UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT
PURSUANT TO SECTION 13 OR 15(d) OF THE
SECURITIES EXCHANGE ACT OF 1934

Date of report (Date of earliest event reported): **January 6, 2011**

ZIOPHARM Oncology, Inc.

(Exact Name of Registrant as Specified in Charter)

Delaware	**001-33038**	**84-1475642**
(State or Other Jurisdiction of Incorporation)	(Commission File Number)	(IRS Employer Identification No.)

1180 Avenue of the Americas **19th Floor** **New York, NY**	**10036**
(Address of Principal Executive Offices)	(Zip Code)

(646) 214-0700
(Registrant's telephone number, including area code)

Not applicable
(Former Name or Former Address, if Changed Since Last Report)

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

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425).

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12).

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b)).

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c)).

Item 1.01 Entry into a Material Definitive Agreement.

Exclusive Channel Partner Agreement

On January 6, 2011, ZIOPHARM Oncology, Inc. (the "Company") entered into an Exclusive Channel Partner Agreement (the "Channel Agreement") with Intrexon Corporation ("Intrexon") that governs a "channel partnering" arrangement in which the Company will use Intrexon's technology directed towards in vivo expression of effectors in connection with the development of two existing clinical-stage product candidates and generally to research, develop and commercialize products, in each case in which DNA is administered to humans for expression of anti-cancer effectors for the purpose of treatment or prophylaxis of cancer (collectively, the "Cancer Program"). The Channel Agreement establishes committees comprised of Company and Intrexon representatives that will govern activities related to the Cancer Program in the areas of project establishment, chemistry, manufacturing and controls, clinical and regulatory matters, commercialization efforts and intellectual property.

The Channel Agreement grants the Company a worldwide license to use specified patents and other intellectual property of Intrexon in connection with the research, development, use, importing, manufacture, sale, and offer for sale of products involving DNA administered to humans for expression of anti-cancer effectors for the purpose of treatment or prophylaxis of cancer ("ZIOPHARM Products"). Such license is exclusive with respect to any clinical development, selling, offering for sale or other commercialization of ZIOPHARM Products, and otherwise is non-exclusive. Subject to limited exceptions, the Company may not sublicense the rights described without Intrexon's written consent.

Under the Channel Agreement, and subject to certain exceptions, the Company is responsible for, among other things, the performance of the Cancer Program including development, commercialization and certain aspects of manufacturing of ZIOPHARM Products. Among other things, Intrexon is responsible for the costs of establishing manufacturing capabilities and facilities for the bulk manufacture of products developed under the Cancer Program, certain other aspects of manufacturing, costs of discovery-stage research with respect to platform improvements and costs of filing, prosecution and maintenance of Intrexon's patents.

Subject to certain expense allocations and other offsets provided in the Channel Agreement, the Company will pay Intrexon 50% of the cumulative net quarterly profits derived from the sale of ZIOPHARM Products, calculated on a ZIOPHARM Product-by- ZIOPHARM Product basis. The Company has likewise agreed to pay Intrexon 50% of quarterly revenue obtained from a sublicensor in the event of a sublicensing arrangement. In addition, in partial consideration for each party's execution and delivery of the Channel Agreement, the Company entered into the Stock Purchase Agreement (as defined below).

During the first 24 months, either the Company or Intrexon may terminate the Channel Agreement in the event of a material breach by the other and Intrexon may terminate the Channel Agreement under certain circumstances if the Company assigns its rights under the Channel Agreement without Intrexon's consent. Following the first 24 months, Intrexon may also terminate the Channel Agreement if the Company elects not to pursue the development of a Cancer Program identified by Intrexon that is a "Superior Therapy" as defined in the Channel Agreement. Also following the first 24 months, the Company may voluntarily terminate the Channel Agreement upon 90 days written notice to Intrexon.

Upon termination of the Channel Agreement, the Company may continue to develop and commercialize any ZIOPHARM Product that, at the time of termination:

- is being commercialized by the Company,
- has received regulatory approval,
- is a subject of an application for regulatory approval that is pending before the applicable regulatory authority, or
- is the subject of at least an ongoing Phase 2 clinical trial (in the case of a termination by Intrexon due to a ZIOPHARM uncured breach or a voluntary termination by the Company), or an ongoing Phase 1 clinical trial in the Field (in the case of a termination by the Company due to an Intrexon uncured breach or a termination by Intrexon following an unconsented assignment by the Company or the Company's election not to pursue development of a Superior Therapy).

The Company's obligation to pay 50% of net profits or revenue described above with respect to these "retained" products will survive termination of the Channel Agreement.

Stock Purchase Agreement and Registration Rights Agreement

On January 6, 2011, the Company entered into a Stock Purchase Agreement with Intrexon pursuant to which Intrexon has agreed to purchase a number of shares of the Company's common stock equal to 5.00% of the number of shares of Company common stock issued and outstanding immediately prior to the issuance of such shares (the "Purchase Shares"), at a purchase price equal to $4.80 per share. At the same time, the Company has agreed to issue to Intrexon a number of additional shares of Company common stock equal to 7.495% of the number of shares of Company common stock issued and outstanding prior to such issuance (the "First Tranche Shares") at a purchase price equal to the $0.001 par value of such shares, which price will be deemed paid in partial consideration for the execution and delivery of the Channel Agreement. Upon satisfaction of customary closing conditions, the closing of the purchase and sale of the Purchase Shares and the First Tranche Shares (the "First Tranche Closing") is expected to occur on or around January 12, 2011.

The Company has also agreed to issue additional shares of Company common stock to Intrexon upon dosing of the first patient in a ZIOPHARM-conducted Phase II clinical trial in the United States, or similar study as the parties may agree in a country other than the United States, of a product that is created, produced, developed or identified directly or indirectly by the Company during the term of the Channel Agreement and that, subject to certain exceptions, involves DNA administered to humans for expression of anti-cancer effectors for the purpose of treatment or prophylaxis of cancer. Upon satisfaction of such contingency, the Company has agreed to issue to Intrexon an additional number of shares of Company common stock equal to 7.495% of the number of shares Company common stock issued and outstanding immediately prior to the First Tranche Closing (the "Second Tranche Shares") for a purchase price equal to the $0.001 par value of such shares, which price will be deemed paid in partial consideration for the execution and delivery of the Channel Agreement.

Based on the number of shares of the Company's common stock issued and outstanding on the date of this report, the Purchase Shares will be comprised of 2,426,235 shares, resulting in proceeds from the sale thereof approximately $11.6 million. Also based on the Company's currently issued and outstanding shares of common stock, the First Tranche Shares and, if issued upon satisfaction of the condition described above, the Second Tranche Shares will each be comprised of 3,636,926 shares. Such share amounts will be adjusted based on changes, if any, in the number of shares of the Company's common stock issued and outstanding between the date of this report and the date of the First Tranche Closing.

Under the Stock Purchase Agreement, if requested by the Company and subject to certain restrictions and limitations, Intrexon has agreed to purchase securities in conjunction with future securities offerings of the Company that constitute "Qualified Financings" and that are conducted while the Channel Agreement remains in effect. For this purpose, a "Qualified Financing" means a sale of common stock or equity securities convertible into common stock in a public or private offering, raising gross proceeds of at least $10,000,000, where the sale of shares is either registered under the Securities Act of 1933, as amended, at the time of issuance or the Company agrees to register the resale of such shares. In conjunction with a Qualified Financing, Intrexon has committed to purchase up to 19.99% of the securities issued and sold by the Company therein (such amount to be calculated exclusive of Intrexon's purchase). Intrexon will not be obligated to purchase securities in a Qualified Financing unless the Company is then in substantial compliance with its obligations under the Channel Agreement and, with respect to a Qualified Financing that is completed following January 6, 2012, the Company confirms its intent that 40% of the net offering proceeds (the "Use of Proceeds Commitment Amount") shall have been spent, or in the next year will be spent, by the Company under the Channel Agreement. In the case of a Qualified Financing that is completed after January 6, 2012, Intrexon's purchase commitment will be further limited to an amount equal to 50% of the Use of Proceeds Commitment Amount. Intrexon's aggregate purchase commitment for all future Qualified Financings is capped at $50,000,000.

Also pursuant to the Stock Purchase Agreement and prior to the First Tranche Closing, the Company will elect Randal J. Kirk, Chairman and Chief Executive Officer of Intrexon, as a director to fill the existing vacancy on the Company's board of directors. In addition, the Company has agreed that at each stockholders' meeting at which directors are to be elected, it will nominate and recommend for election to the Board of Directors an individual designated by Intrexon, provided that the Board of Directors determines that he or she is a suitable candidate. If such Intrexon designee is not elected to the Board of Directors by the Company's stockholders, then, at Intrexon's election, such designee will be entitled to attend all Board of Directors and committee meetings as an observer subject to certain conditions and limitations. At such time as Intrexon controls 20% or more of the Company's stock, the Company will cause a second individual designated by Intrexon to be elected to the Board of Directors and, so long thereafter as Intrexon continues to control 20% or more of the Company's stock, at each stockholders' meeting at which directors are to be elected, the Company will nominate and recommend for election to the Board of Directors a second individual designated by Intrexon, provided that such second designee is an "independent director" under Nasdaq's listing standards and that the Board of Directors determines that he or she is a suitable candidate. The rights of Intrexon to designate director nominees discussed above will terminate upon the termination of the Channel Agreement or upon an earlier sale of the Company.

The Stock Purchase Agreement contains a standstill provision pursuant to which, among other things, Intrexon has agreed that, for a period of three years, subject to certain exceptions and unless invited in writing by the Company to do so, neither Intrexon nor its affiliates will, directly or indirectly: (i) effect or seek, initiate, offer or propose to effect, or cause or participate in any acquisition of securities or assets of the Company; any tender or exchange offer, merger, consolidation or other business combination involving the Company; any recapitalization, restructuring, liquidation, dissolution or other extraordinary transaction with respect to the Company; or any "solicitation" of "proxies" or consents to vote any voting securities of the Company, or in any way advise or, assist any other person in doing so; (ii) form, join or in any way participate in a "group" with respect to any securities of the Company; (iii) otherwise act to seek to control or influence the management, Board of Directors or policies of the Company; provided that the Intrexon director designees, in their capacity as directors, may fully exercise their rights and duties as directors of the Company including freely communicating with the Company's executive management and Board of Directors; (iv) take any action reasonably expected to force the Company to make a public announcement regarding any such matters; or (v) enter into any agreements, discussions or arrangements with any third party with respect to any of the foregoing. Among other things and subject to certain exceptions, the standstill restrictions do not apply to the future purchase by Intrexon and/or its affiliates of up to 10% of the number of shares of the Company's common stock then issued and outstanding in addition to the shares issuable pursuant to the Stock Purchase Agreement.

In connection with the transactions contemplated by the Stock Purchase Agreement, and pursuant to a Registration Rights Agreement to be executed and delivered by the parties at the First Tranche Closing, the Company will agree to file a "resale" registration statement (the "Registration Statement") registering the resale of the Purchase Shares, the First Tranche Shares and the Second Tranche Shares within 120 days of the First Tranche Closing. Under that agreement, the Company will be obligated to use its reasonable best efforts to cause the "resale" registration statement to be declared effective as promptly as practicable after filing and to maintain the effectiveness of the registration statement until all securities therein are sold or are otherwise can be sold pursuant to Rule 144, without any restrictions.

The foregoing description of each of the Channel Agreement, the Stock Purchase Agreement and the form of Registration Rights Agreement is qualified in its entirety by reference to such agreements, which are filed as Exhibits 10.1, 10.2 and 10.3 to this Current Report, respectively, and are incorporated herein by reference. The benefits of the representations and warranties set forth in the Channel Agreement, the Stock Purchase Agreement and the form of Registration Rights Agreement are intended to be relied upon by the parties to such agreements only and, expect as otherwise expressly provided therein, do not constitute continuing representations and warranties to any other party or for any other purpose. The press release dated January 6, 2011 announcing the transactions described above is filed as Exhibit 99.1 to this Current Report on Form 8-K and incorporated herein by reference.

Item 3.02 Unregistered Sales of Equity Securities.

The disclosure in Item 1.01 is incorporated herein by reference thereto. The offer and sale of the Purchase Shares, the First Tranche Shares and the Second Tranche Shares will not be registered under the Securities Act of 1933, as amended (the "Securities Act") at the time of sale, and therefore may not be offered or sold in the United States absent registration or an applicable exemption from registration requirements. For these issuances, the Company is relying on the exemption from federal registration under Section 4(2) of the Securities Act and/or Rule 506 promulgated thereunder, based on the Company's belief that the offer and sale of the Shares has not and will not involve a public offering as Intrexon is an "accredited investor" as defined under Section 501 promulgated under the Securities Act and no general solicitation has been involved in the Offering.

Item 5.02 Departure of Directors or Principal Officers; Election of Directors; Appointment of Principal Officers

The disclosure in Item 1.01 is incorporated herein by reference thereto. In accordance with the Stock Purchase Agreement, Randal J. Kirk will be elected as a director of the Company to fill the Board of Director's existing vacancy and to serve as a director until the Company's next annual stockholders' meeting, with such election to be effective immediately prior to the First Tranche Closing.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit No.	Description
10.1	Exclusive Channel Partner Agreement by and between ZIOPHARM Oncology, Inc. and Intrexon Corporation dated as of January 6, 2011 **
10.2	Stock Purchase Agreement by and between ZIOPHARM Oncology, Inc. and Intrexon Corporation dated as of January 6, 2011
10.3	Form of Registration Rights Agreement by and between ZIOPHARM Oncology, Inc. and Intrexon Corporation (incorporated by reference to Exhibit A to the Stock Purchase Agreement filed as Exhibit 10.1 to this report)
99.1	Press Release dated January 6, 2011

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

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

ZIOPHARM Oncology, Inc.

By: /s/ Richard Bagley
Name: Richard Bagley
Title: President, Chief Operating Officer and Chief Financial Officer

Date: January 11, 2011

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Exhibit 10.1

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 [*****].

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 [*****].

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. [*****].

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 [*****].

1.46 [*****].

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 [*****].

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, [*****].

(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 [*****].

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 [*****].

(a) [*****]

(b) [*****]

(c) [*****]

(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. [*****]. 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 [*****] 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.

(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, [*****] shall have the [*****] right, but not the obligation, to take appropriate action to enforce [*****] against any Infringement that involves a [*****] of allegedly infringing activities in the Field ("[*****]"), either by settlement or lawsuit or other appropriate action. If [*****] fails to take the appropriate steps to enforce [*****] against any [*****] within [*****] days of the date one Party has provided notice to the other Party pursuant to Section 6.3(g) of such [*****], then [*****] shall have the right (but not the obligation), at its own expense, to enforce [*****] against such [*****], either by settlement or lawsuit or other appropriate action.

(c) With respect to any [*****] that cannot reasonably be abated through the enforcement of [*****] pursuant to Section 6.3(b) but can reasonable be abated through the enforcement of [******] (other than the [******]),[******] shall be obligated to choose one of the following courses of action: [******]. The determination of which [******] to assert shall be made by [******] in its sole discretion; provided, however, that [******] shall consult in good faith with [******] on such determination. For the avoidance of doubt, [******] has no obligations under this Agreement to enforce any [******] against, or otherwise abate, any Infringement that is not a [*****].

(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) [*****] shall not settle or otherwise compromise any action under this Section 6.3 in a way that diminishes the rights or interests of [*****] or adversely affects any [*****] without [*****]'s prior written consent, which consent shall not be unreasonably withheld. [*****] shall not settle or otherwise compromise any action under this Section 6.3 in a way that diminishes the rights or interests of [*****] in the [*****] or adversely affects any [*****] with respect to the [*****] without [*****]'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 **"**[*****]**"**) will be shared by the Parties as follows: [*****]. In any action initiated by [*****] pursuant to Section 6.3(c), the Parties shall share the [*****] equally, and such [*****] shall not be deemed to constitute [*****].

(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 [*****] 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 [*****] 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, [*****], 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 [*****], 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.

(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):

If to Intrexon:	Intrexon Corporation 20358 Seneca Meadows Parkway Germantown, MD 20876 Attention: Legal Department Fax: (301) 556-9902
with a copy to:	Cooley LLP 3175 Hanover St. Palo Alto, CA 94304 Attention: Robert Jones Fax: (650) 849-7400

If to ZIOPHARM:	ZIOPHARM Oncology, Inc. One First Avenue Parris Building, 34 Navy Yard Plaza Boston, MA 02129 Attention: Chief Executive Officer Fax: (617) 241-2855
with a copy to:	WilmerHale 60 State Street Boston, MA 02109 Attention: Stuart Falber 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 [*****].

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.

EXHIBIT B

Press Release

ZIOPHARM Oncology and Intrexon Announce Worldwide Partnership for Synthetic Biology DNA-based Oncology Therapeutics

RJ Kirk, CEO and Chairman of Intrexon, to Join ZIOPHARM Board of Directors

NEW YORK, NY and GERMANTOWN, MD (January 6, 2011) – ZIOPHARM Oncology, Inc. (Nasdaq: ZIOP), a small molecule late-stage oncology drug development company, and Intrexon Corporation, a next generation synthetic biology company, announced today a global exclusive channel partnership in oncology where ZIOPHARM will develop and commercialize DNA-based therapeutics using Intrexon's UltraVector® Technology. Under the partnership, ZIOPHARM will utilize Intrexon's advanced transgene engineering platform for the controlled and precise cellular production of anti-cancer effectors. ZIOPHARM will have rights to Intrexon's entire human *in vivo* effector platform within the field of oncology which includes two lead clinical-stage product candidates, one which is in an advanced phase I study and another which will be the subject of an Investigational New Drug ("IND") filing during the first half of 2011. Ziopharm and Intrexon will host a conference call and audio webcast today, Thursday, January 6th at 5:00 p.m. ET to discuss the global exclusive channel partnership.

Intrexon employs its modular genetic engineering platform in the areas of therapeutics, protein production, industrial, and agriculture products. The exclusive channel partnership between Intrexon and ZIOPHARM has been established specifically for the field of human oncologic therapeutics. Under the partnership, Intrexon remains responsible for technology discovery efforts and managing the patent estate as well as for certain aspects of manufacturing. ZIOPHARM will be responsible for conducting preclinical and clinical development of candidates, as well as for other aspects of manufacturing and the commercialization of the candidates.

Intrexon's core synthetic biology technology is designed to create Better DNA™ at industrial scale, enabling unprecedented control over the function and output of living cells by providing external control over *in vivo* activation and regulation of potent effectors. This platform, called UltraVector®, provides speed, flexibility, consistency and precision to the design, production and testing of rationally designed complex transgenes and their encoded genetic circuits. These qualities allow an iterative and rational approach to transgene design, which can be continually engineered until their performance is optimized. Through this process, Intrexon is able to overcome the challenges inherent in current therapeutic strategies, including recombinant protein therapies and constitutive gene therapies, thereby enhancing capabilities, improving safety and lowering cost for human therapeutics. The lead oncology product candidate developed using Intrexon's technologies is currently in Phase Ib clinical study for metastatic melanoma. ZIOPHARM expects to submit an Investigational New Drug (IND) application with U.S. Food and Drug Administration for a second oncology product candidate in the first half of this year.

“Controllable, scalable synthetic biology, the tightly regulated delivery of therapeutic proteins from within the body, is an aspirational and disruptive technology which Intrexon has brought from scientific theory to medical application,” said Jonathan Lewis, M.D., Ph.D., Chief Executive Officer and Chief Medical Officer of ZIOPHARM. “As the sole channel partner for *in* vivo therapeutic candidates for human oncology, ZIOPHARM plans to leverage this technology for next-generation products targeting key pathways used by cancers to grow and metastasize. Intrexon has developed a technology that is uniquely flexible, scalable and controllable, adding significantly to our small molecule drug development capabilities and our ability to translate science to the patient using our world-class global team.”

“We are very pleased to collaborate with ZIOPHARM, which, under the leadership of Jonathan Lewis, is building an industry leading oncology company with a strategic vision regarding cancer medicine. ZIOPHARM’s oncology expertise, development capabilities, as well as its excellent reputation within the oncology community make ZIOPHARM an exceptional investment for Intrexon and ideal partner to rapidly achieve the full therapeutic benefit and commercial potential of Intrexon’s disruptive technologies,” stated RJ Kirk, Intrexon’s Chairman and CEO. “This collaboration leverages the capabilities and strengths of each partner and has the potential to create significant value for shareholders.”

Under terms of the agreement:

- Intrexon will purchase 2,422,542 shares of ZIOPHARM ‘s common stock (representing 5% of ZIOPHARM’s currently outstanding shares) in a private placement for a total purchase price of $11,464,438, or $4.7324 per share, which is the trailing 10-day volume-weighted average price per share of ZIOPHARM’s common stock;
- ZIOPHARM will simultaneously issue to Intrexon for no additional consideration an additional 3,631,391 shares of its common stock, representing 7.495% of ZIOPHARM’s currently outstanding shares; ZIOPHARM has agreed to issue to Intrexon additional shares of its common stock for no additional consideration, representing an additional 7.495% under certain conditions upon dosing of the first patient in a ZIOPHARM-conducted U.S. Phase II clinical trial of a product candidate created, produced or developed by ZIOPHARM using Intrexon technology;
- Intrexon has agreed to purchase up to $50 million in conjunction with securities offerings that may be conducted by ZIOPHARM in the future, subject to certain conditions and limitations;
- Subject to certain expense allocations, ZIOPHARM will pay Intrexon 50% of the cumulative net quarterly profits derived from the sale of products developed from the channel partnership.

Pursuant to the agreement, Mr. Kirk has agreed to join the ZIOPHARM board of directors. In addition to his responsibilities at Intrexon, Mr. Kirk has served, since March 1999, as Senior Managing Director and Chief Executive Officer of Third Security, LLC, an investment management firm founded by Mr. Kirk. Additionally, Mr. Kirk founded and became Chairman of the Board of New River Pharmaceuticals Inc. in 1996, and was President and Chief Executive Officer between October 2001 and April 2007. New River was acquired by Shire plc in 2007. Mr. Kirk also currently serves as a member of the Board of Directors of Halozyme Therapeutics, Inc. (Nasdaq: HALO), and as Chairman of the Board for Clinical Data, Inc. (Nasdaq: CLDA). Previously, Mr. Kirk served as a member of the Board of Directors of Scios, Inc. (acquired by Johnson & Johnson) between February 2000 and May 2002. Mr. Kirk served on the Board of Visitors of Radford University from July 2003 to June 2009, was Rector of the Board from September 2006 to September 2008, and has served on the Board of Directors of the Radford University Foundation, Inc. since September 1998. He has served on the Board of Visitors of the University of Virginia and Affiliated Schools since July 2009, on the Virginia Advisory Council on Revenue Estimates since July 2006, on the Governor's Economic Development and Jobs Creation Commission since April 2010, and served as a member of the Board of Directors of the Virginia University Research Partnership from July 2007 to November 2010. Mr. Kirk received a B.A. in Business from Radford University and a J.D. from the University of Virginia.

Regarding Mr. Kirk's appointment, Dr. Lewis added: "RJ is a visionary and a winner with a long record of success and value creation in the life sciences. His addition to the ZIOPHARM Board of Directors will be invaluable, and we look forward to his many contributions in this role."

Griffin Securities, Inc. acted as an advisor to Intrexon on this transaction.

Conference Call and Webcast January 6, 2011 at 5pm ET

ZIOPHARM and Intrexon will host a conference call and live audio webcast on January 6, 2011 at 5:00pm ET to discuss their global exclusive channel partnership. The call can be accessed by dialing (877) 375-9144 (U.S. and Canada) or (253) 237-1150 (international). The passcode for the conference call is 'ZIOPHARM.' To access the live audio webcast, or the subsequent archived recording, visit the "Investors - Events & Presentations" section of the ZIOPHARM website at www.ziopharm.com. The webcast will be recorded and available for replay on the company's website for two (2) weeks.

About ZIOPHARM Oncology, Inc.:

ZIOPHARM Oncology is a biopharmaceutical company engaged in the development and commercialization of a diverse portfolio of cancer drugs. The Company is currently focused on three clinical programs.

Palifosfamide (Zymafos™ or ZIO-201) is a novel DNA cross-linker in class with bendamustine, ifosfamide, and cyclophosphamide. ZIOPHARM is currently enrolling patients in a randomized, double-blinded, placebo-controlled Phase III trial with palifosfamide administered intravenously for the treatment of metastatic soft tissue sarcoma in the front-line setting. The Company is also currently conducting a Phase I intravenous study of palifosfamide in combination with standard of care addressing small cell lung cancer and expects to initiate an additional study with drug in the oral form treating solid tumors.

Darinaparsin (Zinapar™ or ZIO-101) is a novel mitochondrial-targeted agent (organic arsenic) being developed intravenously for the treatment of peripheral T-cell lymphoma with a pivotal study expected to begin in late 2011. An oral form is in a Phase I trial in solid tumors.

Indibulin (Zybulin™ or ZIO-301) is a novel, oral tubulin binding agent that is expected to have several potential benefits including oral dosing, application in multi-drug resistant tumors, no neuropathy and minimal overall toxicity. It is currently being studied in Phase I/II in metastatic breast cancer.

ZIOPHARM's operations are located in Boston, MA with an executive office in New York City. Further information about ZIOPHARM may be found at www.ziopharm.com.

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About Intrexon Corporation:

Intrexon Corporation is a privately held synthetic biology company that employs modular DNA control systems to enhance capabilities, improve safety and lower cost in human therapeutics, protein production, industrial products and agricultural biotechnology. The company's advanced transgene engineering platform enables Better DNA™ by combining breakthroughs in DNA control systems with corresponding advancements in modular transgene design, assembly and optimization. The company is currently using these advanced capabilities to undertake foremost challenges across the spectrum for biological applications. More information about the company is available at www.DNA.com.

Forward-Looking Safe Harbor Statement:
This press release contains forward-looking statements for ZIOPHARM Oncology, Inc. that involve risks and uncertainties that could cause ZIOPHARM Oncology's actual results to differ materially from the anticipated results and expectations expressed in these forward-looking statements. These statements are based on current expectations, forecasts and assumptions that are subject to risks and uncertainties, which could cause actual outcomes and results to differ materially from these statements. Among other things, there can be no assurance that any of ZIOPHARM Oncology's development efforts relating to its product candidates will be successful, or such product candidates will be successfully commercialized. Other risks that affect forward-looking information contained in this press release include the possibility of being unable to obtain regulatory approval of ZIOPHARM Oncology's product candidates, the risk that the results of clinical trials may not support ZIOPHARM Oncology's claims, the risk that pre-clinical or clinical trials will proceed on schedules that are consistent with ZIOPHARM Oncology's current expectations or at all, risks related to ZIOPHARM Oncology's ability to protect its intellectual property and its reliance on third parties to develop its product candidates, risks related to the sufficiency of existing capital reserves to fund continued operations for a particular amount of time and uncertainties regarding ZIOPHARM Oncology's ability to obtain additional financing to support its operations thereafter, as well as other risks regarding ZIOPHARM Oncology's that are discussed under the heading "Risk Factors" in ZIOPHARM Oncology's filings with the United States Securities and Exchange Commission. Forward-looking statements can be identified by the use of words such as "may," "will," "intend," " should," "could," "can," "would," "expect," "believe," "estimate," " predict," "potential," "plan," "is designed to," "target" and similar expressions. ZIOPHARM Oncology assumes no obligation to update these forward-looking statements, except as required by law.

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Exhibit 10.2

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

FINAL VERSION

REGISTRATION RIGHTS AGREEMENT

This Registration Rights Agreement (this "**Agreement**") is made and entered into as of _____, 201__, by and among ZIOPHARM Oncology, Inc., a Delaware corporation (the "**Company**"), and Intrexon Corporation, a Virginia corporation ("**Intrexon**").

This Agreement is being entered into pursuant to the Stock Purchase Agreement between the Company and Intrexon dated as of January 6, 2011 (the "**Purchase Agreement**").

The Company and Intrexon hereby agree as follows:

1. Definitions.

Capitalized terms used and not otherwise defined herein shall have the meanings given such terms in the Purchase Agreement. As used in this Agreement, the following terms shall have the following meanings:

"**Affiliate**" means, with respect to any Person, any other Person that directly or indirectly controls or is controlled by or under common control with such Person. For the purposes of this definition, "**control**," when used with respect to any Person, means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of such Person, whether through the ownership of voting securities, by contract or otherwise; and the terms of "**affiliated**," "**controlling**" and "**controlled**" have meanings correlative to the foregoing.

"**Board**" means the Company's Board of Directors.

"**Business Day**" means any day except Saturday, Sunday and any day which shall be a legal holiday or a day on which banking institutions in the state of Delaware generally are authorized or required by law or other government actions to close.

"**Closing Date**" means the date of the closing of the purchase and sale of the Shares pursuant to the Purchase Agreement.

"**Commission**" means the Securities and Exchange Commission.

"**Common Stock**" means the Company's Common Stock, par value $0.001 per share.

"**Effectiveness Period**" shall have the meaning set forth in Section 2.

"**Exchange Act**" means the Securities Exchange Act of 1934, as amended.

"**Filing Date**" means [120 days from date of this Agreement], 2011.

"**Holder**" or "**Holders**" means the holder or holders, as the case may be, from time to time of Registrable Securities.

"**Indemnified Party**" shall have the meaning set forth in Section 5(c).

"**Indemnifying Party**" shall have the meaning set forth in Section 5(c).

"**Losses**" shall have the meaning set forth in Section 5(a).

"**Person**" means an individual or a corporation, partnership, trust, incorporated or unincorporated association, joint venture, limited liability company, joint stock company, government (or an agency or political subdivision thereof) or other entity of any kind.

"**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.

"**Prospectus**" means the prospectus included in the Registration Statement (including, without limitation, a prospectus that includes any information previously omitted from a prospectus filed as part of an effective registration statement in reliance upon Rule 430A promulgated under the Securities Act), as amended or supplemented by any prospectus supplement, with respect to the terms of the offering of any portion of the Registrable Securities covered by the Registration Statement, and all other amendments and supplements to the Prospectus, including post-effective amendments, and all material incorporated by reference in such Prospectus.

"**Registrable Securities**" means the First Tranche Shares, Second Tranche Shares and Up Front Purchase Shares (as such terms are defined in the Purchase Agreement) issued or issuable to Intrexon and any securities issued with respect to, or in exchange for or in replacement of such shares of Common Stock upon any stock split, stock dividend, recapitalization, subdivision, merger or similar event; provided, however, that the applicable Holder has completed and delivered to the Company a Selling Stockholder Questionnaire; and provided further that such securities shall no longer be deemed Registrable Securities if such securities have been sold pursuant to a Registration Statement, or (ii) such shares have been sold in compliance with Rule 144 or all such shares may be sold without limitation pursuant to Rule 144.

"**Registration Statement**" means the registration statements and any additional registration statements contemplated by Section 2, including (in each case) the Prospectus, amendments and supplements to such registration statement or Prospectus, including pre- and post-effective amendments, all exhibits thereto, and all material incorporated by reference in such registration statement.

"**Rule 144**" means Rule 144 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same effect as such Rule.

"**Rule 415**" means Rule 415 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same effect as such Rule.

"**Securities Act**" means the Securities Act of 1933, as amended.

"**Selling Stockholder Questionnaire**" means a questionnaire in the form attached as Annex B hereto, or such other form of questionnaire as may reasonably be requested by the Company from time to time.

2. Registration Obligations; Filing Date Registration. On or prior to the Filing Date the Company shall prepare and file with the Commission a Registration Statement covering the resale of the Registrable Securities as would permit or facilitate the sale and distribution of all the Registrable Securities in the manner reasonably requested by the Holder; provided, however, that if the Filing Date falls on a day that is not a Business Day, such deadline shall be extended to the next Business Day. The Registration Statement shall be on Form S-3 (except if the Company is not then eligible to register for resale the Registrable Securities on Form S-3, in which case such registration shall be on another appropriate form in accordance with the Securities Act and the rules promulgated thereunder and the Company shall undertake to register the Registrable Securities on Form S-3 as soon as practicable following the availability of such form, provided that the Company shall use reasonable best efforts to maintain the effectiveness of the Registration Statement then in effect until such time as a Registration Statement on Form S-3 covering the Registrable Securities has been declared effective by the Commission). The Registration Statement shall contain the "Plan of Distribution" section in substantially the form attached hereto as Annex A. The Company shall use reasonable best efforts to cause the Registration Statement to be declared effective under the Securities Act as promptly as practicable after the filing thereof, and, subject to Section 3(j) hereof, to keep such Registration Statement continuously effective under the Securities Act until such date as is the earlier of (x) the date when all Registrable Securities covered by such Registration Statement have been sold under such Registration Statement; or (y) the date on which the Registrable Securities may be sold pursuant to Rule 144, without limitations, as determined by the counsel to the Company pursuant to a written opinion letter, addressed to the Company's transfer agent to such effect (the "**Effectiveness Period**"). By 9:30 am Eastern Time on the Business Day following the Effective Date, the Company shall file with the Commission in accordance with Rule 424 under the Securities Act the final prospectus to be used in connection with sales pursuant to such Registration Statement. Intrexon acknowledges and agrees that securities other than the Registrable Securities may be included in the Registration Statement.

3. Registration Procedures.

In connection with the Company's registration obligations hereunder, the Company shall:

(a) Prepare and file with the Commission on or prior to the Filing Date, a Registration Statement on Form S-3 (or if the Company is not then eligible to register for resale the Registrable Securities on Form S-3 such registration shall be on another appropriate form in accordance with the Securities Act and the rules and regulations promulgated thereunder) in accordance with the method or methods of distribution thereof as described on Annex A hereto (except if otherwise directed by all of the Holders), and use reasonable best efforts to cause the Registration Statement to become effective and remain effective as provided herein.

(b) Prepare and file with the Commission such amendments, including post-effective amendments, to the Registration Statement as may be necessary to keep the Registration Statement continuously effective (subject to Section 3(l)) as to the applicable Registrable Securities for the Effectiveness Period and prepare and file with the Commission such additional Registration Statements, if necessary, in order to register for resale under the Securities Act all of the Registrable Securities; (ii) cause the related Prospectus to be amended or supplemented by any required Prospectus supplement, and as so supplemented or amended to be filed pursuant to Rule 424 (or any similar provisions then in force) promulgated under the Securities Act; (iii) respond promptly to any comments received from the Commission with respect to the Registration Statement or any amendment thereto and promptly provide the Holders true and complete copies of all correspondence from and to the Commission relating to the Registration Statement; and (iv) comply in all material respects with the provisions of the Securities Act and the Exchange Act with respect to the disposition of all Registrable Securities covered by the Registration Statement during the applicable period in accordance with the intended methods of disposition by the Holders thereof set forth in the Registration Statement as so amended or in such Prospectus as so supplemented.

(c) Promptly notify the Holders of Registrable Securities (i)(A) when a Prospectus or any Prospectus supplement or post-effective amendment to the Registration Statement is filed; (B) when the Commission notifies the Company whether there will be a "review" of such Registration Statement and whenever the Commission comments in writing on such Registration Statement, and if requested by such Holders, furnish to them a copy of such comments and the Company's responses thereto and (C) with respect to the Registration Statement or any post-effective amendment, when the same has become effective; (ii) of any request by the Commission or any other Federal or state governmental authority for amendments or supplements to the Registration Statement or Prospectus or for additional information; (iii) of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement covering any or all of the Registrable Securities or the initiation of any Proceedings for that purpose; (iv) of the receipt by the Company of any notification with respect to the suspension of the qualification or exemption from qualification of any of the Registrable Securities for sale in any jurisdiction, or the initiation or threatening of any Proceeding for such purpose; and (v) of the occurrence of any event that makes any statement made in the Registration Statement or Prospectus or any document incorporated or deemed to be incorporated therein by reference untrue in any material respect or that requires any revisions to the Registration Statement, Prospectus or other documents so that, in the case of the Registration Statement or the Prospectus, as the case may be, it will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading.

(d) Use reasonable best efforts to avoid the issuance of, or, if issued, obtain the withdrawal of, (i) any order suspending the effectiveness of the Registration Statement or (ii) any suspension of the qualification (or exemption from qualification) of any of the Registrable Securities for sale in any U.S. jurisdiction.

(e) If requested by the Holders of a majority of the Registrable Securities, (i) promptly incorporate in a Prospectus supplement or post-effective amendment to the Registration Statement such information as the Company reasonably agrees should be included therein and (ii) make all required filings of such Prospectus supplement or such post-effective amendment as soon as practicable after the Company has received notification of the matters to be incorporated in such Prospectus supplement or post-effective amendment.

(f) Furnish to each Holder, without charge and upon request, at least one conformed copy of each Registration Statement and each amendment thereto, including financial statements and schedules, and, to the extent requested by such Person, all documents incorporated or deemed to be incorporated therein by reference, and all exhibits (including those previously furnished or incorporated by reference) promptly after the filing of such documents with the Commission.

(g) Promptly deliver to each Holder, without charge, as many copies of the Prospectus or Prospectuses (including each form of prospectus) and each amendment or supplement thereto as such Persons may reasonably request; and the Company hereby consents to the use of such Prospectus and each amendment or supplement thereto by each of the selling Holders in connection with the offering and sale of the Registrable Securities covered by such Prospectus and any amendment or supplement thereto.

(h) Prior to any public offering of Registrable Securities, use commercially reasonable efforts to register or qualify or cooperate with the selling Holders in connection with the registration or qualification (or exemption from such registration or qualification) of such Registrable Securities for offer and sale under the securities or Blue Sky laws of such jurisdictions within the United States as any Holder reasonably requests in writing, to keep each such registration or qualification (or exemption therefrom) effective during the Effectiveness Period and to do any and all other acts or things necessary or advisable to enable the disposition in such jurisdictions of the Registrable Securities covered by a Registration Statement; provided, however, the Company shall in no event be required to (x) qualify to do business in any state where it is not then qualified or (y) take any action that would subject it to tax or to the general service of process in any such state where it is not then subject, or (z) comply with state securities or "blue sky" laws of any state for which registration by coordination is unavailable to the Company.

(i) Cooperate with the Holders to facilitate the timely preparation and delivery of certificates representing Registrable Securities to be sold pursuant to a Registration Statement.

(j) Upon the occurrence of any event contemplated by Section 3(c)(v), promptly prepare a supplement or amendment, including a post-effective amendment, to the Registration Statement or a supplement to the related Prospectus or any document incorporated or deemed to be incorporated therein by reference, and file any other required document so that, as thereafter delivered, neither the Registration Statement nor such Prospectus will contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading.

(k) Use commercially reasonable efforts to cause all Registrable Securities relating to the Registration Statement to be listed on the Nasdaq Stock Market or any subsequent securities exchange, quotation system or market, if any, on which similar securities issued by the Company are then listed or traded.

(l) The Company may require each selling Holder to furnish to the Company information regarding such Holder and the distribution of such Registrable Securities as is required by law to be disclosed in the Registration Statement, and the Company may exclude from such registration the Registrable Securities of any such Holder who fails to furnish such information within fifteen (15) days after receiving such request.

Each Holder covenants and agrees that (i) it will not sell any Registrable Securities under the Registration Statement until it has received copies of the Prospectus as then amended or supplemented as contemplated in Section 3(g) and notice from the Company that such Registration Statement and any post-effective amendments thereto have become effective as contemplated by Section 3(c) and (ii) it and its officers, directors or Affiliates, if any, will comply with the prospectus delivery requirements of the Securities Act as applicable to them in connection with sales of Registrable Securities pursuant to the Registration Statement.

Each Holder agrees by its acquisition of such Registrable Securities that, upon receipt of a notice from the Company of the occurrence of any event of the kind described in Section 3(c)(ii), 3(c)(iii), 3(c)(iv), 3(c)(v) or 3(m), such Holder will forthwith discontinue disposition of such Registrable Securities under the Registration Statement until such Holder's receipt of the copies of the supplemented Prospectus and/or amended Registration Statement contemplated by Section 3(j), or until it is advised in writing by the Company that the use of the applicable Prospectus may be resumed, and, in either case, has received copies of any additional or supplemental filings that are incorporated or deemed to be incorporated by reference in such Prospectus or Registration Statement.

(m) If (i) there is material non-public information regarding the Company which the Board reasonably determines not to be in the Company's best interest to disclose and which the Company is not otherwise required to disclose, or (ii) there is a significant business opportunity (including, but not limited to, the acquisition or disposition of assets (other than in the ordinary course of business) or any merger, consolidation, tender offer or other similar transaction) available to the Company which the Board reasonably determines not to be in the Company's best interest to disclose, then the Company may postpone or suspend filing or effectiveness of a registration statement for a period not to exceed thirty (30) consecutive days, provided that the Company may not postpone or suspend its obligation under this Section 3(m) for more than sixty (60) days in the aggregate during any 12 month period; provided, however, that no such postponement or suspension shall be permitted for consecutive thirty (30) day periods, arising out of the same set of facts, circumstances or transactions.

(n) Any legend indicating, directly or indirectly, that the Registrable Securities constitute "restricted securities" (as such term is defined in Rule 144) stamped on a certificate evidencing the Registrable Securities, and the related stock transfer instructions and record notations with respect to such Registrable Securities, shall be removed and the Company shall approve the issuance of a certificate without such legend to the holder of such Securities if the Holder thereof provides the Company with reasonable assurances that such securities can be sold pursuant to Rule 144. Following the receipt by the Company of such assurances, the Company will, no later than five trading days following the delivery by a holder to the Company or the Company's transfer agent of a legended certificate representing such securities, deliver or cause to be delivered to such Holder a certificate representing such securities that is free from all restrictive and other legends.

4. Registration Expenses.

All reasonable fees and expenses incident to the performance of or compliance with this Agreement by the Company (excluding underwriters' discounts and commissions and all fees and expenses of legal counsel, accountants and other advisors for any Holder except as specifically provided below), except as and to the extent specified in this Section 4, shall be borne by the Company whether or not the Registration Statement is filed or becomes effective and whether or not any Registrable Securities are sold pursuant to the Registration Statement. The fees and expenses referred to in the foregoing sentence shall include, without limitation, (i) all registration and filing fees (including, without limitation, fees and expenses (A) with respect to filings required to be made with the Nasdaq Stock Market and each other securities exchange or market on which Registrable Securities are required hereunder to be listed, (B) with respect to filings required to be made with the Financial Industry Regulatory Authority and (C) in compliance with state securities or Blue Sky laws, (ii) messenger, telephone and delivery expenses, (iii) fees and disbursements of counsel for the Company, (iv) Securities Act liability insurance, if the Company so desires such insurance, and (v) fees and expenses of all other Persons retained by the Company in connection with the consummation of the transactions contemplated by this Agreement, including, without limitation, the Company's independent public accountants. In addition, the Company shall be responsible for all of its internal expenses incurred in connection with the consummation of the transactions contemplated by this Agreement (including, without limitation, all salaries and expenses of its officers and employees performing legal or accounting duties), the expense of any annual audit, the fees and expenses incurred in connection with the listing of the Registrable Securities on any securities exchange as required hereunder.

5. Indemnification.

(a) Indemnification by the Company. The Company shall, notwithstanding any termination of this Agreement, indemnify and hold harmless each Holder, its permitted assignees, officers, directors, agents, brokers (including brokers who offer and sell Registrable Securities as principal as a result of a pledge or any failure to perform under a margin call of Common Stock), underwriters, investment advisors and employees, each Person who controls any such Holder or permitted assignee (within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act) and the officers, directors, agents and employees of each such controlling Person, and the respective successors, assigns, estate and personal representatives of each of the foregoing, to the fullest extent permitted by applicable law, from and against any and all claims, losses, damages, liabilities, penalties, judgments, costs (including, without limitation, costs of investigation) and expenses (including, without limitation, reasonable attorneys' fees and expenses) (collectively, "**Losses**"), arising out of or relating to any untrue or alleged untrue statement of a material fact contained in the Registration Statement, any Prospectus, as supplemented or amended, if applicable, or arising out of or relating to any omission or alleged omission of a material fact required to be stated therein or necessary to make the statements therein (in the case of any Prospectus or form of prospectus or supplement thereto, in the light of the circumstances under which they were made) not misleading, except (i) to the extent, but only to the extent, that such untrue statements or omissions are based upon information regarding such Holder furnished in writing to the Company by such Holder expressly for use in the Registration Statement, such Prospectus or such form of Prospectus or in any amendment or supplement thereto (it being understood that each Holder has approved Annex A hereto for this purpose); (ii) as a result of the failure of such Holder to deliver a Prospectus, as amended or supplemented, to a purchaser in connection with an offer or sale; or (iii) in the case of an occurrence of an event of the type specified in Section 3(c)(ii)-(v), the use by a Holder of an outdated or defective Prospectus after the Company has notified such Holder in writing that the Prospectus is outdated or defective and prior to the receipt by such Holder of notice that use of the applicable prospectus may be resumed (and, if applicable, receipt of additional or supplemental filings that are incorporated or deemed to be incorporated by referenced in such Prospectus or Registration Statement), but only if and to the extent that following such receipt the misstatement or omission giving rise to such Loss would have been corrected; provided, however, that the indemnity agreement contained in this Section 5(a) shall not apply to amounts paid in settlement of any Losses if such settlement is effected without the prior written consent of the Company, which consent shall not be unreasonably withheld. The Company shall notify such Holder promptly of the institution, threat or assertion of any Proceeding of which the Company is aware in connection with the transactions contemplated by this Agreement. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of an Indemnified Party (as defined in Section 5(c) hereof) and shall survive the transfer of the Registrable Securities by the Holder.

(b) Indemnification by Holders. Each Holder and its permitted assignees shall, severally and not jointly, indemnify and hold harmless the Company, its directors, officers, agents and employees, each Person who controls the Company (within the meaning of Section 15 of the Securities Act and Section 20 of the Exchange Act), and the directors, officers, agents or employees of such controlling Persons, and the respective successors, assigns, estate and personal representatives of each of the foregoing, to the fullest extent permitted by applicable law, from and against all Losses, as incurred, arising out of or relating to any untrue or alleged untrue statement of a material fact contained in the Registration Statement, any Prospectus, as supplemented or amended, if applicable, or arising out of or relating to any omission or alleged omission of a material fact required to be stated therein or necessary to make the statements therein (in the case of any Prospectus or supplement thereto, in the light of the circumstances under which they were made) not misleading, to the extent, but only to the extent, that such untrue statement or omission is contained in or omitted from any information regarding such Holder furnished in writing to the Company by such Holder expressly for use in therein, and that such information was reasonably relied upon by the Company for use therein, or to the extent that such information relates to such Holder or such Holder's proposed method of distribution of Registrable Securities and was furnished in writing by such Holder expressly for use therein (it being understood that each Holder has approved Annex A hereto for this purpose). Notwithstanding anything to the contrary contained herein, in no event shall the liability of any Purchaser under this Section 5(b) exceed the net proceeds to such Purchaser as a result of the sale of Registrable Securities pursuant to a Registration Statement in connection with which the untrue or alleged untrue statement or material omission was provided.

(c) Conduct of Indemnification Proceedings. If any Proceeding shall be brought or asserted against any Person entitled to indemnity hereunder (an "**Indemnified Party**"), such Indemnified Party promptly shall notify the Person from whom indemnity is sought (the "**Indemnifying Party**") in writing, and the Indemnifying Party shall assume the defense thereof, including the employment of counsel reasonably satisfactory to the Indemnified Party and the payment of all fees and expenses incurred in connection with defense thereof; provided, that the failure of any Indemnified Party to give such notice shall not relieve the Indemnifying Party of its obligations or liabilities pursuant to this Agreement, except (and only) to the extent that it shall be finally determined by a court of competent jurisdiction (which determination is not subject to appeal or further review) that such failure shall have proximately and materially adversely prejudiced the Indemnifying Party.

An Indemnified Party shall have the right to employ separate counsel in any such Proceeding and to participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of such Indemnified Party or Parties unless: (1) the Indemnifying Party has agreed in writing to pay such fees and expenses; or (2) the Indemnifying Party shall have failed promptly to assume the defense of such Proceeding and to employ counsel reasonably satisfactory to such Indemnified Party in any such Proceeding; or (3) the named parties to any such Proceeding (including any impleaded parties) include both such Indemnified Party and the Indemnifying Party, and such Indemnified Party shall have been advised by counsel (which shall be reasonably acceptable to the Indemnifying Party) that a conflict of interest is likely to exist if the same counsel were to represent such Indemnified Party and the Indemnifying Party (in which case, the Indemnifying Party shall be responsible for reasonable fees and expenses of no more than one counsel for the Indemnified Parties). The Indemnifying Party shall not be liable for any settlement of any such Proceeding effected without its written consent, which consent shall not be unreasonably withheld or delayed. No Indemnifying Party shall, without the prior written consent of the Indemnified Party, effect any settlement of any pending Proceeding in respect of which any Indemnified Party is a party, unless such settlement includes an unconditional release of such Indemnified Party from all liability on claims that are the subject matter of such Proceeding.

All fees and expenses of the Indemnified Party (including reasonable fees and expenses to the extent incurred in connection with investigating or preparing to defend such Proceeding in a manner not inconsistent with this Section) shall be paid to the Indemnified Party, as incurred, within twenty (20) Business Days of written notice thereof to the Indemnifying Party (regardless of whether it is ultimately determined that an Indemnified Party is not entitled to indemnification hereunder; provided, that the Indemnifying Party may require such Indemnified Party to undertake to reimburse all such fees and expenses to the extent it is finally judicially determined that such Indemnified Party is not entitled to indemnification hereunder).

(d) Contribution. If a claim for indemnification under Section 5(a) or 5(b) is unavailable to an Indemnified Party because of a failure or refusal of a governmental authority to enforce such indemnification in accordance with its terms (by reason of public policy or otherwise), then each Indemnifying Party, in lieu of indemnifying such Indemnified Party, shall contribute to the amount paid or payable by such Indemnified Party as a result of such Losses, in such proportion as is appropriate to reflect the relative fault of the Indemnifying Party and Indemnified Party in connection with the actions, statements or omissions that resulted in such Losses as well as any other relevant equitable considerations. The relative fault of such Indemnifying Party and Indemnified Party shall be determined by reference to, among other things, whether any action in question, including any untrue or alleged untrue statement of a material fact or omission or alleged omission of a material fact, has been taken or made by, or relates to information supplied by, such Indemnifying, Party or Indemnified Party, and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such action, statement or omission. The amount paid or payable by a party as a result of any Losses shall be deemed to include, subject to the limitations set forth in Section 5(c), any reasonable attorneys' or other reasonable fees or expenses incurred by such party in connection with any Proceeding to the extent such party would have been indemnified for such fees or expenses if the indemnification provided for in this Section was available to such party in accordance with its terms.

The parties hereto agree that it would not be just and equitable if contribution pursuant to this Section 5(d) were determined by pro rata allocation or by any other method of allocation that does not take into account the equitable considerations referred to in the immediately preceding paragraph. No Person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation.

The indemnity and contribution agreements contained in this Section are in addition to any liability that the Indemnifying Parties may have to the Indemnified Parties. Notwithstanding anything to the contrary contained herein, the Holders shall be liable under this Section 5(d) for only that amount as does not exceed the aggregate amount invested by such Holder under the Purchase Agreement.

6. Rule 144.

As long as any Holder owns any Registrable Securities, the Company covenants to use its commercially reasonable efforts to timely file (or obtain extensions in respect thereof and file within the applicable grace period) all reports required to be filed by the Company after the date hereof pursuant to Section 13(a) or 15(d) of the Exchange Act. As long as any Holder owns any Registrable Securities, if the Company is not required to file reports pursuant to Section 13(a) or 15(d) of the Exchange Act, it will prepare and furnish to the Holders and make publicly available in accordance with Rule 144 annual and quarterly financial statements, together with a discussion and analysis of such financial statements in form and substance substantially similar to those that would otherwise be required to be included in reports required by Section 13(a) or 15(d) of the Exchange Act, as well as any other information required thereby, in the time period that such filings would have been required to have been made under the Exchange Act. The Company further covenants that it will take such further action as any Holder may reasonably request, all to the extent required from time to time to enable such Person to sell the Shares without registration under the Securities Act within the limitation of the exemptions provided by Rule 144 promulgated under the Securities Act, including providing any legal opinions relating to such sale pursuant to Rule 144. Upon the request of any Holder, the Company shall deliver to such Holder a written certification of a duly authorized officer as to whether it has complied with such requirements.

7. Miscellaneous.

(a) Remedies. In the event of a breach by the Company or by a Holder, of any of their obligations under this Agreement, each Holder or the Company, as the case may be, in addition to being entitled to exercise all rights granted by law and under this Agreement, including recovery of damages, will be entitled to specific performance of its rights under this Agreement. The Company and each Holder agree that monetary damages would not provide adequate compensation for any losses incurred by reason of a breach by it of any of the provisions of this Agreement and hereby further agrees that, in the event of any action for specific performance in respect of such breach, it shall waive the defense that a remedy at law would be adequate.

(b) Entire Agreement; Amendment. This Agreement and the Purchase Agreement contain the entire understanding and agreement of the parties with respect to the matters covered hereby and, except as specifically set forth herein or in the Purchase Agreement, neither the Company nor any Holder make any representation, warranty, covenant or undertaking with respect to such matters, and they supersede all prior understandings and agreements with respect to said subject matter, all of which are merged herein. No provision of this Agreement may be waived or amended other than by a written instrument signed by the Company and the Holders of at least a majority of all Registrable Securities then outstanding. Any amendment or waiver effected in accordance with this Section 7(b) shall be binding upon each Holder (and their permitted assigns) and the Company.

(c) Notices. Any notice, demand, request, waiver or other communication required or permitted to be given hereunder shall be in writing and 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. The addresses for such communications shall be:

If to the Company:

ZIOPHARM Oncology, Inc.
1180 Avenue of the Americas, 19th Floor
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

Any party hereto may from time to time change its address for notices by giving written notice of such changed address to the other party hereto.

(d) Waivers. No waiver by either party of any default with respect to any provision, condition or requirement of this Agreement shall be deemed to be a continuing waiver in the future or a waiver of any other provision, condition or requirement hereof, nor shall any delay or omission of any party to exercise any right hereunder in any manner impair the exercise of any such right accruing to it thereafter.

(e) Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties and their successors and permitted assigns and shall inure to the benefit of each Holder and its successors and assigns. The Company may not assign this Agreement or any of its rights or obligations hereunder without the prior written consent of each Holder.

(f) Assignment of Registration Rights. The rights of each Holder hereunder, including the right to have the Company register for resale Registrable Securities in accordance with the terms of this Agreement, shall be assignable by each Holder of all or a portion of the Registrable Securities if: (i) the Holder agrees in writing with the transferee or assignee to assign such rights, and a copy of such agreement is furnished to the Company within a reasonable time after such assignment, (ii) the Company is, within a reasonable time after such transfer or assignment, furnished with written notice of (a) the name and address of such transferee or assignee, and (b) the securities with respect to which such registration rights are being transferred or assigned, (iii) following such transfer or assignment the further disposition of such securities by the transferee or assignees is restricted under the Securities Act and applicable state securities laws, and (iv) at or before the time the Company receives the written notice contemplated by clause (ii) of this Section, the transferee or assignee agrees in writing with the Company to be bound by all of the provisions of this Agreement. The rights to assignment shall apply to the Holders (and to subsequent) successors and assigns.

(g) Counterparts. This Agreement may be executed in any number of counterparts, each of which when so executed shall be deemed to be an original and, all of which taken together shall constitute one and the same Agreement. In the event that any signature is delivered by facsimile transmission, such signature shall create a valid binding obligation of the party executing (or on whose behalf such signature is executed) the same with the same force and effect as if such facsimile signature were the original thereof.

(h) Termination. This Agreement shall terminate on the earlier of (i) the date on which all remaining Registrable Securities may be sold without restriction pursuant to Rule 144 of the Securities Act or (ii) the date when all Registrable Securities have been sold pursuant to a Registration Statement.

(i) Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of New York, without regard to principles of conflicts of law thereof.

(j) Cumulative Remedies. The remedies provided herein are cumulative and not exclusive of any remedies provided by law.

(k) Severability. The provisions of this Agreement are severable and, in the event that any court of competent jurisdiction shall determine that any one or more of the provisions or part of the provisions contained in this Agreement shall, for any reason, be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provision or part of a provision of this Agreement and this Agreement shall be reformed and construed as if such invalid or illegal or unenforceable provision, or part of such provision, had never been contained herein, so that such provisions would be valid, legal and enforceable to the maximum extent possible.

(l) Headings. The headings herein are for convenience only, do not constitute a part of this Agreement and shall not be deemed to limit or affect any of the provisions hereof.

IN WITNESS WHEREOF, the parties hereto have caused this Registration Rights Agreement to be duly executed by their respective authorized officers as of the date first above written.

ZIOPHARM ONCOLOGY, INC.

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

INTREXON CORPORATION

By: _____
Name: Randal J. Kirk
Title: Chief Executive Officer

SIGNATURE PAGE TO
REGISTRATION RIGHTS AGREEMENT

ANNEX A
PLAN OF DISTRIBUTION

The Selling Stockholders and any of their pledgees, donees, transferees, assignees or other successors-in-interest may, from time to time, sell, transfer or otherwise dispose of any or all of their shares of Common Stock or interests in shares of Common Stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These dispositions may be at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices. The Selling Stockholders may use one or more of the following methods when disposing of the shares or interests therein:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- through the writing or settlement of options, swaps, derivatives or other hedging transactions, whether through an options exchange or otherwise;
- broker-dealers may agree with the Selling Stockholders to sell a specified number of such shares at a stipulated price per share;
- in the over the counter market;
- a combination of any such methods of disposition; and
- any other method permitted pursuant to applicable law.

The Selling Stockholders may also sell shares under Rule 144 under the Securities Act, if available, rather than under this prospectus.

Broker-dealers engaged by the Selling Stockholders may arrange for other broker-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the Selling Stockholders (or, if any broker-dealer acts as agent for the purchaser of shares, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this prospectus, in the case of an agency transaction will not be in excess of a customary brokerage commission in compliance with FINRA Rule 2440; and in the case of a principal transaction a markup or markdown in compliance with FINRA IM-2440 or the successor to such FINRA rules.

The Selling Stockholders may from time to time pledge or grant a security interest in some or all of the Shares owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell shares of Common Stock from time to time under the prospectus, or under an amendment to the prospectus under Rule 424(b) or other applicable provision of the Securities Act of 1933, as amended (the "Securities Act"), amending the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under the prospectus. The Selling Stockholders do not expect these commissions and discounts to exceed what is customary in the types of transactions involved.

There can be no assurance that any Selling Stockholder will sell any or all of the shares of Common Stock pursuant to the registration statement, of which this prospectus forms a part.

The Selling Stockholders may enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by the prospectus, which shares such broker-dealer or other financial institution may resell pursuant to the prospectus (as supplemented or amended to reflect such transaction).

The Selling Stockholders and any broker-dealer or agents that are involved in selling the shares of Common Stock may be deemed to be "underwriters" within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of Common Stock purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. . In no event shall any broker-dealer receive fees, commission and markups which, in the aggregate, would exceed eight percent (8%). Each Selling Stockholder has informed the Company that it does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the Common Stock.

We have advised each Selling Stockholder that it may not use shares registered on the registration statement of which this prospectus is a part to cover short sales of Common Stock made prior to the date on which the registration statement shall have been declared effective by the Securities and Exchange Commission. If a Selling Stockholder uses this prospectus for any sale of shares of our Common Stock, it will be subject to the prospectus delivery requirements of the Securities Act. The Selling Stockholders and any other person participating in such distribution will be subject to applicable provisions of the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder, including, without limitation, Regulation M of the Exchange Act, which may limit the timing of purchases and sales of any of the shares of Common Stock by the Selling Stockholders and any other participating person. Regulation M may also restrict the ability of any person engaged in the distribution of the shares of Common Stock to engage in market-making activities with respect to the shares of Common Stock. All of the foregoing may affect the marketability of the shares of Common Stock and the ability of any person or entity to engage in market-making activities with respect to the shares of Common Stock.

We may indemnify the Selling Stockholders against certain liabilities, including some liabilities under the Securities Act, in accordance with an agreement between us and the Selling Stockholders. We may be indemnified by the Selling Stockholders against civil liabilities, including liabilities under the Securities Act, that may arise from any written information furnished to us by the Selling Stockholders specifically for use in this prospectus, in accordance with the related registration rights agreement, or we may be entitled to contribution.

ZIOPHARM Oncology, Inc.

Selling Stockholder Notice and Questionnaire

The undersigned beneficial owner of common stock, $0.001 par value per share (the "Common Stock"), of ZIOPHARM Oncology, Inc. (the "Company"), (the "Registrable Securities") understands that the Company has filed or intends to file with the Securities and Exchange Commission (the "Commission") a registration statement (the "Registration Statement") for the registration and resale under Rule 415 of the Securities Act of 1933, as amended (the "Securities Act"), of the Registrable Securities, in accordance with the terms of the Registration Rights Agreement, dated as of _____, 201___ (the "Registration Rights Agreement"), among the Company and the Purchasers named therein. The purpose of this Questionnaire is to facilitate the filing of the Registration Statement under the Act that will permit you to resell the Registrable Securities in the future. The information supplied by you will be used in preparing the Registration Statement. All capitalized terms not otherwise defined herein shall have the meanings ascribed thereto in the Registration Rights Agreement.

Certain legal consequences arise from being named as a selling stockholder in the Registration Statement and the related Prospectus. Accordingly, holders and beneficial owners of Registrable Securities are advised to consult their own securities law counsel regarding the consequences of being named or not being named as a selling stockholder in the Registration Statement and the related Prospectus.

NOTICE

The undersigned beneficial owner (the "Selling Stockholder") of Registrable Securities hereby elects to include the Registrable Securities owned by it and listed below in Item 3 (unless otherwise specified under such Item 3) in the Registration Statement.

QUESTIONNAIRE

1. Name.

(a) Full Legal Name of Selling Stockholder

_____

(b) Full Legal Name of Registered Holder (if not the same as (a) above) through which Registrable Securities Listed in Item 3 below are held:

_____

(c) Full Legal Name of Natural Control Person (which means a natural person who directly or indirectly alone or with others has power to vote or dispose of the securities covered by the questionnaire):

_____

2. Address for Notices to Selling Stockholder:

Telephone: _____
Fax: _____
Contact Person: _____
E-mail address of Contact Person:_____

3. Beneficial Ownership of Registrable Securities:

(a) Type and Number of Registrable Securities beneficially owned:

4. Broker-Dealer Status:

(a) Are you a broker-dealer?

Yes ☐ No ☐

Note: If yes, the Commission's staff has indicated that you should be identified as an underwriter in the Registration Statement.

(b) Are you an affiliate of a broker-dealer?

Yes ☐ No ☐

Note: If yes, provide a narrative explanation below:

(c) If you are an affiliate of a broker-dealer, do you certify that you bought the Registrable Securities in the ordinary course of business, and at the time of the purchase of the Registrable Securities to be resold, you had no agreements or understandings, directly or indirectly, with any person to distribute the Registrable Securities?

Yes ☐ No ☐

Note: If no, the Commission's staff has indicated that you should be identified as an underwriter in the Registration Statement.

5. Beneficial Ownership of Other Securities of the Company Owned by the Selling Stockholder.

Except as set forth below in this Item 5, the undersigned is not the beneficial or registered owner of any securities of the Company other than the Registrable Securities listed above in Item 3.

(a) As of _____, 201___, the Selling Stockholder owned outright (including shares registered in Selling Stockholder's name individually or jointly with others, shares held in the name of a bank, broker, nominee, depository or in "street name" for its account), _____ shares of the Company's capital stock (excluding the Registrable Securities). If "zero," please so state.

(b) In addition to the number of shares Selling Stockholder owned outright as indicated in Item 5(a) above, as of _____, 201___, the Selling Stockholder had or shared voting power or investment power, directly or indirectly, through a contract, arrangement, understanding, relationship or otherwise, with respect to _____ shares of the Company's capital stock (excluding the Registrable Securities). If "zero," please so state.

If the answer to Item 5(b) is not "zero," please complete the following tables:

Sole Voting Power:

Number of Shares	Nature of Relationship Resulting in Sole Voting Power

Shared Voting Power:

Number of Shares	With Whom Shared	Nature of Relationship

Sole Investment power:

Number of Shares	Nature of Relationship Resulting in Sole Investment power

Shared Investment power:

Number of Shares	With Whom Shared	Nature of Relationship

(c) As of _____, 201___, the Selling Stockholder had the right to acquire the following shares of the Company's common stock pursuant to the exercise of outstanding stock options, warrants or other rights (excluding the Registrable Securities). Please describe the number, type and terms of the securities, the method of ownership, and whether the undersigned holds sole or shared voting and investment power. If "none", please so state.

_____

_____

6. Relationships with the Company:

Except as set forth below, neither the undersigned nor any of its affiliates, officers, directors or principal equity holders (owners of 5% of more of the equity securities of the undersigned) has held any position or office or has had any other material relationship with the Company (or its predecessors or affiliates) during the past three years.

State any exceptions here:

_____

_____

7. Plan of Distribution:

The undersigned has reviewed the form of Plan of Distribution attached as Annex A to the Registration Rights Agreement, and hereby confirms that, except as set forth below, the information contained therein regarding the undersigned and its plan of distribution is correct and complete.

State any exceptions here:

_____

_____

****

The undersigned agrees to promptly notify the Company of any inaccuracies or changes in the information provided herein that may occur subsequent to the date hereof and prior to the effective date of any applicable Registration Statement filed pursuant to the Registration Rights Agreement.

By signing below, the undersigned consents to the disclosure of the information contained herein in its answers to Items 1 through 7 and the inclusion of such information in each Registration Statement filed pursuant to the Registration Rights Agreement and each related Prospectus. The undersigned understands that such information will be relied upon by the Company in connection with the preparation or amendment of any such Registration Statement and the related Prospectus.

By signing below, the undersigned acknowledges that it understands its obligation to comply, and agrees that it will comply, with the provisions of the Exchange Act and the rules and regulations thereunder, particularly Regulation M. The undersigned also acknowledges that it understands that the answers to this Questionnaire are furnished for use in connection with Registration Statements filed pursuant to the Registration Rights Agreement and any amendments or supplements thereto filed with the Commission pursuant to the Securities Act.

The undersigned hereby acknowledges and is advised of the following Interpretation A.65 of the July 1997 SEC Manual of Publicly Available Telephone Interpretations regarding short selling:

"An Issuer filed a Form S-3 registration statement for a secondary offering of common stock which is not yet effective. One of the selling shareholders wanted to do a short sale of common stock "against the box" and cover the short sale with registered shares after the effective date. The issuer was advised that the short sale could not be made before the registration statement become effective, because the shares underlying the short sale are deemed to be sold at the time such sale is made. There would, therefore, be a violation of Section 5 if the shares were effectively sold prior to the effective date."

By returning this Questionnaire, the undersigned will be deemed to be aware of the foregoing interpretation.

I confirm that, to the best of my knowledge and belief, the foregoing statements (including without limitation the answers to this Questionnaire) are correct.

IN WITNESS WHEREOF the undersigned, by authority duly given, has caused this Questionnaire to be executed and delivered either in person or by its duly authorized agent.

Dated: _____ Beneficial Owner: _____

By: _____
Name:
Title:

Exhibit 99.1

ZIOPHARM Oncology and Intrexon Announce Worldwide Partnership for Synthetic Biology DNA-based Oncology Therapeutics

RJ Kirk, CEO and Chairman of Intrexon, to Join ZIOPHARM Board of Directors

NEW YORK, NY and GERMANTOWN, MD (January 6, 2011) – ZIOPHARM Oncology, Inc. (Nasdaq: ZIOP), a small molecule late-stage oncology drug development company, and Intrexon Corporation, a next generation synthetic biology company, announced today a global exclusive channel partnership in oncology where ZIOPHARM will develop and commercialize DNA-based therapeutics using Intrexon's UltraVector® Technology. Under the partnership, ZIOPHARM will utilize Intrexon's advanced transgene engineering platform for the controlled and precise cellular production of anti-cancer effectors. ZIOPHARM will have rights to Intrexon's entire human *in vivo* effector platform within the field of oncology which includes two lead clinical-stage product candidates, one which is in an advanced Phase I study and another which will be the subject of an Investigational New Drug ("IND") filing during the first half of 2011. ZIOPHARM and Intrexon will host a conference call and audio webcast today, Thursday, January 6th at 5:00 p.m. ET to discuss the global exclusive channel partnership.

Intrexon employs its modular genetic engineering platform in the areas of therapeutics, protein production, industrial, and agriculture products. The exclusive channel partnership between Intrexon and ZIOPHARM has been established specifically for the field of human oncologic therapeutics. Under the partnership, Intrexon remains responsible for technology discovery efforts and managing the patent estate as well as for certain aspects of manufacturing. ZIOPHARM will be responsible for conducting preclinical and clinical development of candidates, as well as for other aspects of manufacturing and the commercialization of the candidates.

Intrexon's core synthetic biology technology is designed to create Better DNA™ at industrial scale, enabling unprecedented control over the function and output of living cells by providing external control over *in vivo* activation and regulation of potent effectors. This platform, called UltraVector®, provides speed, flexibility, consistency and precision to the design, production and testing of rationally designed complex transgenes and their encoded genetic circuits. These qualities allow an iterative and rational approach to transgene design, which can be continually engineered until their performance is optimized. Through this process, Intrexon is able to overcome the challenges inherent in current therapeutic strategies, including recombinant protein therapies and constitutive gene therapies, thereby enhancing capabilities, improving safety and lowering cost for human therapeutics. The lead oncology product candidate developed using Intrexon's technologies is currently in Phase Ib clinical study for metastatic melanoma. ZIOPHARM expects to submit an Investigational New Drug (IND) application with U.S. Food and Drug Administration for a second oncology product candidate in the first half of this year.

“Controllable, scalable synthetic biology, the tightly regulated delivery of therapeutic proteins from within the body, is an aspirational and disruptive technology which Intrexon has brought from scientific theory to medical application,” said Jonathan Lewis, M.D., Ph.D., Chief Executive Officer and Chief Medical Officer of ZIOPHARM. “As the sole channel partner for *in* vivo therapeutic candidates for human oncology, ZIOPHARM plans to leverage this technology for next-generation products targeting key pathways used by cancers to grow and metastasize. Intrexon has developed a technology that is uniquely flexible, scalable and controllable, adding significantly to our small molecule drug development capabilities and our ability to translate science to the patient using our world-class global team.”

“We are very pleased to collaborate with ZIOPHARM, which, under the leadership of Jonathan Lewis, is building an industry leading oncology company with a strategic vision regarding cancer medicine. ZIOPHARM’s oncology expertise, development capabilities, as well as its excellent reputation within the oncology community make ZIOPHARM an exceptional investment for Intrexon and ideal partner to rapidly achieve the full therapeutic benefit and commercial potential of Intrexon’s disruptive technologies,” stated RJ Kirk, Intrexon’s Chairman and CEO. “This collaboration leverages the capabilities and strengths of each partner and has the potential to create significant value for shareholders.”

Under terms of the agreement:

- Intrexon will purchase 2,422,542 shares of ZIOPHARM ‘s common stock (representing 5% of ZIOPHARM’s currently outstanding shares) in a private placement for a total purchase price of $11,628,202, or $4.80 per share, which is the trailing 10-day volume-weighted average price per share of ZIOPHARM’s common stock;
- ZIOPHARM will simultaneously issue to Intrexon for no additional consideration an additional 3,631,391 shares of its common stock, representing 7.495% of ZIOPHARM’s currently outstanding shares; ZIOPHARM has agreed to issue to Intrexon additional shares of its common stock for no additional consideration, representing an additional 7.495% under certain conditions upon dosing of the first patient in a ZIOPHARM-conducted U.S. Phase II clinical trial of a product candidate created, produced or developed by ZIOPHARM using Intrexon technology;
- Intrexon has agreed to purchase up to $50 million in conjunction with securities offerings that may be conducted by ZIOPHARM in the future, subject to certain conditions and limitations;
- Subject to certain expense allocations, ZIOPHARM will pay Intrexon 50% of the cumulative net quarterly profits derived from the sale of products developed from the channel partnership.

Pursuant to the agreement, Mr. Kirk has agreed to join the ZIOPHARM Board of Directors. In addition to his responsibilities at Intrexon, Mr. Kirk has served, since March 1999, as Senior Managing Director and Chief Executive Officer of Third Security, LLC, an investment management firm founded by Mr. Kirk. Additionally, Mr. Kirk founded and became Chairman of the Board of New River Pharmaceuticals Inc. in 1996, and was President and Chief Executive Officer between October 2001 and April 2007. New River was acquired by Shire plc in 2007. Mr. Kirk also currently serves as a member of the Board of Directors of Halozyme Therapeutics, Inc. (Nasdaq: HALO), and as Chairman of the Board for Clinical Data, Inc. (Nasdaq: CLDA). Previously, Mr. Kirk served as a member of the Board of Directors of Scios, Inc. (acquired by Johnson & Johnson) between February 2000 and May 2002. Mr. Kirk served on the Board of Visitors of Radford University from July 2003 to June 2009, was Rector of the Board from September 2006 to September 2008, and has served on the Board of Directors of the Radford University Foundation, Inc. since September 1998. He has served on the Board of Visitors of the University of Virginia and Affiliated Schools since July 2009, on the Virginia Advisory Council on Revenue Estimates since July 2006, on the Governor’s Economic Development and Jobs Creation Commission since April 2010, and served as a member of the Board of Directors of the Virginia University Research Partnership from July 2007 to November 2010. Mr. Kirk received a B.A. in Business from Radford University and a J.D. from the University of Virginia.

Regarding Mr. Kirk's appointment, Dr. Lewis added: "RJ is a visionary and a winner with a long record of success and value creation in the life sciences. His addition to the ZIOPHARM Board of Directors will be invaluable, and we look forward to his many contributions in this role."

Griffin Securities, Inc. acted as an advisor to Intrexon on this transaction.

Conference Call and Webcast January 6, 2011 at 5:00pm ET

ZIOPHARM and Intrexon will host a conference call and live audio webcast on January 6, 2011 at 5:00pm ET to discuss their global exclusive channel partnership. The call can be accessed by dialing (877) 375-9144 (U.S. and Canada) or (253) 237-1150 (international). The passcode for the conference call is 'ZIOPHARM.' To access the live audio webcast, or the subsequent archived recording, visit the "Investors - Events & Presentations" section of the ZIOPHARM website at www.ziopharm.com. The webcast will be recorded and available for replay on the company's website for two (2) weeks.

About ZIOPHARM Oncology, Inc.:

ZIOPHARM Oncology is a biopharmaceutical company engaged in the development and commercialization of a diverse portfolio of cancer drugs. The Company is currently focused on three clinical programs.

Palifosfamide (Zymafos™ or ZIO-201) is a novel DNA cross-linker in class with bendamustine, ifosfamide, and cyclophosphamide. ZIOPHARM is currently enrolling patients in a randomized, double-blinded, placebo-controlled Phase III trial with palifosfamide administered intravenously for the treatment of metastatic soft tissue sarcoma in the front-line setting. The Company is also currently conducting a Phase I intravenous study of palifosfamide in combination with standard of care addressing small cell lung cancer and expects to initiate an additional study with drug in the oral form treating solid tumors.

Darinaparsin (Zinapar™ or ZIO-101) is a novel mitochondrial-targeted agent (organic arsenic) being developed intravenously for the treatment of peripheral T-cell lymphoma with a pivotal study expected to begin in late 2011. An oral form is in a Phase I trial in solid tumors.

Indibulin (Zybulin™ or ZIO-301) is a novel, oral tubulin binding agent that is expected to have several potential benefits including oral dosing, application in multi-drug resistant tumors, no neuropathy and minimal overall toxicity. It is currently being studied in Phase I/II in metastatic breast cancer.

ZIOPHARM's operations are located in Boston, MA with an executive office in New York City. Further information about ZIOPHARM may be found at www.ziopharm.com.

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About Intrexon Corporation:

Intrexon Corporation is a privately held synthetic biology company that employs modular DNA control systems to enhance capabilities, improve safety and lower cost in human therapeutics, protein production, industrial products and agricultural biotechnology. The company's advanced transgene engineering platform enables Better DNA™ by combining breakthroughs in DNA control systems with corresponding advancements in modular transgene design, assembly and optimization. The company is currently using these advanced capabilities to undertake foremost challenges across the spectrum for biological applications. More information about the company is available at www.DNA.com.

Forward-Looking Safe Harbor Statement:
This press release contains forward-looking statements for ZIOPHARM Oncology, Inc. that involve risks and uncertainties that could cause ZIOPHARM Oncology's actual results to differ materially from the anticipated results and expectations expressed in these forward-looking statements. These statements are based on current expectations, forecasts and assumptions that are subject to risks and uncertainties, which could cause actual outcomes and results to differ materially from these statements. Among other things, there can be no assurance that any of ZIOPHARM Oncology's development efforts relating to its product candidates will be successful, or such product candidates will be successfully commercialized. Other risks that affect forward-looking information contained in this press release include the possibility of being unable to obtain regulatory approval of ZIOPHARM Oncology's product candidates, the risk that the results of clinical trials may not support ZIOPHARM Oncology's claims, the risk that pre-clinical or clinical trials will proceed on schedules that are consistent with ZIOPHARM Oncology's current expectations or at all, risks related to ZIOPHARM Oncology's ability to protect its intellectual property and its reliance on third parties to develop its product candidates, risks related to the sufficiency of existing capital reserves to fund continued operations for a particular amount of time and uncertainties regarding ZIOPHARM Oncology's ability to obtain additional financing to support its operations thereafter, as well as other risks regarding ZIOPHARM Oncology's that are discussed under the heading "Risk Factors" in ZIOPHARM Oncology's filings with the United States Securities and Exchange Commission. Forward-looking statements can be identified by the use of words such as "may," "will," "intend," " should," "could," "can," "would," "expect," "believe," "estimate," " predict," "potential," "plan," "is designed to," "target" and similar expressions. ZIOPHARM Oncology assumes no obligation to update these forward-looking statements, except as required by law.
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