS 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, Gross Profit 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 an Genopaver Product is sold to any Third Party together with other products or services, the price of such product, solely for purposes of the calculation of Gross Profit, 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.

**1.30** "**In-Licensed Program IP**" has the meaning set forth in Section 3.8(a).

**1.31** "**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 regulatory test data, analytical and quality control data, stability data, studies and procedures, and patent and other legal information or descriptions.

**1.32** "**Infringement**" has the meaning set forth in Section 6.3(a).

**1.33** "**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) LEAP™, (3) DNA and RNA MOD engineering, (4) protein engineering, (5) transcription control chemistry, (6) genome engineering, and (7) cell system engineering.

**1.34** "**Intrexon Indemnitees**" has the meaning set forth in Section 9.2.

**1.35** "**Intrexon IP**" means the Intrexon Patents and Intrexon Know-How.

**1.36** "**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 Genopaver to conduct the Alkaloid Program. For the avoidance of doubt, the Intrexon Know-How shall include any Information (other than Intrexon Patents) in the Channel-Related Program IP.

**1.37** "**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 Genopaver by or on behalf of Intrexon to conduct the Alkaloid Program.

**1.38** "**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 Genopaver to conduct the Alkaloid Program. For the avoidance of doubt, the Intrexon Patents shall include any Patent in the Channel-Related Program IP.

**1.39** "**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.

**1.40** "**Inventions**" has the meaning set forth in Section 6.1(b).

**1.41** "**IPC**" has the meaning set forth in Section 2.2(b).

**1.42** "**JSC**" has the meaning set forth in Section 2.2(b).

**1.43** "**Losses**" has the meaning set forth in Section 9.1.

**1.44 "Manufacturing Costs"** means, with respect to a given Genopaver Product, the full-time equivalent costs (under a reasonable accounting mechanism to be agreed upon by the Parties) and out-of-pocket costs that Genopaver or any of its Affiliates incurred in manufacturing such products, including costs and expenses incurred in connection with (a) the development or validation of any manufacturing process, formulations or delivery systems, or improvements to the foregoing; (b) manufacturing scale-up; (c) in-process testing, stability testing and release testing; (d) quality assurance/quality control development; (e) internal and Third Party costs and expenses incurred in connection with qualification and validation of Third Party contract manufacturers, including scale up, process and equipment validation, and initial manufacturing

licenses, approvals and inspections; (f) packaging development and final packaging and labeling; (g) shipping configurations and shipping studies; and (h) overseeing the conduct of any of the foregoing. "Manufacturing Costs" shall further include: (i) to the extent that any such Genopaver Product is manufactured by a Third Party manufacturer, the out-of-pocket costs incurred by Genopaver or any of its Affiliates to the Third Party for the manufacture and supply (including packaging and labeling) thereof, and any reasonable out-of-pocket costs and direct labor costs incurred by Genopaver or any of its Affiliates in managing or overseeing the Third Party relationship determined in accordance with the books and records of such Party or its Affiliates maintained in accordance with US GAAP; and (ii) to the extent that any such Genopaver Product is manufactured by Genopaver or any of its Affiliates, direct material and direct labor costs attributable to such product, as well as reasonably allocable overhead expenses, determined in accordance with the books and records of Genopaver or its Affiliates maintained in accordance with US GAAP.

**1.45** "**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.

**1.46** "**Permitted Ancillary Commercial Use**" means the commercial use or sale, for a purpose other than as Active Pharmaceutical Ingredients or as commercially-sold intermediates in the manufacture of Active Pharmaceutical Ingredients, of any Alkaloid-containing product that is produced under the Alkaloid Program or otherwise created, produced, developed, or identified in whole or in part, directly or indirectly, by or on behalf of Genopaver during the Term through use or practice of Intrexon Channel Technology, Intrexon IP, or the Intrexon Materials. For example, Genopaver may elect to sell or commercially use, but is not obligated to sell or commercially use, a Genopaver Product that was developed as an Active Pharmaceutical Ingredient for a Permitted Ancillary Commercial Use outside the Field, such as for use as, and subject to Section 3.8(g), (i) a food supplement, (ii) an industrial chemical unrelated in purpose to the synthesis of Active Pharmaceutical Ingredients, or (iii) a food additive.

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

**1.48** "**Product Sublicense**" has the meaning set forth in Section 3.2(c).

**1.49** "**Product Sublicensee**" has the meaning set forth in Section 3.2(c).

**1.50** "**Proposed Terms**" has the meaning set forth in Section 11.2.

**1.51** "**Prosecuting Party**" has the meaning set forth in Section 6.2(c).

**1.52** "**RAC**" has the meaning set forth in Section 2.2(b).

**1.53** "**Recovery**" has the meaning set forth in Section 6.3(f).

**1.54** "**Retained Product**" has the meaning set forth in Section 10.4(a).

**1.55** "**Reverted Product**" has the meaning set forth in Section 10.4(c).

**1.56** "**SEC**" means the United States Securities and Exchange Commission.

**1.57** "**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 Genopaver 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 Genopaver 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 Genopaver 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); and (c) amounts received from sublicensees in respect of any Genopaver Product sales or uses that are included in the calculation of revenue sharing payments made to Intrexon under Sections 5.2(a) or 5.2(b).

**1.58** "**Superior Product**" means a product produced by fermentation in the Field that, based on the data then available, (a) demonstrably appears to offer either superior yield or safety or significantly lower cost of production, as compared with both (i) those products that are marketed (either by Genopaver or others) at such time for similar commercial use and (ii) those products that are being actively developed by Genopaver for such purpose; (b) demonstrably appears to represent a substantial improvement over such existing products; and (c) has intellectual property protection and a regulatory approval pathway that, in each case, would not present a significant barrier to commercial development.

**1.59** "**Supplemental In-Licensed Third Party IP**" has the meaning set forth in Section 3.8(a).

**1.60** "**Support Memorandum**" has the meaning set forth in Section 11.2.

**1.61** "**Technology Access Fee**" for the purposes of this Agreement has the meaning as set forth in Section 5.1.

**1.62** "**Term**" has the meaning set forth in Section 10.1.

**1.63** "**Territory**" means the world.

**1.64 "Third Party**" means any individual or entity other than the Parties or their respective Affiliates.

**1.65** "**Third Security**" means Third Security, LLC.

**1.66** "**US GAAP**" means generally accepted accounting principles in the United States.

## ARTICLE 2

## SCOPE OF CHANNEL COLLABORATION; MANAGEMENT

**2.1 Scope.**

**(a) Generally**. The general purpose of the Alkaloid Program described in this Agreement will be to use the Intrexon Channel Technology to research, develop and Commercialize Genopaver Products. As provided below, the JSC shall establish, monitor, and govern projects for Genopaver Products. Either Party may propose other potential projects in the Field for review and consideration by the JSC.

**2.2 Committees.**

**(a) Generally**. The Parties desire to establish several committees (collectively, "**Committees**") to oversee the Alkaloid 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.

| Committee | Purpose |
|---|---|
| Joint Steering Committee ("**JSC**") | Establish projects for the Alkaloid Program and establish the priorities, as well as approve budgets for such projects. Approve all subcommittee projects and plans. The JSC shall establish budgets not less than on a quarterly basis. |

| Committee | Purpose |
|---|---|
| Chemistry, Manufacturing and Controls Committee ("**CMCC**") | Establish project plans and review and approve activities and budgets for chemistry, manufacturing, and controls under the Alkaloid Program. |
| Regulatory Approval Committee ("**RAC**") | Review and approve all research and development plans and projects associated with any necessary regulatory approvals, all associated publications, and all regulatory filings and correspondence relating to gaining regulatory approval under the Alkaloid 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 Alkaloid Program. |
| Intellectual Property Committee ("**IPC**") | Evaluate intellectual property issues in connection with the Alkaloid 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 three (3) 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. For purposes of this Section 2.3, employees of Third Security may, at Genopaver's election, serve as members of a Committee as if they were employees of Genopaver. 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 Genopaver selecting the chairperson first for

the JSC, RAC and CC, and Intrexon selecting the chairperson first for the CMCC and IPC. The chairperson of each Committee shall be responsible for calling meetings, preparing and circulating an agenda in advance of each meeting of such Committee, and preparing and issuing minutes of each meeting within fifteen (15) days thereafter.

**(b) Meetings**. Each Committee shall hold meetings at such times as it elects to do so, but in no event shall such meetings be held less frequently than once every six (6) months, with the caveat that both Parties may agree to suspend activities of a given Committee other than the JSC until such time as one Party informs the other Party of its then desire to reactivate the so-suspended Committee, at which point the Parties will thereafter schedule and hold the next meeting for the reactivated Committee within one (1) month. Meetings of any Committee may be held in person or by means of telecommunication (telephone, video, or web conferences). To the extent that a Committee holds any meetings in person, the Parties will alternate in designating the location for such in-person meetings, with Genopaver 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 support services as set forth in Section 4.5 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 accept 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 Executive 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 Genopaver shall have the authority to finally resolve such dispute.

**(b) Casting Vote at CMCC**. If a dispute at the CMCC is not resolved pursuant to Section 2.4 above, then (i) in the case of any disputes relating to the Intrexon Materials, the manufacture of an Genopaver Product through the use of Intrexon Channel Technology or Intrexon IP, or the manufacturing of other components of Genopaver Products contracted for or manufactured by Intrexon or reasonable controls regarding the dissemination of Intrexon Technology, Intrexon IP or Intrexon Materials, 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 Genopaver shall have the authority to finally resolve such dispute.

**(c) Casting Vote at RAC**. If a dispute at the RAC is not resolved pursuant to Section 2.4 above, then the Executive Officer of Genopaver 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 Genopaver 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 or subcommittee 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 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 Genopaver.**

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

**(b)** Subject to the terms and conditions of this Agreement, Intrexon hereby grants to Genopaver a non-exclusive, royalty-free license to use and display the Intrexon Trademarks, solely in connection with the Commercialization of Genopaver Products in the promotional materials, packaging, and labeling for Genopaver Products, as provided under and in accordance with Section 4.7.

**(c)** Subject to the restrictions of Section 3.8(g) and the other terms and conditions of this Agreement, Intrexon hereby grants to Genopaver a non-exclusive license under the Intrexon IP to use, make, have made, sell, and offer for sale Genopaver Products for Permitted Ancillary Commercial Uses in the Territory.

**3.2 Sublicensing**. Except as provided in this Section 3.2, Genopaver 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 Genopaver Products or use or display the Intrexon Trademarks, in each case except with Intrexon's written consent, which written consent may be withheld in Intrexon's sole discretion. Notwithstanding the foregoing, Genopaver (and its Product Sublicensees only to the extent explicitly 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).

**(a)** Genopaver may transfer, to the extent reasonably necessary and after providing Intrexon with reasonable advance notice thereof, Intrexon Materials that are or express Genopaver Products to a Third Party contractor performing contract manufacturing

responsibilities for Genopaver Products, and may in connection therewith grant limited sublicenses necessary to enable such Third Party to perform such activities. If Genopaver transfers any Intrexon Materials under this Section 3.2(a), Genopaver 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 Genopaver 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 express ingredients for the Genopaver Product sublicensed by the Product Sublicensee to a Third Party contractor performing on behalf of that Product Sublicensee contract manufacturing responsibilities for Genopaver Products, and may in connection therewith grant limited sublicenses to the extent necessary to enable such Third Party to perform such activities. Genopaver 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)** Genopaver may, with Intrexon's written consent, which consent shall not be unreasonably withheld, 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 display the Intrexon Trademarks. In the event that Intrexon consents to any such grant or transfer to an Affiliate, Genopaver 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 Genopaver), including any payment obligations owed to Intrexon hereunder.

**(c)** Genopaver may grant a sublicense of the rights granted under Section 3.1 (and not including a right to sublicense under this Section 3.1(c)) to a Third Party licensee of any Genopaver Product (a "**Product Sublicensee**") to the extent necessary to permit such Third Party to research, develop, use, import, export, make, have made, sell, and offer for sale that Genopaver Product (a "**Product Sublicense**"), provided, that (i) such Product Sublicense is expressly limited to the appropriate Genopaver Product, (ii) such Product Sublicense does not grant the Product Sublicensee any rights to Intrexon IP other than as incorporated into the Genopaver Product at the time of the Product Sublicense, (iii) such Product Sublicense does not purport to relieve Genopaver 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, 3.3-3.5, 3.7, 3.9, and 3.10 and Articles 6, 7, and 10), and (v) the Product Sublicense is presented in full to the JSC by Genopaver before execution by Genopaver 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.

**3.3 Limitation on Sublicensees**. None of the enforcement rights under the Intrexon Patents that are granted to Genopaver 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**. Genopaver 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**. Neither Intrexon nor its Affiliates shall make the Intrexon Channel Technology or Intrexon Materials available to any Third Party for the purpose of developing or Commercializing products in the Field (except as set forth in Section 3.2), 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 commercial use or sale in the Field, outside of the Alkaloid Program. Further, neither Genopaver nor its Affiliates shall pursue (either by itself or with a Third Party or Affiliate) outside of the Alkaloid Program the research, development or Commercialization of any product for purpose of commercial use or sale in the Field where such products would compete with Genopaver Products.

**3.6 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, Genopaver acknowledges that (i) Intrexon has all rights, in Intrexon's sole discretion, to make the Intrexon Materials, Intrexon Channel Technology (including any genetic materials used in an Genopaver Product), and Intrexon IP available to Third Party channel partners or collaborators for use in fields outside the Field, and (ii) Intrexon has all rights, in Intrexon's sole discretion, to grant to other channel collaborators and/or Third Parties exclusive and/or non-exclusive rights outside the Field under the Intrexon IP with respect to the use of the Alkaloids, which grants may restrict or prohibit Genopaver's previously-permitted activities with respect to Permitted Ancillary Commercial Uses in accord with Sections 3.1(c) and 3.8(g).

**3.7 Rights to Regulatory Data**. Genopaver shall own and control all regulatory data and regulatory filings relating to Commercialization of Genopaver Products (except to the extent such become Reverted Products). Genopaver shall provide (or shall cause an applicable Product Sublicensee to provide) to Intrexon at Intrexon's written request full copies of all regulatory data and reports, regulatory filings, and communications from regulatory authorities that relate specifically and solely to Genopaver Products. To the extent that there exist any regulatory data and reports, regulatory filings, and communications from regulatory authorities owned by Genopaver (or a Product Sublicensee) that relate both to Genopaver Products and other products produced by Genopaver (or a Product Sublicensee) outside the Field, upon Intrexon's written request Genopaver shall provide (or shall cause an applicable Product Sublicensee to provide) to Intrexon copies of the portions of such data, reports, filings, and communications that relate to Genopaver 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 Genopaver Products in regulatory filings made to obtain regulatory

approval for products 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. Notwithstanding the provisions of this Section 3.7, Intrexon shall not, outside of the Alkaloid Program, utilize knowingly any Genopaver data or reports in support of obtaining regulatory approval for a product for use in the Field.

**3.8 Third Party Licenses.**

**(a)** [*****] shall obtain [*****] any licenses from Third Parties that are required in order to practice the Intrexon Channel Technology in the Field where the licensed intellectual property is reasonably necessary for Intrexon to conduct genetic and cell engineering and related analytic activities under JSC established plans for the Alkaloid Program (but specifically excluding intellectual property directed to any specific target genes, active pharmaceutical ingredients or chemical intermediates thereof, or processes or methods for commercially manufacturing Genopaver Products) ("**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 Genopaver 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 Genopaver Products and to the Field. As provided above in Section 3.8(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 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 (to the extent such threats would reasonably be considered to subject the Third Party owner or licensee to declaratory judgment 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 3.8(c), [*****] shall have the right to pursue a license under Complementary In-Licensed Third Party IP [*****]. For the avoidance of doubt, [*****] may at any time obtain a license under Complementary In-Licensed Third Party IP outside the Field [*****] 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. Notwithstanding the foregoing, [*****] shall not be required to provide drafts or an unexecuted version of a definitive license agreement with respect to Complementary In-Licensed Third Party IP if and to the extent that (i) doing so would result in a loss of the protections granted under Fed. R. Evid. 408, and (ii) the Parties after duly consulting with one another have not executed a suitable common legal interest or other agreement to prevent such loss of protections. 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 3.8 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 Genopaver 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 Genopaver Products, Genopaver shall use commercially reasonable efforts to ensure that Genopaver 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 Genopaver 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 3.8(c), provided that Intrexon shall either provide unredacted copies of such upstream license agreements to Genopaver or shall disclose in writing to Genopaver all of such terms and conditions that are applicable to Genopaver. Genopaver 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 Genopaver 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.

**(g)** Intrexon may notify Genopaver from time to time that it has, as expressly permitted under Section 3.6, entered into a definitive commercial agreement with a Third Party, including with another channel collaborator, which agreement involves the use of Alkaloids outside of the Field. To the extent that such commercial agreement with the Third Party grants exclusive rights under or to the Intrexon IP, and to the extent that Genopaver's activities

otherwise permitted under Section 3.1(c) could or does overlap with those exclusive rights granted to the Third Party, Genopaver's rights under Section 3.1(c) upon such notice shall be automatically and immediately restricted such that Genopaver would no longer be licensed under the Intrexon IP to make, use, sell, or offer for sale the Genopaver Products for any Permitted Ancillary Commercial Uses that would conflict with the exclusive rights so-granted to the Third Party. Any notice by Intrexon under this Section 3.8(f) will explain with sufficient detail the scope of rights granted to any such Third Party and the effective date and term of such rights to permit Genopaver to assess the scope of such restriction hereunder, and will identify any significant prior Genopaver activities known to Intrexon that were previously permitted under Section 3.1(c) but that would thereafter be prohibited by operation of this Section 3.8(g) and such notice. Nothwithstanding the foregoing, Genopaver will be give sixty (60) days from receipt of any such notice under this Section 3.8(g) to sell, use, or otherwise dispose of any inventory (including for Permitted Ancillary Commercial Uses) affected by such notice.

**3.9 Licenses to Intrexon.** Subject to the terms and conditions of this Agreement, Genopaver hereby grants to Intrexon a non-exclusive, worldwide, fully-paid, royalty-free license, under any applicable Patents or other intellectual property Controlled by Genopaver 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 4.5 in conjunction with support services (subject to JSC research plan approval).

**3.10 Restrictions Relating to Intrexon Materials**. Genopaver and its permitted sublicensees shall use the Intrexon Materials solely for purposes of the Alkaloid 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, Genopaver shall not, and shall ensure that Genopaver personnel and permitted sublicensees do not, except as otherwise permitted in 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 Section 4.5, Genopaver shall be solely responsible for the development and Commercialization of Genopaver Products. Genopaver shall be responsible for all costs incurred in connection with the Alkaloid Program except that Intrexon shall be responsible for the following: (a) costs of basic research with respect to the Intrexon Channel Technology and Intrexon Materials (*i.e.*, platform improvements) but, for clarity, excluding research described in Section 4.5 or research requested by the JSC for the development of a Genopaver Product (which research costs shall be reimbursed by Genopaver); (b) [*****]; and (c) costs of filing, prosecution and maintenance of Intrexon Patents.

**4.2 Information and Reporting**. Genopaver will keep Intrexon informed about Genopaver's efforts to develop and Commercialize Genopaver Products, including reasonable and accurate summaries of Genopaver's (and its Affiliates' and, if applicable, (sub)licensees') development plans (as updated), including regulatory plans, marketing plans (as updated), progress towards meeting the goals and milestones in such plans and explanations of any material deviations, significant developments in the development and/or Commercialization of the Genopaver Products, including initiation or completion of a regulatory trial, submission of a United States or international regulatory filing, receipt of a response to such United States or international regulatory filing, product safety event, receipt of regulatory approval, or commercial launch, and manufacturing costs and pricing information. As set forth in Section 3.7 above, Genopaver shall also provide to Intrexon copies of all final regulatory documents and reports. Intrexon will keep Genopaver informed about Intrexon's efforts to undertake discovery-stage research for the Alkaloid Program with respect to the Intrexon Channel Technology and Intrexon Materials. Unless otherwise provided herein or directed by the JSC in accord with Section 4.1 above, such disclosures by Genopaver and Intrexon will be coordinated by the JSC and made in connection with JSC meetings at least once every six (6) months while Genopaver Products are being developed or Commercialized anywhere in the world, and shall be reflected in the minutes of such meetings.

**4.3 Regulatory Matters**. At all times after the Effective Date, Genopaver shall own and maintain, at its own cost, all regulatory filings and regulatory approvals for Genopaver Products that Genopaver is developing or Commercializing pursuant to this Agreement. As such, Genopaver shall be responsible for reporting all adverse events related to such Genopaver 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 Genopaver and Intrexon establish and execute a separate safety data exchange agreement, which agreement will address and govern the timely exchange of safety information generated by Genopaver, Intrexon, and relevant third parties with respect to specific Intrexon Materials.

**4.4 Diligence.**

**(a)** Genopaver shall use, and shall require its sublicensees to use, Diligent Efforts to develop and Commercialize Genopaver Products.

**(b)** Without limiting the generality of the foregoing, Intrexon may, from time to time, notify Genopaver that it believes it has identified a Superior Product, and in such case Intrexon shall provide to Genopaver its then-available information about such product and reasonable written support for its conclusion that the product constitutes a Superior Product. Genopaver shall have the following obligations with respect to such proposed Superior Product: (i) within sixty (60) days after such notification, Genopaver shall prepare and deliver to the JSC for review and approval a development plan detailing how Genopaver will pursue the Superior Product (including a proposed budget); (ii) Genopaver shall revise the development plan as directed by the JSC; and (iii) following approval of the development plan by the JSC, Genopaver shall use Diligent Efforts to pursue the development of the Superior Product under the Alkaloid

Program in accordance with such development plan. If Genopaver fails to comply with the foregoing obligations, or if Genopaver unreasonably exercises its casting vote at the JSC to either (x) prevent the approval of a development plan for a Superior Product; (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 Product, 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 4.4, including any dispute as to whether a proposed project constitutes a Superior Product (as with any other dispute under this Agreement) shall be subject to dispute resolution in accordance with Article 11.

**(c)** The activities of Genopaver's Affiliates and any permitted sublicensees shall be attributed to Genopaver for the purposes of evaluating Genopaver's fulfillment of the obligations set forth in this Section 4.4.

**4.5 Support Services**. The JSC will meet promptly following the Effective Date and establish a plan under which Intrexon will provide support services to Genopaver for the research and development of Genopaver Products under the Alkaloid Program, which initial plan may be amended from time to time by the JSC. Genopaver 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, Genopaver shall request, or Intrexon may propose, that Intrexon perform certain additional support services with respect to researching and developing new Genopaver Products or improving the manufacturing or processing methods for any existing Genopaver Products. To the extent that the Parties mutually agree that Intrexon 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 would be compensated for such services by cash payments equal to Intrexon's Fully Loaded Cost in connection with such services.

**4.6 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 Alkaloid Program, including without limitation those relating to the transport, storage, and handling of Intrexon Materials and Genopaver Products.

**4.7 Trademarks and Patent Marking.** To the extent permitted by applicable law and regulations, Genopaver shall ensure that the packaging, promotional materials, and labeling for Genopaver Products, as appropriate, shall carry, in a conspicuous location, the applicable Intrexon Trademark(s), subject to Genopaver's reasonable approval of the size, position, and location thereof. Consistent with the U.S. patent laws, Genopaver shall ensure that Genopaver Products appropriately identify Intrexon Patents. Genopaver 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. Genopaver's use of the Intrexon Trademarks and patent markings shall be subject to prior review and approval of the IPC. Genopaver acknowledges Intrexon's sole ownership of the Intrexon Trademarks and agrees not to take any action inconsistent with such ownership. Genopaver covenants that it shall not

use any trademark confusingly similar to any Intrexon Trademarks in connection with any products (including any Genopaver Product). From time to time during the Term, Intrexon shall have the right to obtain from Genopaver samples of Genopaver Product sold by Genopaver 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 Genopaver Products, the use of the Intrexon Trademarks, or the accuracy of the patent markings. In the event that Intrexon inspects under this Section 4.7, Intrexon shall notify the result of such inspection to Genopaver in writing thereafter. Genopaver shall comply with reasonable policies provided by Intrexon from time-to-time to maintain the goodwill and value of the Intrexon Trademarks.

**4.8 Reporting Compliance.** During the Term, in the event that Intrexon notifies Genopaver that Intrexon has reasonably concluded, after consultation with its outside advisors, that Intrexon will have to consolidate Genopaver's financial statements with its own, for so long as Intrexon reasonably believes that such consolidation is necessary, Genopaver shall comply with the following additional obligations:

**(a)** Genopaver shall maintain at its principal place of business or, upon notice to Intrexon, at such other place as Genopaver shall determine:

(i) a copy of Genopaver's certificate of incorporation or organizational document and all amendments thereto, together with executed copies of any powers of attorney pursuant to which any amendment has been executed;

(ii) a copy of this Agreement;

(iii) a copy of Genopaver's federal, state, and local income tax returns and reports, if any; and

(iv) minutes of meetings of Genopaver's board of directors and shareholders or actions by written consent in lieu thereof, redacted as necessary by Genopaver to exclude any sensitive or confidential information that Intrexon, by operation of law or contractual stipulation, is not permitted to receive.

**(b)** Genopaver shall keep its books and records consistent with US GAAP.

**(c)** Intrexon at its own expense and upon reasonable notice, may examine any information it may reasonably request (including, to the extent Genopaver has the right to provide such, the work papers of Genopaver's internal and independent auditors) and make copies of and abstracts from the financial and operating records and books of account of Genopaver, and discuss the affairs, finances and accounts of Genopaver with Genopaver and independent auditors of Genopaver, all at such reasonable times and as often as Intrexon or any agents or representatives of Intrexon may reasonably request. The rights granted pursuant to this Section 4.8(c) are expressly subject to compliance by Intrexon with the safety, security and confidentiality procedures and guidelines of Genopaver, as such procedures and guidelines may be established from time to time.

**(d)** As soon as available but no later than ninety (90) days after the end of

each fiscal year, Genopaver shall cause to be prepared and Intrexon to be furnished with an audited balance sheet as of the last day of such fiscal year and an audited income statement, a statement of stockholders' equity and statement of cash flows for Genopaver for such fiscal year and notes associated with each, in each case prepared in accordance with US GAAP, together with a report of Genopaver's independent auditor that such statements have been prepared in accordance with US GAAP and present fairly, in all material respects, the financial position, results of operations and cash flows of Genopaver.

**(e)** As soon as available but no later than forty five (45) days after the end of each calendar quarter, Genopaver shall furnish the following to Intrexon an unaudited balance sheet as of the last day of such period, and an unaudited income statement, a statement of cash flows and a statement of stockholders' equity for Genopaver for such period, in each case prepared in accordance with US GAAP.

**(f)** As requested by Intrexon on no more than a quarterly basis, a certificate, executed by the Executive Officer of Genopaver, certifying on behalf of Genopaver the following:

(i) Genopaver maintains accurate books and records reflecting its assets and liabilities and maintains proper and adequate internal accounting controls that provide assurance that (1) transactions are executed with management's authorization; (2) transactions are recorded as necessary to permit preparation of the consolidated financial statements of Genopaver and to maintain accountability for Genopaver's consolidated assets; (3) access to the assets of Genopaver is permitted only in accordance with management's authorization; (4) the reporting of assets of Genopaver is compared with existing assets at regular intervals; and (5) accounts, notes and other receivables and inventory are recorded accurately, and proper and adequate procedures are implemented to effect the collection of accounts, notes and other receivables on a current and timely basis.

(ii) under the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder; any such controls and procedures are effective to ensure that all material information concerning (ii) Genopaver is made known on a timely basis to those individuals responsible for the preparation of any filings that may be required to be made by Intrexon with the SEC and other public disclosure documents.

**(g)** Genopaver shall promptly prepare and furnish to Intrexon any information, whether written or oral, requested by Intrexon that is reasonably necessary for purposes of Intrexon's ongoing compliance with applicable law.

**4.9 Modification of Deadlines.** The parties agree that the delivery deadlines in Section 4.8 will be modified to the extent necessary to ensure that such deliverables are provided by Genopaver no less than thirty (30) days prior (inclusive of any cure period set forth in Section 10.2(a)) 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 Genopaver 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 under this Section 4.9.

## ARTICLE 5

### COMPENSATION

**5.1 Technology Access Fee**. In partial consideration for Genopaver's appointment as an exclusive channel collaborator in the Field and the other rights granted to Genopaver hereunder and as an access fee for commercial license rights to the Intrexon IP granted under Section 3.1, Genopaver shall pay to Intrexon a one time cash payment of three million United States dollars ($3,000,000) (the "**Technology Access Fee**"). The Technology Access Fee shall be paid within ten (10) business days by Genopaver, and the receipt of such payment by Intrexon is a condition subsequent to the effectiveness of this Agreement.

**5.2 Revenue Sharing.**

**(a)** No later than thirty (30) days after each calendar quarter in which there are positive aggregate Gross Profits arising from the sale of Genopaver Products in the Field and Territory or from the sale of Genopaver Products for Permitted Ancillary Commercial Uses, Genopaver shall pay to Intrexon a royalty equal to [*****] of such Gross Profits during that calendar quarter. Commencing with the Effective Date, in the event that there are negative Gross Profits for a particular Genopaver Product in any calendar quarter, neither Genopaver nor Intrexon shall owe any payments hereunder with respect to such Genopaver Product. Any negative Gross Profits that results from Excess Product Liability Costs may be carried forward to future quarters and offset against positive Gross Profits in such future quarters for the same Genopaver Product. Except as set forth in the preceding sentence, Genopaver shall not be permitted to carry forward any negative Gross Profits to subsequent quarters.

**(b)** If Genopaver or its Affiliates commercially uses Genopaver Products as a component of, or as a chemical intermediate in the commercial production of, derivative or other downstream products, Genopaver will pay to Intrexon, in cash, royalties at a rate of [*****] of the Gross Profits that would have been obtainable by Genopaver or its Affiliates had the same quantities of Genopaver Product used by Genopaver and its Affiliates instead been sold in an arm's length transaction to a Third Party. Payments under this Section 5.2(b) will be due no later than thirty (30) days after each calendar quarter in which use occurs.

**(c)** No later than thirty (30) days after each calendar quarter in which Genopaver or any Genopaver Affiliate receives Sublicensing Revenue, Genopaver shall pay to Intrexon [*****] of such Sublicensing Revenue.

**5.3 Method of Payment**. Payments due to Intrexon under this Agreement shall be paid in United States dollars by wire transfer to a bank in the United States designated in writing by Intrexon. All references to "dollars" or "$" herein shall refer to United States dollars.

**5.4 Payment Reports and Records Retention**. Within thirty (30) days after the end of each calendar quarter during which Gross Profits have been generated, during which

Sublicensing Revenue has been received, or during which a negative Gross Profits has occurred, Genopaver shall deliver to Intrexon a written report that shall contain at a minimum for the applicable calendar quarter:

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

**(b)** itemized calculation of Gross Profits, showing all applicable COGS deductions;

**(c)** itemized calculation of any payment due under Section 5.2(b), including an identification of the Genopaver Product involved, the quantity so used, the prevailing market price being used by Genopaver, and an indication of how Genopaver determined such prevailing market price;

**(d)** itemized calculation of Sublicensing Revenue;

**(e)** the amount of any negative Gross Profits for the applicable calendar quarter, and any negative Gross Profits amount carried forward from a prior quarter and applied during the present quarter (as per Section 5.2(a));

**(f)** the amount of the payment (if any) due pursuant to each of Sections 5.2(a), 5.2(b), and 5.2(c);

**(g)** the amount of taxes, if any, withheld to comply with any applicable law; and

**(h)** the exchange rates used in any of the foregoing calculations.

For three (3) years after each sale or other commercial use of Genopaver Product, or after incurring any component item Genopaver incorporated into its calculation of Sublicensing Revenues, payments in accord with Section 5.2(b), Gross Profits or COGS as reported to Intrexon, Genopaver 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.

**5.5 Audits.**

**(a)** Upon the written request of Intrexon, Genopaver shall permit an independent certified public accounting firm of internationally recognized standing selected by Intrexon, and reasonably acceptable to Genopaver, 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 Genopaver and its Affiliates to verify the accuracy and timeliness of the reports and payments made by Genopaver 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, Genopaver shall pay additional amounts, with interest from the date originally due as set forth in Section 5.7, 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 Genopaver 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).

**(c)** Intrexon shall (i) treat all information that it receives under this Section 5.5 in accordance with the confidentiality provisions of Article 7 and (ii) cause its accounting firm to enter into an acceptable confidentiality agreement with Genopaver 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.

**5.6 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. Genopaver 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 Genopaver or the appropriate governmental authority (with the assistance of Genopaver 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 Genopaver of its obligation to withhold tax, and Genopaver shall apply the reduced rate of withholding tax, or dispense with withholding tax, as the case may be, provided that Genopaver 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, Genopaver withholds any amount, it shall make timely payment to the proper taxing authority of the withheld amount, and send to Intrexon proof of such payment within forty-five (45) days following that latter payment.

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

## ARTICLE 6

### INTELLECTUAL PROPERTY

**6.1 Ownership.**

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

**(b)** Genopaver 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 Alkaloid 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 made with, using, or otherwise incorporating Intrexon Channel Technology, together with all Patent rights and other intellectual property rights therein (the "**Channel-Related Program IP**"). Genopaver hereby assigns all of its right, title and interest in and to the Channel-Related Program IP to Intrexon. Genopaver 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 Genopaver 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. Genopaver shall be under appropriate written agreements with each of its employees, contractors, or agents working on the Alkaloid Program, pursuant to which such person shall grant all rights in the Inventions to Genopaver (so that Genopaver may convey certain of such rights to Intrexon, as provided herein) and agree to protect all Confidential Information relating to the Alkaloid Program.

**6.2 Patent Prosecution.**

**(a)** Intrexon shall have the sole right, but not the obligation, to (i) conduct and control the filing, prosecution and maintenance of the Intrexon Patents, and (ii) conduct and control the filing, prosecution, and maintenance of any applications for patent term extension and/or supplementary protection certificates that may be available as a result of the regulatory approval of any Genopaver Product. Notwithstanding the foregoing, Genopaver may request that Intrexon pursue a patent for a Genopaver Product, and, if Intrexon declines to do so, then the issue shall be referred to and resolved by the IPC. At the reasonable request of Intrexon, Genopaver shall cooperate with Intrexon in connection with such filing, prosecution, and maintenance, at Intrexon's expense. Under no circumstances shall Genopaver (i) 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, (ii) 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 (iii) 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 Genopaver Product.

**(b)** Genopaver 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 Genopaver or its Affiliates and not assigned to Intrexon under Section 6.1(c) ("**Genopaver Program Patents**"). At the reasonable request of Genopaver, Intrexon shall cooperate with Genopaver in connection with such filing, prosecution, and maintenance, at Genopaver's expense.

**(c)** As used in this Section, "**Prosecuting Party**" means Intrexon in the case of Intrexon Patents and Genopaver in the case of Genopaver 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 Genopaver Program Patents, as applicable. The Prosecuting Party shall:

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

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

(iii) consult with the non-Prosecuting Party before taking any action that would reasonably be expected to have a material adverse impact on the scope of claims within the Intrexon Patents and Genopaver 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, Genopaver 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 Genopaver exercises the foregoing right, Intrexon agrees to be named in any such action if required. If Genopaver 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) [*****]. To the extent Genopaver shall be entitled to a share of the Recovery a set forth in Section 6.3(f), Intrexon and Genopaver shall bear the costs and expenses of such enforcement equally. 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 Genopaver on such determination. For the avoidance of doubt, Intrexon has no obligations under this Agreement to enforce any Intrexon Patents against, or otherwise abate, any Infringement that is not a Field Infringement.

**(d)** In the event a Party pursues an action under this Section 6.3, the other Party shall reasonably cooperate with the enforcing Party with respect to the investigation and prosecution of any alleged, threatened, or actual Infringement, at the enforcing Party's expense (except with respect to an action under Section 6.3(c), where all costs and expenses will be shared equally in accordance with terms thereof).

**(e)** Genopaver 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 Genopaver in the Field or adversely affects any Intrexon Patent with respect to the Field without Genopaver's 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 Genopaver pursuant to Section 6.3(b), Genopaver shall retain one hundred percent (100%) of any Recovery, but such Recovery shall be shared with Intrexon as Sublicensing Revenue. In any action initiated by Intrexon or Genopaver pursuant to Section 6.3(c), the Parties shall share the Recovery equally, and such Recovery shall not be deemed to constitute Sublicensing Revenue.

**(g)** Genopaver shall promptly notify Intrexon of any suspected, alleged, threatened, or actual Infringement of which it becomes aware, and Intrexon shall promptly notify Genopaver 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 and can be demonstrated by written records, other than under an obligation of confidentiality, at the time of disclosure by the other Party;

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

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

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

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

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

**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 regulatory trials, or to gain regulatory approval, of Genopaver 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) who agree to be bound by obligations of confidentiality and non-use at least equivalent in scope to those set forth in this Article 7; and

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

**7.3 Publicity; Publications**. Following the Effective Date, the Parties will consult to consider, and, if mutually desired, draft and release, a public announcement of the execution of this Agreementsubstantially in the form of a press release, which form shall be mutually agreed to by the Parties. Each Party will provide the other Party with the opportunity to review and comment, prior to submission or presentation, on external reports, publications and presentations (e.g., press releases, reports to government agencies, abstracts, posters, manuscripts and oral presentations) that refer to the Alkaloid Program, Genopaver 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 Intrexon

by Genopaver as soon as practicable prior to filing. 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, Genopaver acknowledges that Intrexon's authorized representative(s), during regular business hours may (i) examine and inspect Genopaver's facilities and (ii) inspect all data and work products relating to this Agreement, subject to restrictions imposed by applicable laws. Any examination or inspection hereunder shall require five (5) business days written notice from Intrexon to Genopaver. Genopaver 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 Genopaver 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 Genopaver to Intrexon. Intrexon will make itself and the pertinent employees and/or agents available, on a reasonable basis, to Genopaver for the aforementioned compliance review.

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

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

## ARTICLE 8

## REPRESENTATIONS AND WARRANTIES

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

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

**(b) Due Authorization**. Genopaver is duly authorized to execute and deliver this Agreement and to perform its obligations hereunder, and the person executing this Agreement on Genopaver'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 Genopaver 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 Genopaver 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. Genopaver is aware of no action, suit or inquiry or investigation instituted by any governmental agency which questions or threatens the validity of this Agreement.

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

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

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

**(c) Binding Agreement**. This Agreement is a legal and valid obligation binding upon Intrexon and enforceable in accordance with its terms, except as such enforcement may be limited by applicable bankruptcy, insolvency, reorganization, arrangement, moratorium or other similar laws affecting creditors' rights, and subject to general equity principles and to limitations on availability of equitable relief, including specific performance. The execution, delivery and performance of this Agreement by Intrexon does not conflict with any agreement, instrument or understanding, oral or written, to which it is a party or by which it may be bound. Intrexon is aware of no action, suit or inquiry or investigation instituted by any governmental agency which questions or threatens the validity of this Agreement.

**(d) Additional Intellectual Property Representations**.

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

(ii) The Intrexon Patents and Intrexon Know-How existing as of the Effective Date constitute all of the Patents and Know-How Controlled by Intrexon as of such date that are necessary for the development, manufacture and Commercialization of Genopaver Products;

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

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

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

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

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

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

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

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

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

(xii) Except as otherwise disclosed in writing to Genopaver, Intrexon: (A) is in material compliance with all statutes, rules or regulations applicable to the ownership, testing, development, manufacture, packaging, processing, use, distribution, marketing, labeling, promotion, sale, offer for sale, storage, import, export or disposal of any product that is under development, manufactured or distributed by Intrexon in the Field ("**Applicable Laws**"); (B) has not received any FDA Form 483, notice of adverse finding, warning letter, untitled letter or other correspondence or notice from the United States Food and Drug Administration (the "**FDA**") or any other federal, state, local or foreign governmental or regulatory authority alleging or asserting material noncompliance with any Applicable Laws or any licenses, certificates, approvals, clearances, authorizations, permits and supplements or amendments thereto required by any such Applicable Laws ("**Authorizations**"), which would, 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, letters to customers, or other notice or action relating to the alleged lack of safety or efficacy of any product or any alleged product defect or violation and, to Intrexon's knowledge, no third party has initiated, conducted or intends to initiate any such notice or action.

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

**8.3 Warranty Disclaimer**. EXCEPT FOR THE EXPRESS WARRANTIES PROVIDED IN THIS ARTICLE 8, 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 Genopaver and its Affiliates and their respective directors, officers, employees, and agents (collectively, the "**Genopaver 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 gross negligence or willful misconduct of Intrexon or any of its Affiliates, or their respective employees or agents, (b) the use, handling, storage or transport of Intrexon Materials by or on behalf of Intrexon or its Affiliates, licensees (other than Genopaver) or sublicensees; or (c) breach by Intrexon of any representation, warranty or covenant in this Agreement. Notwithstanding the foregoing, Intrexon shall not have any obligation to indemnify the Genopaver Indemnitees to the extent that a Claim arises from (i) the gross negligence or willful misconduct of Genopaver or any of its Affiliates, licensees, or sublicensees, or their respective employees or agents; or (ii) a breach by Genopaver of a representation, warranty, or covenant of this Agreement.

**9.2 Indemnification by Genopaver**. Genopaver 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 gross negligence or willful misconduct of Genopaver or any of its Affiliates or their respective employees or agents; (b) the use, handling, storage, or transport of Intrexon Materials by or on behalf of Genopaver or its Affiliates, licensees, or sublicensees; (c) breach by Genopaver 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 Genopaver Product by or on behalf of Genopaver or its Affiliates, licensees, or sublicensees. Notwithstanding the foregoing, Genopaver shall not have any obligation to indemnify the Intrexon Indemnitees to the extent that a Claim arises from (i) the gross 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 Genopaver 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 Genopaver Products, Genopaver shall maintain in effect and good standing a product liability insurance policy issued by a reputable insurance company in amounts considered standard for the industry. Immediately prior to, and during the conduct of any regulatory trials, Genopaver shall maintain in effect and good standing a regulatory trials liability insurance policy issued by a reputable insurance company in amounts considered standard for the industry. At Intrexon's reasonable request, Genopaver shall provide Intrexon with all details regarding such policies, including without limitation copies of the applicable liability insurance contracts. Genopaver 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 4.4(b)**

**(a)** Either Party shall have the right to terminate this Agreement upon written notice to the other Party if the other Party commits any material breach of this Agreement that such breaching Party fails to cure within sixty (60) days following written notice from the nonbreaching Party specifying such breach; provided, however, that if Genopaver commits any breach of the provisions of Section 4.9 of this Agreement, Intrexon shall have the right to terminate this Agreement if Genopaver fails after notice from Intrexon to cure such breach within thirty (30) days following written notice thereof.

**(b)** Intrexon shall have the right to terminate this Agreement, at its sole discretion, the Technology Access Fee has not been paid in accordance with Section 5.1.

**(c)** Intrexon shall have the right to terminate this Agreement under the circumstances set forth in Section 4.4(b) upon written notice to Genopaver, such termination to become effective sixty (60) days following such written notice unless Genopaver 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 Genopaver execute any purported assignment of this Agreement contrary to the prohibitions in Section 12.8, such termination occurring upon Intrexon providing written notice to Genopaver and becoming effective immediately upon such written notice.

**10.3 Termination by Genopaver**. Genopaver shall have the right to voluntarily terminate this Agreement in its entirety upon ninety (90) days written notice to Intrexon at any time.

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

(i) the particular product is an Genopaver Product that is being sold by Genopaver (or, as may be permitted under this Agreement, its Affiliates and, if applicable, (sub)licensees) triggering profit sharing payments therefor under Section 5.2(a) or (b) of this Agreement,

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

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

(iv) the particular product is a Genopaver Product that has been adopted for commercial scale up by the JSC, or that has otherwise acheived under the Alkaloid Program a benchmark production rate pre-established by the JSC for advancement of that product to commercial scale up or pilot production, which benchmark (A) takes into account relevant commercial and technical factors with respect to the product in question and (B) the achievement of which would be accepted in the industry as being reasonably indicative of such product being suitable for such advancement.

Such right to continue development and Commercialization shall be subject to Genopaver's full compliance with the payment provisions in Article 5, a continuing obligation for Genopaver to use in accord with Section 4.4(a) 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 Genopaver to continue to obtain regulatory approval for, 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 Genopaver under this Agreement shall terminate and shall revert to Intrexon without further action by either Intrexon or Genopaver. Genopaver's 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 Genopaver Products other than the Retained Products shall be referred to herein as the "**Reverted Products**." Genopaver 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 Genopaver shall not use or practice, nor shall it cause or authorize 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. Genopaver 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**. Genopaver shall promptly return, or at Intrexon's request, destroy, any Intrexon Materials in Genopaver's 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**. Genopaver is automatically deemed to grant to Intrexon a worldwide, fully paid, royalty-free, exclusive (even as to Genopaver and its Affiliates), irrevocable, license (with full rights to sublicense) under the Genopaver 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 Genopaver 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**. Genopaver 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. Genopaver 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, Genopaver shall provide copies of the portions of such regulatory filings that relate to Reverted Products and shall reasonably cooperate to assist Intrexon in obtaining the benefits of such regulatory approvals with respect to the Reverted Products.

**(g) Data Disclosure**. Genopaver shall provide to Intrexon copies of the relevant portions of all material reports and data, including regulatory trial data and reports, obtained or generated by or on behalf of Genopaver 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 written request, Genopaver shall promptly provide to Intrexon copies of all Third Party agreements under which Genopaver 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 written request such that Intrexon may Commercialize the Reverted Products, Genopaver shall promptly work with Intrexon to either, as appropriate (i) assign to Intrexon the Third Party agreement(s), or (ii) 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 Genopaver and Genopaver 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, Genopaver shall transfer to Intrexon all quantities of Reverted Product (including final products or work-in-process) in the possession of Genopaver or its Affiliates. Genopaver shall transfer to Intrexon all such quantities of Reverted Products without charge, except that Intrexon shall pay the reasonable costs of processing and shipping.

**(j) Third Party Vendors**. At Intrexon's request, Genopaver shall promptly provide to Intrexon copies of all agreements between Genopaver 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, Genopaver shall promptly: (i) 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 (ii) with respect to all other such Third Party agreements, Genopaver shall reasonably cooperate to assist Intrexon in obtaining the benefits of such agreements. Genopaver 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 Genopaver's breach. For the avoidance of doubt, Intrexon shall have no obligation to assume any of Genopaver's obligations under any Third Party agreement.

**(k) Commercialization**. Intrexon shall have the right to develop and Commercialize the Reverted Products itself or with one or more Third Parties, and shall have the right, without obligation to Genopaver, 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 Genopaver) 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 Genopaver 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), 5.4, 5.6, 6.1, 6.2 (with subsection (c) surviving only to the extent relating to Intrexon Patents that are relevant to Retained Products that, to Intrexon's knowledge, are being developed or Commercialized at such time, if any), 7.1, 7.2, 7.4, 7.5, 10.4, and 10.5; Articles 9, 11, and 12; and any relevant definitions in Article 1. Further, Article 7 and Sections 4.4, 5.2 through 5.7, and 9.5 will survive termination of this Agreement to the extent there are applicable Retained Products.

## ARTICLE 11

## DISPUTE RESOLUTION

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

**11.2 Arbitration**. Any dispute, controversy, difference or claim which may arise between the Parties and not from a Committee, out of or in relation to or in connection with this Agreement (including, without limitation, arising out of or relating to the validity, construction, interpretation, enforceability, breach, performance, application or termination of this Agreement) that is not resolved pursuant to Section 11.1 shall, subject to Sections 11.9 and 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, with the arbitration to be held in the state where the other Party's principal office is located (or some other place as may be mutually agreed by the Parties). Promptly following receipt of such notice, the Parties shall meet and discuss in good faith and seek to agree on an arbitrator to resolve the issue, which arbitrator shall be neutral and independent of both Parties and all of their respective Affiliates, shall have significant experience and expertise in licensing and partnering agreements in the pharmaceutical and biotechnology industries, and shall have some experience in mediating or arbitrating issues relating to such agreements. If the Parties cannot agree on a single arbitrator within fifteen (15) days of request by a Party for arbitration, then each Party shall select an arbitrator meeting the foregoing criteria and the two (2) arbitrators so selected shall select within ten (10) days of their appointment a third arbitrator meeting the foregoing criteria. Within fifteen (15) days after an arbitrator(s) is selected (in the case of the three-person panel, when the third arbitrator is selected), each Party will deliver to both the arbitrator(s) and the other Party a detailed written proposal setting forth its proposed terms for the resolution for the matter at issue (the "**Proposed Terms**" of the Party) and a memorandum (the "**Support Memorandum**") in support thereof. The Parties will also provide the arbitrator(s) a copy of this Agreement, as it may be amended at such time. Within fifteen (15) days after receipt of the other Party's Proposed Terms and Support Memorandum, each Party may submit to the arbitrator(s) (with a copy to the other Party) a response to the other

Party's Support Memorandum. Neither Party may have any other communications (either written or oral) with the arbitrator(s) other than for the sole purpose of engaging the arbitrator or as expressly permitted in this Section 11.2; provided that, the arbitrator(s) may convene a hearing if the arbitrator(s) so chooses to ask questions of the Parties and hear oral argument and discussion regarding each Party's Proposed Terms. Within sixty (60) days after the arbitrator's appointment, the arbitrator(s) will select one of the two Proposed Terms (without modification) provided by the Parties that he or she believes is most consistent with the intention underlying and agreed principles set forth in this Agreement. The decision of the arbitrator(s) shall be final, binding, and unappealable. For clarity, the arbitrator(s) must select as the only method to resolve the matter at issue one of the two sets of Proposed Terms, and may not combine elements of both Proposed Terms or award any other relief or take any other action.

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

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

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

**11.6 Injunctive Relief**. Nothing in this Article 11 will preclude either Party from seeking equitable relief or interim or provisional relief from a court of competent jurisdiction, including a temporary restraining order, preliminary injunction or other interim equitable relief, concerning a dispute either prior to or during any arbitration if necessary to protect the interests of such Party or to preserve the status quo pending the arbitration proceeding. Specifically, the Parties agree that a material breach by either Party of its obligations in Section 3.5 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 3.5 or Article 7, and without further proof

of irreparable harm other than this acknowledgement, such non-breaching Party shall be entitled to seek (a) immediate equitable relief, specifically including, but not limited to, both interim and permanent restraining orders and injunctions, without bond, and (b) such other and further equitable relief as the court may deem proper under the circumstances. For the avoidance of doubt, nothing in this Section 11.6 shall otherwise limit a breaching Party's opportunity to cure a material breach as permitted in accordance with Section 10.2.

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

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

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

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

## ARTICLE 12

## GENERAL PROVISIONS

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

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.

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

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

| | |
|---|---|
| If to Intrexon: | Intrexon Corporation<br>20358 Seneca Meadows Parkway<br>Germantown, MD 20876<br>Attention: Chief Operating Officer<br>Fax: (301) 556-9901 |
| with a copy to: | Intrexon Corporation<br>20358 Seneca Meadows Parkway<br>Germantown, MD 20876<br>Attention: Legal Department<br>Fax: (301) 556-9902 |
| If to Genopaver: | Genopaver, LLC<br>2875 South Ocean Boulevard<br>Suite 214<br>Palm Beach, FL 33480<br>Attention: Legal Department<br>Phone: (561) 328-6459<br>Fax: (561) 355-0627 |

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

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

**12.7 Entire Agreement; Amendment**. This Agreement, including any exhibits attached hereto, constitute the entire, final, complete and exclusive agreement between the Parties and supersede all previous agreements or representations, written or oral, with respect to the subject matter of this Agreement (including any prior confidentiality agreement between the Parties). All information of Intrexon or Genopaver 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 Genopaver 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.

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

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

*[Remainder of page intentionally left blank.]*

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

| **INTREXON CORPORATION** | **GENOPAVER, LLC** |
|---|---|
| By: /s/ Krish S. Krishnan | By: /s/ Theodore J. Fisher |
| Name: Krish S. Krishnan | Name: Theodore J. Fisher |
| Title: Chief Operating Officer | Title: Secretary |

**Exhibit 10.13**

**REDACTED COPY**
**CONFIDENTIAL**

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 April 27, 2013 (the "**Effective Date**") by and between **INTREXON CORPORATION**, a Virginia corporation with offices at 20358 Seneca Meadows Parkway, Germantown, MD 20876 ("**Intrexon**"), and **SOLIGENIX, INC.,** a Delaware corporation having a place of business at 29 Emmons Drive, Suite C-10, Princeton, NJ 08540 ("**Soligenix**"). Intrexon and Soligenix 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 and DNA vectors, and the control of peptide expression; and

**WHEREAS,** Soligenix now desires to become Intrexon's exclusive channel collaborator with respect to such technology for the purpose of developing the Melioidosis Program (as defined herein), and Intrexon is willing to appoint Soligenix as a channel collaborator in the Field (as defined herein, and subject to amendments to the definition as permitted herein) under the terms and conditions of this Agreement.

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

## ARTICLE 1

## DEFINITIONS

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

**1.1** "**Affiliate**" means, with respect to a particular Party, any other person or entity that directly or indirectly controls, is controlled by, or is in common control with such Party. As used in this Section 1.1, the term "controls" (with correlative meanings for the terms "controlled by" and "under common control with") means the ownership, directly or indirectly, of more than fifty percent (50%) of the voting securities or other ownership interest of an entity, or the possession, directly or indirectly, of the power to direct the management or policies of an entity, whether through the ownership of voting securities, by contract, or otherwise. Notwithstanding the foregoing, Third Security shall be deemed not to be an Affiliate of Intrexon, 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 Intrexon 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.

**1.2** "**Applicable Laws**" has the meaning set forth in Section 8.2(e)(xii).

**1.3** "**Authorizations**" has the meaning set forth in Section 8.2(e)(xii).

**1.4** "**Biodefense**" means procedures involved in taking defensive measures against attacks using biological agents, which includes without limitation emerging pathogen threats.

**1.5** "**Biodefense Sector**" means government agencies including but not limited to the Department of Defense ("DoD"), Department of Health and Human Services ("DHHS"), Department of Homeland Security ("DHS"), Biomedical Advanced Research and Development Authority ("BARDA"), and the Centers for Disease Control and Prevention ("CDC").

**1.6** "**CC**" has the meaning set forth in Section 2.2(b).

**1.7** "**Channel-Related Program IP**" has the meaning set forth in Section 6.1(c).

**1.8** "**Claims**" has the meaning set forth in Section 9.1.

**1.9** "**CMCC**" has the meaning set forth in Section 2.2(b).

**1.10** "**Committees**" has the meaning set forth in Section 2.2(a).

**1.11** "**Commercialize**" or "**Commercialization**" means any activities directed to marketing, promoting, distributing, importing for sale, offering to sell and/or selling Soligenix Products.

**1.12** "**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.

**1.13 "Complementary In-Licensed Third Party IP**" has the meaning set forth in Section 3.8(a).

**1.14** "**Confidential Information**" means each Party's confidential Information disclosed pursuant to this Agreement or any other confidentiality agreement between the Parties, regardless of whether in oral, written, graphic or electronic form.

**1.15** "**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.

**1.16** "**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 Soligenix 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.

**1.17** "**Emergency Use Authorization**" or "**EUA**" means an authorization by the FDA under section 564 of the Federal Food, Drug and Cosmetic Act (FD&C Act) (21 U.S.C. 360bbb-3) whereby certain unapproved medical products or unapproved uses of approved medical products may nonetheless be used in an emergency to diagnose, treat, or prevent serious or life-threatening diseases or conditions caused by biologic, chemical, or nuclear agents when there are no adequate approved and available alternatives.

**1.18** "**Equity Agreement**" has the meaning set forth in Section 5.1.

**1.19** "**Excess Product Liability Costs**" has the meaning set forth in Section 9.3.

**1.20** "**Executive Officer**" means : (a) the Chief Executive Officer of the applicable Party, or (b) 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, (i) 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 (ii) a dispute described in Section 11.1.

**1.21** "**FDA**" has the meaning set forth in Section 8.2(e)(xii).

**1.22** "**Field**" means exogenously produced human recombinant monoclonal antibodies, and mixes of such antibodies, for use in the prevention or treatment of Melioidosis in humans.

**1.23** "**Field Infringement**" has the meaning set forth in Section 6.3(b).

**1.24** "**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 and the terms of Sections 4.6 and 4.7 (as appropriate), Intrexon will bill for its internal direct costs incurred through the use of annualized standard full-time equivalents; such rate shall be based upon the actual fully loaded costs of those personnel directly involved in the provision of such good, product or service. Intrexon may, from time to time, adjust such full-time equivalent rate based on changes to its actual fully loaded costs and will review the accuracy of its full-time equivalent rate at least quarterly. Intrexon shall provide Soligenix with reasonable documentation indicating the basis for any direct and indirect charges, any allocable overhead, and any such adjustment in full-time equivalent rate.

**1.25 "Government Funding"** means use of grants, contracts or other mechanisms from government agencies, including but not limited to the DHHS, BARDA, and DoD to fund development activities in the Field.

**1.26** "**In-Licensed Program IP**" has the meaning set forth in Section 3.8(a).

**1.27** "**Information**" means information, results and data of any type whatsoever, in any tangible or intangible form whatsoever, including without limitation, business information and plans (such as marketing, financial, and personnel), manufacturing information and data, technical information, databases, inventions, practices, methods, techniques, specifications, formulations, formulae, knowledge, know-how, skill, experience, test data including pharmacological, biological, chemical, biochemical, toxicological and regulatory test data, analytical and quality control data, stability data, studies and procedures, and patent and other legal information or descriptions.

**1.28** "**Infringement**" has the meaning set forth in Section 6.3(a).

**1.29** "**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) LEAP™, (3) DNA and RNA MOD engineering, (4) protein engineering, (5) transcription control chemistry, (6) genome engineering, and (7) cell system engineering.

**1.30** "**Intrexon Indemnitees**" has the meaning set forth in Section 9.2.

**1.31** "**Intrexon IP**" means the Intrexon Patents and Intrexon Know-How.

**1.32** "**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 Soligenix to conduct the Melioidosis Program. For the avoidance of doubt, the Intrexon Know-How shall include any Information (other than Intrexon Patents) in the Channel-Related Program IP.

**1.33** "**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 provided to Soligenix by or on behalf of Intrexon to conduct the Melioidosis Program.

**1.34** "**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 Soligenix to conduct the Melioidosis Program. For the avoidance of doubt, the Intrexon Patents shall include any Patent in the Channel-Related Program IP.

**1.35** "**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.

**1.36** "**Inventions**" has the meaning set forth in Section 6.1(b).

**1.37** "**IPC**" has the meaning set forth in Section 2.2(b).

**1.38** "**JSC**" has the meaning set forth in Section 2.2(b).

**1.39** "**Losses**" has the meaning set forth in Section 9.1.

**1.40 "Melioidosis"** means a potentially fatal infection caused by the Gram-negative bacilli, *Burkholderia pseudomallei* and the closely-related *B. mallei*.

**1.41** "**Melioidosis Program**" has the meaning set forth in Section 2.1(a).

**1.42** "**Net Sales**" means, with respect to any Soligenix Product, the net sales of such Soligenix Product by Soligenix, an Affiliate of Soligenix, or a Product Sublicensee, as determined in accordance with US GAAP as the gross amount invoiced on account of sales of Soligenix Product less the usual and customary credits, discounts and the like 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 Soligenix Product is sold by Soligenix, its Product Sublicense, or Affiliates thereof to any Third Party together with other products or services, the price of such product, solely for purposes of the calculation of Net Sales, shall be deemed to be no less than the price at which such product would be sold in a similar transaction to a Third Party not also purchasing the other products or services.

**1.43** "**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.

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

**1.45** "**Product Sublicense**" has the meaning set forth in Section 3.2(c).

**1.46** "**Product Sublicensee**" has the meaning set forth in Section 3.2(c).

**1.47** "**Proposed Terms**" has the meaning set forth in Section 11.2.

**1.48** "**Prosecuting Party**" has the meaning set forth in Section 6.2(c).

**1.49** "**RC**" has the meaning set forth in Section 2.2(b).

**1.50** "**Recovery**" has the meaning set forth in Section 6.3(f).

**1.51** "**Regulatory Trial**" means any clinical or preclinical studies or trials done to produce data intended for or useful for any requisite government approvals for the sale, use, or manufacture of a relevant product.

**1.52** "**Retained Product**" has the meaning set forth in Section 10.4(a).

**1.53** "**Reverted Product**" has the meaning set forth in Section 10.4(c).

**1.54** "**SEC**" means the United States Securities and Exchange Commission.

**1.55** "**Soligenix Indemnitees**" has the meaning set forth in Section 9.1.

**1.56 "Soligenix Independent IP**" has the meaning set forth in Section 6.1(f).

**1.57** "**Soligenix 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 Soligenix (including without limitation by Intrexon under the Melioidosis Program), its Product Sublicensee(s), or Affliliates thereof during the Term through use or practice of Intrexon Channel Technology, Intrexon IP, or the Intrexon Materials.

**1.58** "**Soligenix Program Patent**" has the meaning set forth in Section 6.2(b).

**1.59** "**Soligenix Termination IP**" means all Patents, regulatory data rights, or other intellectual property that Soligenix 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, Soligenix Termination IP shall not include Soligenix Independent IP.

**1.60** "**Sublicensing Revenue**" means any cash consideration, or the cash equivalent value of non-cash consideration, regardless of whether in the form of upfront payments,

milestones, or royalties, actually received by Soligenix 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 Soligenix 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 Soligenix 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 received from sublicensees in respect of any Soligenix Product sales that are included in the calculation of revenue sharing payments made to Intrexon under Section 5.4(a); (d) any amounts paid by Soligenix to a Third Party for the right to operate under or utilize Third Party owned intellectual property that is used to make or use a Soligenix Product underlying the Sublicensing Revenue; and (e) subject to the waiver provisions of Section 5.2, any payments received by Soligenix from Product Sublicensees for the attainment of a milestone event that is the same as (or substantially similar to) a milestone event for which Intrexon is entitled to receive a milestone payment under Section 5.2.

**1.61** "**Superior Therapy**" means a therapy in the Field and licensed to Soligenix under this Agreement 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 Soligenix or others) at such time for the indication and (ii) those therapies that are being actively developed by Soligenix for such indication; (b) demonstrably appears to represent a substantial improvement over such existing therapies; and (c) has intellectual property protection and a regulatory approval pathway that, in each case, would not present a significant barrier to commercial development.

**1.62** "**Supplemental In-Licensed Third Party IP**" has the meaning set forth in Section 3.8(a).

**1.63** "**Support Memorandum**" has the meaning set forth in Section 11.2.

**1.64** "**Technology Access Fee**" for the purposes of this Agreement has the meaning as set forth in Section 5.1.

**1.65** "**Term**" has the meaning set forth in Section 10.1.

**1.66** "**Territory**" means the world.

**1.67 "Third Party**" means any individual or entity other than the Parties or their respective Affiliates.

**1.68** "**Third Security**" means Third Security, LLC.

**1.69** "**US GAAP**" means generally accepted accounting principles in the United States.

## ARTICLE 2

### SCOPE OF CHANNEL COLLABORATION; MANAGEMENT

**2.1 Scope**.

**(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 (collectively, the "**Melioidosis Program**"). As provided below, the JSC shall establish, monitor, and govern projects for the Melioidosis Program. Either Party may propose potential projects in the Field for review and consideration by the JSC. Intrexon recognizes that Soligenix's intention is for the Melioidosis Program to be supported predominantly by Government Funding through the Biodefense Sector and/or by non-profit agencies as an emerging infectious disease. Therefore, the JSC shall prioritize and account for such funding mechanisms in progressing the Melioidiosis Program consistent with the rights and obligations of the Parties as set forth herein.

**2.2 Committees**.

**(a) Generally**. The Parties desire to establish several committees (collectively, "**Committees**") to oversee the Melioidosis 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.

| Committee | Purpose |
|---|---|
| Joint Steering Committee ("**JSC**") | Establish projects for the Melioidosis Program and establish the priorities, as well as approve budgets for such projects. Approve all subcommittee projects and plans (except for decisions of the IPC). The JSC shall establish budgets not less than on a quarterly basis. |
| Chemistry, Manufacturing and Controls Committee ("**CMCC**") | Establish project plans and review and approve activities and budgets for chemistry, manufacturing, and controls under the Melioidosis Program. |

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.

| Committee | Purpose |
|---|---|
| Regulatory Committee ("**RC**") | Review and approve all research and development plans and projects, including but not limited to clinical projects, associated with any necessary regulatory approvals, all associated publications, and all regulatory filings and correspondence relating to gaining regulatory approval for new Soligenix Products under the Melioidosis 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 Melioidosis Program. |
| Intellectual Property Committee ("**IPC**") | Evaluate all intellectual property issues in connection with the Melioidosis 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 three (3) 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. 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. For purposes of this Section 2.3, employees of Third Security may, at Intrexon's election, serve as members of a Committee as if they were employees of Intrexon; provided that they meet the requirement of clause (i) above. 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 Soligenix selecting the chairperson first for the JSC, RC and CC, and Intrexon selecting the chairperson first for the CMCC and IPC. The chairperson of each Committee shall be responsible for calling meetings, preparing and circulating an agenda in advance of each meeting of such Committee, and preparing and issuing minutes of each meeting within fifteen (15) days thereafter.

**(b) Meetings**. The JSC shall be constituted and the first meeting of the JSC shall be held promptly following the Effective Date, with the JSC considering finalization and approval of workplans prepared by the Parties for inclusion and commencement under the Melioidosis Program. Otherwise, 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 Soligenix selecting the first meeting location for each Committee. A reasonable number of additional representatives of a Party may attend meetings of a Committee in a non-voting capacity. Each Party shall be responsible for all of its own expenses of participating in any Committee excepting that an Intrexon employee or agent serving on a Committee shall not prevent Intrexon from recouping the Fully Loaded Costs otherwise derived from the labor of that employee or agent in the course of providing manufacturing or support services as set forth in Sections 4.6 and 4.7 below.

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

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

**2.4 Committee Decision-Making**. If a Committee is unable to reach unanimous consent on a particular matter within thirty (30) days of its initial consideration of such matter,

then either Party may provide written notice of such dispute to the Executive Officer of the other Party. The Executive Officers of each of the Parties will meet at least once in person or by means of telecommunication (telephone, video, or web conferences) to discuss the dispute and use their good faith efforts to resolve the dispute within thirty (30) days after submission of such dispute to the Executive Officers. If any such dispute is not resolved by the Executive Officers within thirty (30) days after submission of such dispute to such Executive 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 Soligenix shall have the authority to finally resolve such dispute.

**(b) Casting Vote at CMCC**. If a dispute at the CMCC is not resolved pursuant to Section 2.4 above, then (i) in the case of any disputes relating to the Intrexon Materials, the manufacture of a Soligenix Product through the use of Intrexon Channel Technology or Intrexon IP, or the manufacturing of other components of Soligenix Products contracted for or manufactured by Intrexon or reasonable controls regarding the dissemination of Intrexon Technology, Intrexon IP or Intrexon Materials, 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 Soligenix shall have the authority to finally resolve such dispute.

**(c) Casting Vote at RC**. If a dispute at the RC is not resolved pursuant to Section 2.4 above, then the Executive Officer of Soligenix 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 Soligenix 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 or subcommittee other than those set forth in Section 2.2(b) is formed, then the Parties shall, at the time of such formation, agree on which Party shall have the authority to finally resolve a dispute that is not resolved pursuant to Section 2.4 above.

**(g) Restrictions**. Neither Party shall exercise its right to finally resolve a dispute at a Committee in accordance with this Section 2.4 in a manner that (i) excuses such Party from any of its obligations specifically enumerated under this Agreement; (ii) expands the

obligations of the other Party under this Agreement; (iii) negates any consent rights or other rights specifically allocated to the other Party under this Agreement; (iv) purports to resolve any dispute involving the breach or alleged breach of this Agreement; (v) resolves a matter if the provisions of this Agreement specify that mutual agreement is required for such matter; or (vi) would require the other Party to perform any act that is inconsistent with applicable law.

## ARTICLE 3

## LICENSE GRANTS

**3.1 Licenses to Soligenix**.

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

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

**3.2 Sublicensing**. Except as provided in this Section 3.2, Soligenix 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 Soligenix Products or use or display the Intrexon Trademarks, in each case except with Intrexon's written consent, which written consent may be withheld in Intrexon's sole discretion. Notwithstanding the foregoing, Soligenix (and its Product Sublicensees only to the extent explicitly set forth in Section 3.2(a) beow) shall have a limited right to sublicense under the circumstances described in Sections 3.2(a) through 3.2(c).

**(a)** Soligenix may transfer, to the extent reasonably necessary, Intrexon Materials that are or express Soligenix Products to a Third Party contractor performing contract manufacturing, fill, and/or finish responsibilities for Soligenix Products, and may in connection therewith grant limited sublicenses necessary to enable such Third Party to perform such activities. If Soligenix transfers any Intrexon Materials under this Section 3.2(a), Soligenix 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 Soligenix 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 express active pharmaceutical ingredients to a Third

Party contractor performing fill/finish responsibilities for Soligenix Products duly sublicensed to that Product Sublicensee, and may in connection therewith grant limited sublicenses to the extent necessary to enable such Third Party to perform such activities. Soligenix 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, and Soligenix will be responsible for ensuring 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.

**(b)** Soligenix may, with Intrexon's written consent, which consent shall not be unreasonably withheld, 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 display the Intrexon Trademarks. In the event that Intrexon consents to any such grant or transfer to an Affiliate, Soligenix 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 Soligenix), including any payment obligations owed to Intrexon hereunder.

**(c)** Soligenix may, with Intrexon's written consent, which consent may not be unreasonably withheld, grant a sublicense of the rights granted under Section 3.1 to a Third Party licensee of any Soligenix Product (a "**Product Sublicensee**") to the extent necessary to permit such Third Party to research, develop, use, import, export, make, sell, and offer for sale that Soligenix Product (a "**Product Sublicense**"), provided, that (i) the Soligenix Product in question has completed a Phase I clinical trial, (ii) such Product Sublicense is expressly limited to the appropriate Soligenix Product, (ii) such Product Sublicense does not grant the Product Sublicensee any rights to Intrexon IP other than that incorporated into the Soligenix Product at the time of the Product Sublicense, (iii) such Product Sublicense does not purport to relieve Soligenix 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, 3.2(a), 3.3-3.6, 3.8, 3.10, 3.11, and 4.6 and Articles 6, 7, and 10, and (v) the Product Sublicense is presented in full to the JSC and IPC by Soligenix before execution by Soligenix and the prospective Product Sublicensee and as soon as is reasonably practical during negotiations thereof for the purpose of allowing the JSC and IPC to review and comment upon the terms and scope of the Product Sublicense agreement.

**3.3 Limitation on Sublicensees**. None of the enforcement rights under the Intrexon Patents that are granted to Soligenix 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**. Soligenix 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.

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.

**3.5 Exclusivity**. Intrexon and Soligenix 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 as set forth in this Section 3.5. Neither Intrexon nor its Affiliates shall make the Intrexon Channel Technology or Intrexon Materials available to any Third Party for the purpose of developing or Commercializing products in the Field (except as set forth in Section 3.2), 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 commercial use or sale in the Field, outside of the Melioidosis Program. Further, neither Soligenix nor its Affiliates shall pursue (either by itself or with a Third Party or Affiliate) outside of the Melioidosis Program the research, development or Commercialization of any product for purpose of commercial use or sale in the Field where such products would compete with Soligenix Products.

**3.6 Off Label Use**. For purpose of clarity, (a) following first Commercial Sale of a Soligenix Product, the use by direct or indirect purchasers or other users of Soligenix Products outside the Field (i.e. "off label use") shall not constitute a breach by Soligenix of the terms of Section 3.4 or 3.5, provided that neither Soligenix nor its Affiliate (nor any Third Party under contract with either of them) marketed or promoted Soligenix Products for such off-label use; and (b) following 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, Soligenix acknowledges that Intrexon has all rights, in Intrexon's sole discretion, to use or make the Intrexon Materials, Intrexon Channel Technology (including any genetic materials used in a Soligenix Product), and Intrexon IP available to Third Party channel partners or collaborators for use in fields outside the Field.

**3.8 Rights to Regulatory Data**.

**(a)** Soligenix shall own and control all Regulatory Trial data and regulatory filings relating to Commercialization of Soligenix Products (except to the extent such become Reverted Products).

**(b)** Soligenix shall provide to Intrexon at Intrexon's request full copies of all Regulatory Trial data and reports, regulatory filings, and communications from regulatory authorities that relate specifically and solely to Soligenix Products. To the extent that there exist any Regulatory Trial data and reports, regulatory filings, and communications from regulatory authorities owned by Soligenix or a Product Sublicensee that relate both to Soligenix Products and other products produced by Soligenix or a Product Sublicensee outside the Field or outside the Melioidosis Program, upon Intrexon's request Soligenix shall provide (or require that the Product Sublicensee provide) to Intrexon copies of the portions of such data, reports, filings, and communications that relate to Soligenix 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 these data, reports, filings, and communications relating to Soligenix Products in regulatory filings made to obtain regulatory approval for products 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. Notwithstanding the provisions of this Section 3.8, Intrexon shall not, outside of the Melioidosis Program, utilize any Soligenix or Product Sublicensee data, reports, filings or communications for any reason in the Field.

**(c)** Intrexon shall provide to Soligenix at Soligenix's request full copies of all Regulatory Trial data and reports, regulatory filings, and communications from regulatory authorities that relate specifically and solely to Intrexon Materials incorporated in a Soligenix Product or products incorporating such Intrexon Materials. To the extent that there exist any Regulatory Trial data and reports, regulatory filings, and communications from regulatory authorities owned by Intexon or partners or other channel collaborators that relate both to such Intrexon Materials or products and other products produced by Intrexon or a partner or other channel collaborator, upon Soligenix's request Intrexon shall provide (or use reasonable efforts to cause Intrexon's partner or other channel collaborator provide) to Soligenix copies of the portions of such data, reports, filings, and communications that relate to such Intrexon Materials or products. Subject to its ongoing obligations of exclusivity under Section 3.5, Soligenix shall be permitted, directly or in conjunction with Product Sublicensees, to reference these data, reports, filings, and communications relating to such Intrexon Materials or Products in regulatory filings made to obtain regulatory approval for Soligenix Products in the Field. Soligenix shall have the right to use any such information in developing and Commercializing Soligenix Products in the Field and, subject to Section 3.2 to license any Product Sublicensees to do so. Notwithstanding the provisions of this Section 3.8, Soligenix shall not utilize any data, reports, filings or communications obtained under this Section 3.8(c) for any reason other than for development and Commercialization of Soligenix Products.

**3.9 Third Party Licenses**.

**(a)** [*****] shall obtain [*****] any licenses from Third Parties that are required in order to practice the Intrexon Channel Technology in the Field where the licensed intellectual property is reasonably necessary for Intrexon to conduct genetic and cell engineering and related analytic activities under JSC established plans for the Melioidosis Program (but

specifically excluding intellectual property directed to any specific antibodies, methods of treatment or therapy, cell lines, active pharmaceutical ingredients, delivery or packaging methods or apparatuses, or processes or methods for commercially manufacturing Soligenix Products) ("**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 Soligenix 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 Soligenix Products and to the Field. As provided above in Section 3.8(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 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 (to the extent such threats would reasonably be considered to subject the Third Party owner or licensee to declaratory judgment 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 3.8(c), [*****] shall have the right to pursue a license under Complementary In-Licensed Third Party IP [*****]. For the avoidance of doubt, [*****] may at any time obtain a license under Complementary In-Licensed Third Party IP outside the Field [*****] 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 3.8 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 Soligenix 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 Soligenix Products, Soligenix shall use commercially reasonable efforts to ensure that Soligenix 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 Soligenix under Section 3.1 may include sublicenses under Intrexon IP that has been licensed to Intrexon by one or more Third Parties. All 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 3.8(c), provided that Intrexon shall either provide unredacted copies of such upstream license agreements to Soligenix or shall disclose in writing to Soligenix all of such terms and conditions that are applicable to Soligenix. Soligenix 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 Soligenix 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, Soligenix hereby grants to Intrexon a non-exclusive, worldwide, fully-paid, royalty-free license, under any applicable Patents or other intellectual property Controlled by Soligenix 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**. Soligenix and its permitted sublicensees shall use the Intrexon Materials solely for purposes of the Melioidosis 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, Soligenix shall not, and shall ensure that Soligenix personnel and permitted sublicensees do not, except as otherwise permitted in 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, Soligenix shall be solely responsible for the development and Commercialization of Soligenix Products. Soligenix shall be responsible for all costs incurred in connection with the Melioidosis 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 a Soligenix Product, to the extent such allocation, depreciation, and amortization is permitted by US GAAP, it being recognized that the majority of non-facilities scale-up costs cannot be capitalized and amortized under US GAAP); (b) costs of basic research with respect to the Intrexon Channel Technology and Intrexon Materials (i.e., platform improvements) but, for clarity, excluding research described in Section 4.7 or research requested by the JSC for the development of a Soligenix Product (which research costs shall be reimbursed by Soligenix); (c) [*****]; and (d) costs of filing, prosecution and maintenance of Intrexon Patents. The costs encompassed within clause (a) of the previous sentence shall include without limitation the scale-up of Intrexon Materials for generating data for manufacturing-related regulatory approval submissions and Commercialization of Soligenix 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 Soligenix (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 materials between the Parties.

**4.3 Information and Reporting**. Soligenix will keep Intrexon informed about Soligenix's efforts to develop and Commercialize Soligenix Products, including reasonable and accurate summaries of Soligenix's (and its Affiliates' and, if applicable, (sub)licensees') development plans (as updated), including regulatory plans, marketing plans (as updated), progress towards meeting the goals and milestones in such plans and explanations of any material deviations, significant developments in the development and/or Commercialization of the Soligenix Products, including initiation or completion of a Regulatory Trial, submission of a United States or international regulatory filing, receipt of a response to such United States or international regulatory filing, Soligenix Product adverse safety events, receipt of Regulatory Approval, or commercial launch. As set forth in Section 3.7 above, Soligenix shall also provide to Intrexon copies of all final Regulatory Trial protocols and reports, and regulatory correspondence and filings generated by Soligenix as soon as practical after they become available. Intrexon will keep Soligenix informed about Intrexon's efforts (a) to establish manufacturing capabilities and facilities for Soligenix 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 Melioidosis 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 Soligenix and Intrexon will be coordinated by the JSC and made in connection with JSC meetings at least once every six (6) months while Soligenix 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, Soligenix shall own and maintain, at its own cost, all regulatory filings and regulatory approvals for Soligenix Products that Soligenix is developing or Commercializing pursuant to this Agreement. As such, Soligenix shall be responsible for reporting all adverse events related to such Soligenix 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, either Party may request that Soligenix and Intrexon establish and execute a separate safety data exchange agreement, which agreement will address and govern the timely exchange of safety information generated by Soligenix, Intrexon, and relevant third parties with respect to specific Intrexon Materials.

**4.5 Diligence**.

**(a)** Soligenix shall use, and shall require its sublicensees to use, Diligent Efforts to develop and Commercialize Soligenix Products. Activities and success of Soligenix relating to ongoing active pursuit of Government Funding to develop or Commercialize Soligenix Products shall be considered in determining whether Soligenix is using Diligent Efforts in accord with this Section 4.5(a).

**(b)** Without limiting the generality of the foregoing, Intrexon may, from time to time, notify Soligenix that it believes it has identified a Superior Therapy, and in such case Intrexon shall provide to Soligenix its then-available information about such therapy and reasonable written support for its conclusion that the therapy constitutes a Superior Therapy. Soligenix shall have the following obligations with respect to such proposed Superior Therapy: (i) within ninety (90) days after such notification, Soligenix shall prepare and deliver to the JSC for review and approval a development plan detailing how Soligenix will pursue the Superior Therapy (including a proposed budget) along with a comparative analysis outlining the economic impact to both Intrexon and Soligenix to developing the Superior Therapy compared to the existing product; (ii) assuming the JSC approves development of the Superior Therapy, Soligenix shall revise the development plan as directed by the JSC; and (iii) following approval of the development plan by the JSC, Soligenix shall use Diligent Efforts to pursue the development of the Superior Therapy under the Melioidosis Program in accordance with such development plan. If Soligenix fails to comply with the foregoing obligations, or if Soligenix 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 Soligenix's Affiliates and any sublicensees of Soligenix permitted in accord with Section 3.2 shall be attributed to Soligenix for the purposes of evaluating Soligenix's 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 Melioidosis Program of the Intrexon Materials, including through the use of a suitable Third Party contract manufacturer. To the extent that Intrexon so elects, either Party may request that Soligenix and Intrexon establish and execute a separate manufacturing and supply agreement, which agreement will establish and govern the production, quality assurance, and regulatory activities associated with manufacture of Intrexon Materials. Except as provided in Section 4.1, any manufacturing undertaken by Intrexon pursuant to the preceding sentence shall be performed in exchange for cash payments equal to Intrexon's Fully Loaded Cost in connection with such manufacturing, on terms to be negotiated by the Parties in good faith. In the event that Intrexon does not manufacture Intrexon Materials or bulk quantities of other components of Soligenix Products, then Intrexon shall provide to Soligenix or a contract manufacturer selected by Soligenix and approved by Intrexon all Information Controlled by Intrexon that is (a) related to the manufacturing of such Intrexon Materials or bulk quantities of other components of Soligenix Products for use in the Field and (b) reasonably necessary to enable Soligenix or such contract manufacturer (as appropriate) for the sole purpose of manufacturing such Intrexon Materials or bulk quantities of other components of Soligenix Products. The costs and expenses incurred by Intrexon in carrying out such transfer shall be borne by Intrexon. Any manufacturing Information transferred hereunder to Soligenix or its contract manufacturer shall not be further transferred to any Third Party, including any sublicensee of Soligenix, or any Soligenix Affiliate without the prior written consent of Intrexon; provided, however, that Intrexon shall not unreasonably withhold such consent if necessary to permit Soligenix to switch manufacturers.

**4.7 Support Services**. The JSC will meet promptly following the Effective Date and establish a plan under which Intrexon will provide support services to Soligenix for the research and development of Soligenix Products under the Melioidosis Program, which initial plan may be amended from time to time by the JSC. Wherever commercially reasonable, such plan shall take into account and prioritize pursuit of Government Funding to support development activities and a strategy to secure funding. In conjunction with Government Funding and/or in addition as is reasonable for development of the Melioidosis Program, Soligenix 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, Soligenix shall request, or Intrexon may propose, that Intrexon perform certain additional support services with respect to researching and developing new Soligenix

Products or improving the manufacturing or processing methods for any existing Soligenix Products. To the extent that the Parties mutually agree that Intrexon 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 would be compensated for such services by cash payments equal to Intrexon's Fully Loaded Cost in connection with such services.

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

**4.9 Trademarks and Patent Marking.** To the extent permitted by applicable law and regulations, Soligenix shall ensure that the packaging, promotional materials, and labeling for Soligenix Products, as appropriate, shall carry, in a conspicuous location, the applicable Intrexon Trademark(s), subject to Soligenix's reasonable approval of the size, position, and location thereof. Consistent with the U.S. patent laws, Soligenix shall ensure that Soligenix Products, or their respective packaging or accompanying literature as appropriate, bear applicable and appropriate patent markings for Intrexon Patent numbers. Soligenix 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. Soligenix's use of the Intrexon Trademarks and patent markings shall be subject to prior review and approval of the IPC. Soligenix acknowledges Intrexon's sole ownership of the Intrexon Trademarks and agrees not to take any action inconsistent with such ownership. Soligenix covenants that it shall not use any trademark confusingly similar to any Intrexon Trademarks in connection with any products (including any Soligenix Product). From time to time during the Term, Intrexon shall have the right to obtain from Soligenix samples of Soligenix Product sold by Soligenix 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 Soligenix 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 Soligenix in writing thereafter. Soligenix 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 Soligenix that Intrexon has reasonably concluded, after consultation with its outside advisors, that Intrexon will have to consolidate Soligenix's financial statements with its own, for so long as Intrexon reasonably believes that such consolidation is necessary, Soligenix shall used best efforts to comply with the following additional obligations:

**(a)** Soligenix shall maintain at its principal place of business or, upon notice to Intrexon, at such other place as Soligenix shall determine:

(i) a copy of Soligenix's certificate of incorporation or organizational document and all amendments thereto, together with executed copies of any powers of attorney pursuant to which any amendment has been executed;

(ii) a copy of this Agreement;

(iii) a copy of Soligenix's federal, state, and local income tax returns and reports, if any; and

(iv) minutes of meetings of Soligenix's board of directors and shareholders or actions by written consent in lieu thereof, redacted as necessary by Soligenix to exclude any sensitive or confidential information that Intrexon, by operation of law or contractual stipulation, is not permitted to receive.

**(b)** Soligenix shall keep its books and records consistent with US GAAP.

**(c)** Intrexon at its own expense and upon reasonable notice, may examine any information it may reasonably request (including, to the extent Soligenix has the right to provide such, the work papers of Soligenix's internal and independent auditors) and make copies of and abstracts from the financial and operating records and books of account of Soligenix, and discuss the affairs, finances and accounts of Soligenix with Soligenix and independent auditors of Soligenix, all at such reasonable times and as often as Intrexon or any agents or representatives of Intrexon may reasonably request. The rights granted pursuant to this Section 4.10(c) are expressly subject to compliance by Intrexon with the safety, security and confidentiality procedures and guidelines of Soligenix, as such procedures and guidelines may be established from time to time.

**(d)** As soon as available but no later than ninety (90) days after the end of each fiscal year, Soligenix shall cause to be prepared and Intrexon to be furnished with an audited balance sheet as of the last day of such fiscal year and an audited income statement, a statement of stockholders' equity and statement of cash flows for Soligenix for such fiscal year and notes associated with each, in each case prepared in accordance with US GAAP, together with a report of Soligenix's independent auditor that such statements have been prepared in accordance with US GAAP and present fairly, in all material respects, the financial position, results of operations and cash flows of Soligenix.

**(e)** As soon as available but no later than forty five (45) days after the end of each calendar quarter, Soligenix shall furnish the following to Intrexon an unaudited balance sheet as of the last day of such period, and an unaudited income statement, a statement of cash flows and a statement of stockholders' equity for Soligenix for such period, in each case prepared in accordance with US GAAP.

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.

**(f)** As requested by Intrexon on no more than a quarterly basis, a certificate, executed by the Executive Officer of Soligenix, certifying on behalf of Soligenix the following:

(i) Soligenix maintains accurate books and records reflecting its assets and liabilities and maintains proper and adequate internal accounting controls that provide assurance that (1) transactions are executed with management's authorization; (2) transactions are recorded as necessary to permit preparation of the consolidated financial statements of Soligenix and to maintain accountability for Soligenix's consolidated assets; (3) access to the assets of Soligenix is permitted only in accordance with management's authorization; (4) the reporting of assets of Soligenix is compared with existing assets at regular intervals; and (5) accounts, notes and other receivables and inventory are recorded accurately, and proper and adequate procedures are implemented to effect the collection of accounts, notes and other receivables on a current and timely basis.

(ii) under the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder; any such controls and procedures are effective to ensure that all material information concerning (ii) Soligenix is made known on a timely basis to those individuals responsible for the preparation of any filings that may be required to be made by Intrexon with the SEC and other public disclosure documents.

**(g)** Soligenix shall promptly prepare and furnish to Intrexon any information, whether written or oral, requested by Intrexon that is reasonably necessary for purposes of Intrexon's ongoing compliance with applicable law.

**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 Soligenix no less than thirty (30) days prior (inclusive of any cure period set forth in Section 10.2(a)) 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 Soligenix 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 under this Section 4.11.

**4.12 Grant Activities**. While the Parties anticipate that the Melioidosis Program will be supported predominantly by Government Funding, Soligenix will not apply for or obtain grants, whether government or private, to fund activities under the Melioidosis Program, or use funds from any such grant to support activities under the Melioidosis Progam, without obtaining approval in accord with this Section 4.12. The provisions and obligations of any prospective grant shall be presented in full by Soligenix to the JSC and IPC before any grant application submission and before any grant acceptance by Soligenix as soon as is reasonably practical for the purpose of allowing the JSC and IPC to review the terms and scope of grant, to determine, within each such Committee's respective authority, whether such grant (or related funds) would comply with the relevant terms and obligations of this Agreement, and to approve or reject such application for or acceptance of such grant (or use of such grant funds). Intrexon shall not unreasonably use its casting vote at the IPC to withhold its approval of relevant Government Funding grants or contracts to the extent that such grants or contracts do not (i) unreasonably restrict Intrexon's rights to own or use any Inventions developed in the course of the Melioidosis Program consistent with Article 6 of this Agreement, or (ii) impose unreasonable restrictions upon Intrexon's business or platform technology programs.

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.

## ARTICLE 5

### COMPENSATION

**5.1 Technology Access Fee**. In partial consideration for Soligenix's appointment as an exclusive channel collaborator in the Field and the other rights granted to Soligenix hereunder, Soligenix shall issue to Intrexon, as an access fee for commercial license rights to the Intrexon IP granted under Section 3.1, certain equity interests in Soligenix (the "**Technology Access Fee**") in accordance with the terms and conditions of the Stock Issuance Agreement of even date herewith (the "**Equity Agreement**"). As set forth in the Equity Agreement, the Technology Access Fee will be either (i) one and one-half million dollars ($1,500,000) in cash, or (ii) that number of shares of Soligenix common stock having a value equaling one and one-half million dollars ($1,500,000) (the number of shares to be calculated according to, or stipulated by, the terms of the Equity Agreement). Full payment of the Technology Access Fee, will occur within the timeframes set forth in the Equity Agreement. Provided that all closing conditions for the Technology Access Fee Shares (as defined in the Equity Agreement) that are within the reasonable control of Intrexon have been satisfied or waived, the payment of the Technology Access fee to Intrexon, including issuance of any Technology Access Fee Shares (as set forth in the Equity Agreement) to Intrexon, is a condition subsequent to the effectiveness of this Agreement.

**5.2 Milestones**. Upon the attainment of certain milestone events by a Soligenix Product (whether such attainment is achieved by Soligenix, an Affiliate of Soligenix, or sublicensee of Soligenix), Soligenix has agreed to make certain milestone payments to Intrexon as generally set forth below in Sections 5.2(a) and 5.2(b), which payments (subject to the terms and conditions of the Equity Agreement) shall be either in cash or in an equivalent value of Soligenix common stock at Soligenix's sole discretion.

**(a) IND Milestone**. Within thirty (30) days of the achievement of an IND Milestone Event (as defined in the Equity Agreement), Soligenix will pay to Intrexon, according to the timelines and procedures set forth in the Equity Agreement, one of the following: (i) [*****] in cash, or (ii) the IND Milestone Shares (as defined in the Equity Agreement).

**(b) Regulatory Approval Milestone**. Within thirty (30) days of the achievement of an Approval Milestone Event (as defined in the Equity Agreement), Soligenix will pay to Intrexon, according to the timelines and procedures set forth in the Equity Agreement, one of the following: (i) [*****] in cash, or (ii) the Approval Milestone Shares (as defined in the Equity Agreement).

**(c)** If (A) a milestone event occurs that gives rise to a right for Intrexon to receive a milestone payment from Soligenix under this Section 5.2, (B) that milestone event is

achieved by a Soligenix Product licensed to a Product Sublicensee under a respective Product Sublicense, and (C) Soligenix is due to receive a milestone payment from the Product Sublicensee for achievement of that same (or substantially similar) milestone event by the sublicensed Soligenix Product under the respective Product Sublicense, then Intrexon may elect at its own discretion to waive that particular milestone payment from Soligenix for that particular milestone event and instead designate the amount of the payment due to Soligenix from the Product Sublicensee for that same (or substantially similar) milestone event as Sublicensing Revenue for which Intrexon will be entitled to receive revenue sharing under Section 5.4(b). If it so elects under this Section 5.2(c), Intrexon must notify Soligenix in writing of its waiver of the 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 Soligenix to issue shares or otherwise make a payment for the waived milestone payment. The actual receipt by Intrexon of its full share of such a 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 Soligenix under this Section 5.2. Soligenix will pay Intrexon any amount due under this Section 5.2 within the later of (i) thirty (30) days from underlying milestone event, or (ii) ten (10) days following the date stipulated in the underlying Product Sublicense for Soligenix to receive the milestone payment.

**5.3 Equity Agreement Controls.** All issuances of equity interests to Intrexon shall be in accordance with the terms and conditions of the Equity Agreement, which Equity Agreement shall control to the extent they may conflict with Sections 5.1 or 5.2 of this Agreement.

**5.4 Revenue Sharing**.

**(a)** No later than thirty (30) days after each calendar quarter in which there are positive Net Sales arising from the sale of any Soligenix Product in the Field in the Territory, Soligenix shall pay to Intrexon on a Soligenix Product-by-Soligenix Product basis (i) a six percent (6%) royalty on the first one hundred million dollars ($100M) of annual Net Sales (cumulative worldwide for all Soligenix Products), (ii) an eight percent (8%) royalty on the portion of annual Net Sales exceeding one hundred million dollars ($100M) up to and including two hundred million dollars ($200M) of annual Net Sales (cumulative worldwide for all Soligenix Products), (iii) a ten percent (10%) royalty on the portion of annual Net Sales exceeding two hundred million dollars ($200M) up to and including three hundred million dollars ($300M) of annual Net Sales (cumulative worldwide for all Soligenix Products), and (iv) a twelve percent (12%) royalty on the portion of annual Net Sales exceeding three hundred million dollars ($300M) (cumulative worldwide for all Soligenix Products). Commencing with the Effective Date, in the event there are negative Net Sales for a particular Soligenix Product in any calendar quarter, neither Soligenix nor Intrexon shall owe any payments hereunder with respect to such Soligenix Product. To the extent that a portion of Net Sales for any calendar quarter is derived from the sale of Soligenix Products by a Product Sublicensee, the royalty payment due to Intrexon for that portion of Net Sales derived from the Product Sublicensee shall in no event be greater than fifty percent (50%) of the royalty payment due to Soligenix from the Product Sublicensee under the relevant Product Sublicense.

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.

**(b)** No later than thirty (30) days after each calendar quarter in which Soligenix or any Soligenix Affiliate receives Sublicensing Revenue, Soligenix shall pay to Intrexon fifty percent (50%) of such Sublicensing Revenue.

**5.5 Method of Payment**. Cash payments due to Intrexon under this Agreement shall be paid in United States dollars by wire transfer to a bank in the United States designated in writing by Intrexon. All references to "dollars" or "$" herein shall refer to United States dollars.

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

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

**(b)** itemized calculation of Net Sales on a Soligenix Product-by-Soligenix Product and country-by-country basis (showing conversion to dollars for any Net Sales derived in a currency other than dollars), showing all applicable deductions;

**(c)** the amount of any negative Net Sales for the applicable calendar quarter;

**(d)** the amount of the payment (if any) due to Intrexon pursuant to Section 5.4(a) and 5.4(b);

**(e)** the amount of taxes, if any, withheld from each of the payments set forth in Sections 5.8(d) and 5.8(e) to comply with any applicable law; and

**(f)** the exchange rates used in any of the foregoing calculations.

For three (3) years after each sale or other commercial use of Soligenix Product, or after incurring any component item Soligenix incorporated into its calculation of Net Sales or otherwise impacting Soligenix's calculations with regard to payments made to Intrexon in accord with Sections 5.4(a) or 5.4(b), Soligenix shall keep (and shall ensure that its Affiliates and, if applicable, (sub)licensees shall keep) complete and accurate records of such sales and other relevant information in sufficient detail to confirm the accuracy of the payment calculations hereunder.

**5.7 Audits**.

**(a)** Upon the written request of a Party, the other Party shall permit an independent certified public accounting firm of internationally recognized standing selected by

the requesting Party, and reasonably acceptable to the other Party, 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 the other Party and its Affiliates to verify, as applicable, the accuracy and timeliness of the reports and payments made by Soligenix under this Agreement or the amounts charged by Intrexon to Soligenix under this Agreement as its Fully Loaded Cost. Such review may cover the records for sales made in any calendar year with respect to an audit of Soligenix, and for Fully Loaded Costs with respect to an audit of Intrexon, in each case 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 or Fully Loaded Costs charges, as applicable, 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 to Intrexon or over-charged by Intrexon during such period, as appliacble, Soligenix or Intrexon, respectively, shall pay additional amounts, with interest from the date originally due with respect to royalty payments by Soligenix 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 or over-charging, as applicable, is greater than five percent (5%) of the total amount actually owed or charged for the period audited, then the other Party shall in addition reimburse the auditing Party for all costs related to such audit; otherwise, the auditing Party shall pay all costs of the audit. In the event of overpayment of royalties by Soligenix, 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 Soligenix over next three (3) quarters, Intrexon will promptly repay to Soligenix any amount exceeding that projected amount.

**(c)** The auditing Party 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 the other Party 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. Soligenix 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 Soligenix or the appropriate governmental authority (with the assistance of Soligenix 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 Soligenix of its obligation to withhold tax, and Soligenix shall apply the reduced rate of withholding tax, or dispense with withholding tax, as

the case may be, provided that Soligenix 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, Soligenix withholds any amount, it shall make timely payment to the proper taxing authority of the withheld amount, and send to Intrexon proof of such payment within forty-five (45) days following that latter payment.

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

## ARTICLE 6

### INTELLECTUAL PROPERTY

**6.1 Ownership**.

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

**(b)** Soligenix 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 Melioidosis 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 made with, using, or otherwise incorporating Intrexon Channel Technology, together with all Patent rights and other intellectual property rights therein (the "**Channel-Related Program IP**"). Soligenix hereby assigns all of its right, title and interest in and to the Channel-Related Program IP to Intrexon. Soligenix 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 Soligenix 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. Soligenix shall be under appropriate written agreements with each of its employees, contractors, or agents working on the Melioidosis Program, pursuant to which such person shall grant all rights in the Inventions to Soligenix (so that Soligenix may convey certain of such rights to Intrexon, as provided herein) and agree to protect all Confidential Information relating to the Melioidosis Program.

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

**6.2 Patent Prosecution**.

**(a)** Intrexon shall have the sole right, but not the obligation, at Intrexon's expense, to (i) conduct and control the filing, prosecution and maintenance of the Intrexon Patents, and (ii) 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 Soligenix Product. At the reasonable request of Intrexon, Soligenix shall cooperate with Intrexon in connection with such filing, prosecution, and maintenance, at Intrexon's expense. Except as otherwise set forth in this Section 6.2(a), under no circumstances shall Soligenix (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 for the Intrexon Patents, either in the United States or elsewhere, that relies upon the regulatory approval of a Soligenix Product.

**(b)** Soligenix 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 Soligenix or its Affiliates and not assigned to Intrexon under Section 6.1(c) ("**Soligenix Program Patents**"). At the reasonable request of Soligenix, Intrexon shall cooperate with Soligenix in connection with such filing, prosecution, and maintenance, at Soligenix's expense. Under no circumstances shall Intrexon (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 Soligenix, (B) use, attempt to use, or assist anyone else in using or attempting to use, the Soligenix Independent IP, any Inventions that are owned by Soligenix or its Affiliates and

not assigned to Intrexon under Section 6.1(c) or any Confidential Information of Soligenix to support the filing of a Patent application, either in the United States or elsewhere, that contains claims directed to the Soligenix Independent IP or Inventions that are owned by Soligenix or its Affiliates and not assigned to Intrexon under Section 6.1(c).

**(c)** As used in this Section, "**Prosecuting Party**" means Intrexon in the case of Intrexon Patents and Soligenix in the case of Soligenix 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 Soligenix Program Patents, as applicable. The Prosecuting Party shall:

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

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

(iii) consult with the non-Prosecuting Party before taking any action that would reasonably be expected to have a material adverse impact on the scope of claims within the Intrexon Patents and Soligenix 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, Soligenix 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 Soligenix exercises the foregoing right, Intrexon agrees to be named in any such action if required. If Soligenix 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 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 Soligenix on such determination. For the avoidance of doubt, Intrexon has no obligations under this Agreement to enforce any Intrexon Patents against, or otherwise abate, any Infringement that is not a Field Infringement.

**(d)** In the event a Party pursues an action under this Section 6.3, the other Party shall reasonably cooperate with the enforcing Party with respect to the investigation and prosecution of any alleged, threatened, or actual Infringement, at the enforcing Party's expense (except with respect to an action under Section 6.3(c), where all costs and expenses will be shared equally in accordance with terms thereof).

**(e)** Soligenix 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 Soligenix in the Field or adversely affects any Intrexon Patent with respect to the Field without Soligenix's 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 Soligenix pursuant to Section 6.3(b), Soligenix shall retain one hundred percent (100%) of any Recovery, but such Recovery shall be shared with Intrexon as "Net Sales" under Section 5.4(a). In any action initiated by Intrexon or Soligenix pursuant to Section 6.3(c), the Parties shall share the Recovery equally, the Parties shall bear the costs and expenses of such enforcement equally, and such Recovery shall not be deemed to constitute "Net Sales" per the preceding sentence.

**(g)** Soligenix shall promptly notify Intrexon in writing of any suspected, alleged, threatened, or actual Infringement of which it becomes aware, and Intrexon shall promptly notify Soligenix 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 and can be demonstrated by written records, other than under an obligation of confidentiality, at the time of disclosure by the other Party;

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

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

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

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

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

**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 requirement, 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 Regulatory Trials, or to gain regulatory approval, of Soligenix 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 or clinical investigators) who agree to be bound by obligations of confidentiality and non-use at least equivalent in scope to those set forth in this Article 7; and

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

**7.3 Publicity; Publications**. The Parties agree that the public announcement of the execution of this Agreement and the Equity Agreement shall be substantially in the form of a press release and/or the filing of a Form 8-K by Soligenix, which shall be mutually agreed to by the Parties. Each Party will provide the other Party with the opportunity to review and comment,

prior to submission or presentation, on external reports, publications and presentations (e.g., press releases, reports to government agencies, abstracts, posters, manuscripts and oral presentations) that refer to the Melioidosis Program or programs that are approved by the JSC. For such reports, publications, and presentations, the disclosing Party will provide the other Party at least fifteen (15) calendar days for review of the proposed submission or presentation. In the case of a Form 8-K filing, such shall be provided to Intrexon by Soligenix as soon as practicable prior to filing. 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, Soligenix acknowledges that Intrexon's authorized representative(s), during regular business hours may (i) examine and inspect Soligenix's facilities and (ii) inspect all data and work products relating to this Agreement, subject to restrictions imposed by applicable laws. Any examination or inspection hereunder shall require five (5) business days written notice from Intrexon to Soligenix. Soligenix 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 4.5, and the confidentiality obligations under Article 7, Intrexon acknowledges that Soligenix 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 Soligenix to Intrexon. Intrexon will make itself and the pertinent employees and/or agents available, on a reasonable basis, to Soligenix for the aforementioned compliance review.

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

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

## ARTICLE 8

### REPRESENTATIONS AND WARRANTIES

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

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

**(b) Due Authorization**. Soligenix is duly authorized to execute and deliver this Agreement and to perform its obligations hereunder, and the person executing this Agreement on Soligenix'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 Soligenix 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 Soligenix 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. Soligenix is aware of no action, suit or inquiry or investigation instituted by any governmental agency which questions or threatens the validity of this Agreement.

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

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

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

**(c) Binding Agreement**. This Agreement is a legal and valid obligation binding upon Intrexon and enforceable in accordance with its terms, except as such enforcement may be limited by applicable bankruptcy, insolvency, reorganization, arrangement, moratorium or other similar laws affecting creditors' rights, and subject to general equity principles and to limitations on availability of equitable relief, including specific performance. The execution, delivery and performance of this Agreement by Intrexon does not conflict with any agreement, instrument or understanding, oral or written, to which it is a party or by which it may be bound. Intrexon is aware of no action, suit or inquiry or investigation instituted by any governmental agency which questions or threatens the validity of this Agreement

**(d) Third Party Licenses.** Except as previously disclosed by Intrexon to Soligenix, as of the Effective Date there are no material terms and conditions under any relevant sublicenses requiring disclosure to Soligenix under Section 3.9(e).

**(e) Additional Intellectual Property Representations**.

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

(ii) The Intrexon Patents existing as of the Effective Date constitute all of the Patents Controlled by Intrexon as of such date that are necessary for the development, manufacture and Commercialization of Soligenix Products;

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

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

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

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

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

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

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

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

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

(xii) Except as otherwise disclosed in writing to Soligenix, Intrexon: (A) is in material compliance with all statutes, rules or regulations applicable to the ownership,

testing, development, manufacture, packaging, processing, use, distribution, marketing, labeling, promotion, sale, offer for sale, storage, import, export or disposal of any product that is under development, manufactured or distributed by Intrexon in the Field ("**Applicable Laws**"); (B) has not received any FDA Form 483, notice of adverse finding, warning letter, untitled letter or other correspondence or notice from the United States Food and Drug Administration (the "**FDA**") or any other federal, state, local or foreign governmental or regulatory authority alleging or asserting material noncompliance with any Applicable Laws or any licenses, certificates, approvals, clearances, authorizations, permits and supplements or amendments thereto required by any such Applicable Laws ("**Authorizations**"), which would, 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, letters to customers, or other notice or action relating to the alleged lack of safety or efficacy of any product or any alleged product defect or violation and, to Intrexon's knowledge, no third party has initiated, conducted or intends to initiate any such notice or action.

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

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

## ARTICLE 9

### INDEMNIFICATION

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

**9.2 Indemnification by Soligenix**. Soligenix 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 Soligenix or any of its Affiliates or their respective employees or agents; (b) the use, handling, storage, or transport of Intrexon Materials by or on behalf of Soligenix or its Affiliates, licensees, or sublicensees; (c) breach by Soligenix 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 Soligenix Product by or on behalf of Soligenix or its Affiliates, licensees, or sublicensees. Notwithstanding the foregoing, Soligenix 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 Soligenix 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 Soligenix Products, Soligenix shall maintain in effect and good standing a product liability insurance policy issued by a reputable insurance company in amounts considered standard for the industry. Immediately prior to, and during the conduct of any clinical trials, Soligenix shall maintain in effect and good standing a clinical trials liability insurance policy issued by a reputable insurance company in amounts considered standard for the industry. At Intrexon's reasonable request, Soligenix shall provide Intrexon with all details regarding such policies, including without limitation copies of the applicable liability insurance contracts. Soligenix shall use reasonable efforts to include Intrexon as an additional insured on any such policies.

## ARTICLE 10

## TERM; TERMINATION

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

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

**(a)** Either Party shall have the right to terminate this Agreement upon written notice to the other Party if the other Party commits any material breach of this Agreement that such breaching Party fails to cure within sixty (60) days following written notice from the

nonbreaching Party specifying such breach; provided, however, that if Soligenix commits any breach of the provisions of Section 4.10 of this Agreement, Intrexon shall have the right to terminate this Agreement if Soligenix fails after notice from Intrexon to cure such breach within thirty (30) days following written notice thereof.

**(b)** Intrexon shall have the right to terminate this Agreement, at its sole discretion, if any necessary shareholder, member, exchange, and/or board of director approvals of Soligenix have not been obtained, and the Technology Access Fee Shares (as defined in the Equity Agreement) have not been issued, within the time frames set forth in the Equity Agreement.

**(c)** Intrexon shall have the right to terminate this Agreement under the circumstances set forth in Section 4.5(b) upon written notice to Soligenix, such termination to become effective sixty (60) days following such written notice unless Soligenix 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 Soligenix execute any purported assignment of this Agreement contrary to the prohibitions in Section 12.8, such termination occurring upon Intrexon providing written notice to Soligenix and becoming effective immediately upon such written notice.

**(e)** In recognition of the need for Soligenix to raise capital necessary to carry out its obligations under this Agreement, notwithstanding the foregoing, during the twelve (12) month period commencing on the Effective Date, neither Party shall have the right to terminate this Agreement under Section 10.2(a) based on the failure of the other Party to use Diligent Efforts or to comply with any other diligence obligations hereunder (including without limitation Section 4.5), nor shall Intrexon have the right to terminate this Agreement under Section 10.2(c).

**10.3 Termination by Soligenix**. Soligenix shall have the right to voluntarily terminate this Agreement in its entirety upon ninety (90) days written notice to Intrexon at any time.

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

(i) the particular product is a Soligenix Product that is being sold or has been sold within the past six (6) months by Soligenix (or, as may be permitted under this Agreement, its Affiliates and, if applicable, (sub)licensees) triggering revenue sharing payments therefor under Section 5.4(a) of this Agreement,

(ii) the particular product is a Soligenix Product that has received regulatory approval,

(iii) the particular product is a Soligenix Product that has received a government procurement contract under an Emergency Use Authorization by the FDA or similar designation,

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

(v) the particular product is a Soligenix Product that is the subject of an ongoing or completed Phase II clinical trial, or

(vi) the particular product is a Soligenix Product that is the subject of a successful and completed animal efficacy study or an ongoing animal efficacy study, which study (if successful) would be sufficient under relevant government laws or regulations and absent human efficacy trials to permit sale of the particular product under an Emergency Use Authorization or other relevant statutory or regulatory exemptions that permit commercial sale absent a showing to the FDA of safety and effectiveness of the subject product through the conventional route of human clinical trials.

Such right to continue development and Commercialization shall be subject to Soligenix's full compliance with the payment provisions in Article 5, a continuing obligation for Soligenix 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 Soligenix to continue to obtain regulatory approval for, 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 Soligenix under this Agreement shall terminate and shall revert to Intrexon without further action by either Intrexon or Soligenix. Soligenix's 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 Soligenix Products other than the Retained Products shall be referred to herein as the "**Reverted Products**." Soligenix 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 Soligenix 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. Soligenix 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**. Soligenix shall promptly return, or at Intrexon's request, destroy, any Intrexon Materials in Soligenix's 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**. Soligenix is automatically deemed to grant to Intrexon a worldwide, fully paid, royalty-free, exclusive (even as to Soligenix and its Affiliates), irrevocable, license (with full rights to sublicense) under the Soligenix 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 Soligenix 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**. Soligenix 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. Soligenix 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, Soligenix shall provide copies of the portions of such regulatory filings that relate to Reverted Products and shall reasonably cooperate to assist Intrexon in obtaining the benefits of such regulatory approvals with respect to the Reverted Products.

**(g) Data Disclosure**. Soligenix shall provide to Intrexon copies of the relevant portions of all material reports and data, including Regulatory Trial data and reports, obtained or generated by or on behalf of Soligenix 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, Soligenix shall promptly provide to Intrexon copies of all Third Party agreements under which Soligenix 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, Soligenix shall promptly work with Intrexon to either, as appropriate (i) assign to Intrexon the Third Party agreement(s), or (ii) 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 Soligenix and Soligenix 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, Soligenix shall transfer to Intrexon all quantities of Reverted Product (including final products or work-in-process) in the possession of Soligenix or its Affiliates. Soligenix 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, Soligenix shall promptly provide to Intrexon copies of all agreements between Soligenix 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, Soligenix shall promptly: (i) 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 (ii) with respect to all other such Third Party agreements, Soligenix shall reasonably cooperate to assist Intrexon in obtaining the benefits of such agreements. Soligenix 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 Soligenix's breach. For the avoidance of doubt, Intrexon shall have no obligation to assume any of Soligenix's obligations under any Third Party agreement.

**(k) Commercialization**. Intrexon shall have the right to develop and Commercialize the Reverted Products itself or with one or more Third Parties, and shall have the right, without obligation to Soligenix, 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 Soligenix) 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 Soligenix 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)), 3.6, 4.10, 4.11, 5.6 through 5.9, 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), 6.3 (as applicable with respect to Intrexon Patents relevant to Retained Products), 7.1, 7.2, 7.4, 7.5, 10.4, and 10.5; Articles 9, 11, and 12; and any relevant definitions in Article 1. Further, Article 7 and Sections 4.5(a), 4.5(c), 4.12, 5.2 through 5.9, and 9.5 will survive termination of this Agreement to the extent there are applicable Retained Products.

## ARTICLE 11

## DISPUTE RESOLUTION

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

**11.2 Arbitration**. Any dispute, controversy, difference or claim which may arise between the Parties, 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, with the arbitration to be held in the state where the other Party's principal office is located (or some other place as may be mutually agreed by the Parties). Promptly following receipt of such notice, the Parties shall meet and discuss in good faith and seek to agree on an arbitrator to resolve the issue, which arbitrator shall be neutral and independent of both Parties and all of their respective Affiliates, shall have significant experience and expertise in licensing and partnering agreements in the pharmaceutical and biotechnology industries, and shall have some experience in mediating or arbitrating issues relating to such agreements. If the Parties cannot agree on a single arbitrator within fifteen (15) days of request by a Party for arbitration, then each Party shall select an arbitrator meeting the foregoing criteria and the two (2) arbitrators

so selected shall select within ten (10) days of their appointment a third arbitrator meeting the foregoing criteria. Within fifteen (15) days after an arbitrator(s) is selected (in the case of the three-person panel, when the third arbitrator is selected), each Party will deliver to both the arbitrator(s) and the other Party a detailed written proposal setting forth its proposed terms for the resolution for the matter at issue (the "**Proposed Terms**" of the Party) and a memorandum (the "**Support Memorandum**") in support thereof. The Parties will also provide the arbitrator(s) a copy of this Agreement, as it may be amended at such time. Within fifteen (15) days after receipt of the other Party's Proposed Terms and Support Memorandum, each Party may submit to the arbitrator(s) (with a copy to the other Party) a response to the other Party's Support Memorandum. Neither Party may have any other communications (either written or oral) with the arbitrator(s) other than for the sole purpose of engaging the arbitrator or as expressly permitted in this Section 11.2; provided that, the arbitrator(s) may convene a hearing if the arbitrator(s) so chooses to ask questions of the Parties and hear oral argument and discussion regarding each Party's Proposed Terms. Within sixty (60) days after the arbitrator's appointment, the arbitrator(s) will select one of the two Proposed Terms (without modification) provided by the Parties that he or she believes is most consistent with the intention underlying and agreed principles set forth in this Agreement. The decision of the arbitrator(s) shall be final, binding, and unappealable. For clarity, the arbitrator(s) must select as the only method to resolve the matter at issue one of the two sets of Proposed Terms, and may not combine elements of both Proposed Terms or award any other relief or take any other action.

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

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

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

**11.6 Injunctive Relief**. Nothing in this Article 11 will preclude either Party from seeking equitable relief or interim or provisional relief from a court of competent jurisdiction, including a temporary restraining order, preliminary injunction or other interim equitable relief, concerning a dispute either prior to or during any arbitration if necessary to protect the interests of such Party or to preserve the status quo pending the arbitration proceeding. Specifically, the Parties agree that a material breach by either Party of its obligations in Section 3.5 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 3.5 or Article 7, and without further proof of irreparable harm other than this acknowledgement, such non-breaching Party shall be entitled to seek (a) immediate equitable relief, specifically including, but not limited to, both interim and permanent restraining orders and injunctions, without bond, and (b) such other and further equitable relief as the court may deem proper under the circumstances. For the avoidance of doubt, nothing in this Section 11.6 shall otherwise limit a breaching Party's opportunity to cure a material breach as permitted in accordance with Section 10.2.

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

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

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

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

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.

## ARTICLE 12

### GENERAL PROVISIONS

**12.1 Use of Name**. No right, express or implied, is granted by this Agreement to either Party to use in any manner the name of the other or any other trade name or trademark of the other in connection with the performance of this Agreement, except that (a) either Party may use the name of the other Party as required by regulations and in press releases accompanying quarterly and annual earnings reports approved by the issuer's Audit Committee of the Board of Directors, and (b) Soligenix may use the Intrexon Trademarks in accord with 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**. The Parties are not employees or legal representatives of the other Party for any purpose. Neither Party shall have the authority to enter into any contracts in the name of or on behalf of the other Party. This Agreement shall not constitute, create, or in any way be interpreted as a joint venture, partnership, or business organization of any kind.

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

If to Intrexon:
Intrexon Corporation
20358 Seneca Meadows Parkway
Germantown, MD 20876
Attention: Chief Executive Officer
Fax: (301) 556-9901

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

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.

If to Soligenix: Soligenix, Inc.
29 Emmons Drive, Suite C-10
Princeton, NJ 08540
Attention: Chief Executive Officer
Fax: (609) 452-6467

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

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

**12.7 Entire Agreement; Amendment**. This Agreement, including any exhibits attached hereto, constitute the entire, final, complete and exclusive agreement between the Parties and supersede all previous agreements or representations, written or oral, with respect to the subject matter of this Agreement (including any prior confidentiality agreement between the Parties). All information of Intrexon or Soligenix 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 Soligenix 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.

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

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

*[Remainder of page intentionally left blank.]*

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.

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

| **INTREXON CORPORATION** | | **SOLIGENIX, INC.** | |
|---|---|---|---|
| By: | /s/ Donald P. Lehr | By: | /s/ Christopher J. Schaber |
| Name: | Donald P. Lehr | Name: | Christopher J. Schaber, Ph.D. |
| Title: | Chief Legal Officer | Title: | President and Chief Executive Officer |

List of Subsidiaries of the Company

Intrexon CEU, Inc., a Delaware corporation.
Intrexon ABT, Inc., a Delaware corporation.
Intrexon AB, Co., a Delaware corporation.
AquaBounty Technologies, Inc., a Delaware corporation (approximately 54 percent ownership).