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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

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**FORM 8-K**

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

**Date of report (Date of earliest event reported): June 29, 2016**

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**ZIOPHARM Oncology, Inc.**

(Exact Name of Registrant as Specified in Charter)

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**Delaware**  
(State or Other Jurisdiction  
of Incorporation)

**001-33038**  
(Commission  
File Number)

**84-1475642**  
(IRS Employer  
Identification No.)

**One First Avenue, Parris Building 34, Navy Yard Plaza**  
**Boston, Massachusetts**  
(Address of Principal Executive Offices)

**02129**  
(Zip Code)

**(617) 259-1970**  
(Registrant's Telephone Number, including Area Code)

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

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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)).
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**Item 1.01 Entry into a Material Definitive Agreement.**

*Amendments to Exclusive Channel Partner Agreement with Intrexon Corporation for Cancer Program and to Exclusive Channel Collaboration Agreement with Intrexon Corporation for Graft-Versus-Host Disease Program*

On June 29, 2016, ZIOPHARM Oncology, Inc., or the Company, and Intrexon Corporation, or Intrexon, entered into a Third Amendment to Exclusive Channel Partner Agreement, or the ECP Amendment, amending their existing Exclusive Channel Partner Agreement, effective January 6, 2011 and as amended to date, which the Company refers to as the Existing ECP Agreement, and an Amendment to Exclusive Channel Collaboration Agreement, or the ECC Amendment, amending their existing Exclusive Channel Collaboration Agreement, effective September 28, 2015, which the Company refers to as the Existing GvHD Agreement. The Existing ECP Agreement and ECP Amendment govern the “channel partnering” arrangement in which the Company uses Intrexon’s technology to research, develop and commercialize products in which DNA is administered to humans for expression of anti-cancer effectors for the purpose of treatment or prophylaxis of cancer, which the Company collectively refers to as the Cancer Program. The Existing GvHD Agreement and the ECC Amendment govern the collaboration between the Company and Intrexon for the research, development and commercialization of products for use in the treatment or prevention of graft-versus-host disease, or GvHD.

The ECP Amendment reduces the royalty percentage that the Company will pay Intrexon on a quarterly basis from 50% to 20% of net profits derived in that quarter from the sale of products developed under the Cancer Program, referred to as ZIOPHARM Products, calculated on a ZIOPHARM Product-by-ZIOPHARM Product basis, subject to certain expense allocations and other offsets provided in the Existing ECP Agreement. The ECC Amendment reduces the royalty percentage that the Company will pay Intrexon on a quarterly basis from 50% to 20% of net profits derived in that quarter from the sale of products developed under the GvHD collaboration program, subject to certain expense allocations and other offsets provided in the existing Exclusive Channel Collaboration Agreement.

In consideration for the execution and delivery of the ECP Amendment and the ECC Amendment, collectively referred to as the Amendments, the Company has agreed to issue to Intrexon certain shares of the Company’s preferred stock pursuant to the terms of a securities issuance agreement discussed further below.

*Preferred Shares Securities Issuance Agreement*

On June 29, 2016, the Company and Intrexon entered into a Securities Issuance Agreement, or the Preferred Shares Securities Issuance Agreement, pursuant to which the Company agreed to issue and sell 100,000 shares of its newly designated Series 1 Preferred Stock, or the Issued Shares, in consideration of the parties entering into the Amendments to amend the royalty percentage terms. The Issued Shares will be issued to Intrexon by the Company as of June 30, 2016.

The parties have agreed pursuant to the terms of the Preferred Shares Securities Issuance Agreement that the holders of common stock issued upon the conversion of the Issued Shares shall be entitled to piggy-back registration rights with respect to any common stock registered by the Company following such conversion.

The foregoing description of each of the ECP Amendment, the ECC Amendment and the Preferred Shares Securities Issuance Agreement is only a summary and 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 on Form 8-K, respectively, and are incorporated herein by reference. The benefits of the representations and warranties set forth in the Preferred Shares Securities Issuance Agreement are intended to be relied upon by the parties to such agreement only and, except as otherwise expressly provided therein, do not constitute continuing representations and warranties to any other party or for any other purpose.

**Item 3.02 Unregistered Sales of Equity Securities.**

The disclosure in Item 1.01 is incorporated herein by reference thereto. The offer and issuance of the Issued Shares will not be registered under the Securities Act of 1933, as amended, or the Securities Act, at the time of issuance, and therefore may not be offered or sold in the United States absent registration or an applicable exemption from registration requirements. The Company is relying on the exemption from federal registration under Section 4(a)(2) of the Securities Act and/or Rule 506 promulgated thereunder, based on the Company's belief that the offer and sale of the Issued 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 5.03 Amendments to Articles of Incorporation or Bylaws; Change in Fiscal Year.**

As disclosed under Items 1.01 and 3.02 above, in consideration of entering into the Amendments, the Company agreed to issue to Intrexon 100,000 shares of the Company's Series 1 Preferred Stock, a new class of preferred stock authorized by the Company's board of directors.

The rights, preferences, privileges, restrictions and other matters relating to the Series 1 Preferred Stock, referred to as the Preferred Shares, are set forth in a Certificate of Designation, Preferences and Rights of Series 1 Preferred Stock, or the Certificate of Designation, which the Company filed with the Secretary of State of the State of Delaware on June 29, 2016. The Certificate of Designation authorizes the Company to issue 250,000 of its 30,000,000 authorized shares of preferred stock as shares of Series 1 Preferred Stock.

Each Preferred Share has a stated value of \$1,200, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other recapitalization with respect to the Preferred Shares.

*Dividend Rights.* The holders of the Preferred Shares shall receive a monthly dividend, payable in additional Preferred Shares, equal to \$12.00 per Preferred Share held by such holder per month divided by the stated value of the Preferred Shares, which is referred to as the PIK Dividend, rounded down to the nearest whole share. For the holders of any shares of Preferred Shares that are not converted on the Conversion Event Date (as defined below), the rate of PIK Dividend on all remaining unconverted Preferred Shares shall automatically increase from \$12.00 to \$24.00 per Preferred Share per month.

*Conversion.* The Preferred Shares shall automatically convert into shares of the Company's common stock upon the date the first approval in the United States of (i) a ZIOPHARM Product, as defined in and developed under the Existing ECP Agreement, (ii) a Product, as defined in and developed under the Existing GvHD Agreement or (iii) a Product, as defined in and developed under the License and Collaboration Agreement dated March 27, 2015 and as amended from time to time, by and among Intrexon, ARES TRADING Trading, S.A. and the Company, is publicly announced. The public announcement of such an approval is referred to as the Conversion Event Date. On the second business day following the Conversion Event Date, each Preferred Share shall convert into a number of shares of Common Stock equal to the stated value of such Preferred Share, divided by the volume weighted average closing price of the Company's Common Stock as reported by the Nasdaq Stock Market, LLC over the 20 trading days ending on the Conversion Event Date; however, the Company shall not effect any conversion of the Series 1 Preferred Stock into shares of common stock in excess of the Conversion Limitation (defined below) without stockholder approval. The Conversion Limitation is defined as 19.9% of the lesser of (i) the pre-transaction outstanding shares of the Company's common stock or (ii) the outstanding shares of the Company's common stock at the time of conversion.

*Voting Rights.* The holders of the Series 1 Preferred Stock do not have any voting rights except that the Company may not, without the consent of the holders of a majority of the outstanding shares of the Series 1 Preferred Stock, voting as a separate class, (i) amend, alter or repeal any provision of the Company's Certificate of Incorporation in a manner that adversely affects the powers, preferences or rights of the Series 1 Preferred Stock in a manner that is more adverse than the effect on any other class or series of the Company's capital stock; (ii) (A) create, or authorize the creation of, or issue or obligate itself to issue shares of, any additional class or series of the Company's capital stock unless the same ranks junior or *pari*

*passu* to the Series 1 Preferred Stock with respect to the distribution of assets on the liquidation, dissolution or winding up of the Company, the payment of dividends and rights of redemption, or (B) reclassify, alter or amend any existing security of the Company that is junior or *pari passu* to the Series 1 Preferred Stock with respect to the distribution of assets on the liquidation, dissolution or winding up of the Company, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to the Series 1 Preferred in respect of any such right, preference or privilege; or (iii) enter into any transaction (or series of related transactions) the effect of which would adversely affect the holders of the Series 1 Preferred Stock in a manner that is more adverse than the effect on any other class or series of the Company's capital stock.

**Liquidation Rights.** In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Company or a "Deemed Liquidation Event," as defined in the Certificate of Designation (which includes a change of control or the sale, lease transfer or exclusive license of all or substantially all of the Company's assets), the holders of the Preferred Shares shall be entitled to receive a portion of all funds to be distributed in proportion to the holders' proportionate share of the Company's common stock (on an as-converted to common stock basis). The portion of the funds payable to each Preferred Share is referred to as the Series 1 Liquidation Amount. For purposes of calculating the Series 1 Liquidation Amount, if such voluntary or involuntary liquidation, dissolution or winding up of the Company or Deemed Liquidation Event occurs prior to the Conversion Event Date, then each Preferred Share shall be deemed to be convertible into the number of shares of the Company's common stock equal to (i) the stated value of such Preferred Share, divided by (ii) the volume weighted average price of the Company's common stock for the 20-day period ending on the date of the public announcement of such voluntary or involuntary liquidation, dissolution or winding up of the Company or Deemed Liquidation Event, rounded down to the nearest whole share. In addition, the Company may elect to redeem the Preferred Shares in connection with or following a Deemed Liquidation Event at a price per share equal to the Series 1 Liquidation Amount.

The foregoing description of the Certificate of Designation is only a summary and is qualified in its entirety by reference to the Certificate of Designation, which is filed as Exhibit 3.1 to this Current Report on Form 8-K and is incorporated herein by reference.

**Item 7.01 Regulation FD Disclosure.**

On June 30, 2016, the Company, together with Intrexon, issued a press release announcing the transactions described above. A copy of the press release is furnished as Exhibit 99.1 to this Current Report on Form 8-K and is incorporated herein by reference.

**Item 9.01 Financial Statements and Exhibits.**

(d) Exhibits

- 3.1 Certificate of Designation, Preferences and Rights of Series 1 Preferred Stock
- 10.1 Third Amendment to Exclusive Channel Partner Agreement by and between ZIOPHARM Oncology, Inc. and Intrexon Corporation dated as of June 29, 2016
- 10.2 Amendment to Exclusive Channel Collaboration Agreement by and between ZIOPHARM Oncology, Inc. and Intrexon Corporation dated as of June 29, 2016
- 10.3 Securities Issuance Agreement by and between ZIOPHARM Oncology, Inc. and Intrexon Corporation dated as of June 29, 2016
- 99.1 Press release of ZIOPHARM Oncology, Inc. and Intrexon Corporation dated June 30, 2016

**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/ Kevin G. Lafond

Name: Kevin G. Lafond

Title: Vice President, Chief Accounting Officer and Treasurer

Date: June 30, 2016

**INDEX OF EXHIBITS**

<b><u>Exhibit No.</u></b>	<b><u>Description</u></b>
3.1	Certificate of Designation, Preferences and Rights of Series 1 Preferred Stock
10.1	Third Amendment to Exclusive Channel Partner Agreement by and between ZIOPHARM Oncology, Inc. and Intrexon Corporation dated as of June 29, 2016
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## ZIOPHARM ONCOLOGY, INC.

CERTIFICATE OF DESIGNATION, PREFERENCES AND RIGHTS  
OF THE SERIES 1 PREFERRED STOCK

Pursuant to Section 151(g) of the General Corporation Law of the State of Delaware (the “*DGCL*”) and Article 4 of the Corporation’s Amended and Restated Certificate of Incorporation (the “*Certificate of Incorporation*”):

I, Caesar J. Belbel, Chief Operating Officer, Executive Vice President and Chief Legal Officer of ZIOPHARM Oncology, Inc. (the “*Corporation*”), organized and existing under the General Corporation Law of the State of Delaware, in accordance with the provisions of Section 103 thereof, DO HEREBY CERTIFY:

That pursuant to the authority conferred upon the Board of Directors of the Corporation (the “*Board*”) by Article 4 of the Certificate of Incorporation, the Board on June 28, 2016 adopted the following resolution creating a series of 250,000 shares of Preferred Stock designated as “Series 1 Preferred Stock”:

“**RESOLVED**, that pursuant to the authority vested in the Board in accordance with the provisions of Article 4 of the Certificate of Incorporation, a series of Preferred Stock of the Corporation be, and it hereby is, created, and that the designation and amount thereof and the voting powers, preferences and relative, participating, optional and other special rights of the shares of each such series, and the qualifications, limitations or restrictions thereof are as follows:

**A.** 250,000 of the authorized shares of the Corporation’s preferred stock, par value \$0.001 per share (the “*Preferred Stock*”) are hereby designated “Series 1 Preferred Stock” (the “*Series 1 Preferred*”). Each share of Series 1 Preferred shall have a stated value equal to \$1,200 (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other recapitalization with respect to the Series 1 Preferred) (the “*Stated Value*”).

**B.** The rights, preferences, privileges, restrictions and other matters relating to the Series 1 Preferred are as follows:

**1. DIVIDEND RIGHTS.**

**a.** From and after the date of the issuance of any shares of Series 1 Preferred, dividends at the rate per month of the Series 1 Dividend Rate (as defined below) shall accrue on such shares of Series 1 Preferred (the “*Series 1 PIK Dividends*”). The Series 1 PIK Dividends shall accrue on each share of Series 1 Preferred from day to day and shall be paid monthly in the form of a number of additional shares of Series 1 Preferred equal to the cash value of the Series 1 PIK Dividend on such share that accrued during the preceding month, divided by the Stated Value of such share of Series 1 Preferred, within 10 days following the end of the preceding calendar month. The payment of the Series 1 PIK Dividend each calendar month shall be mandatory for so long as the Corporation has funds legally available therefor. The “*Series 1 Dividend Rate*” for each share of Series 1 Preferred shall equal: (i) in the event

that such share is not Unconverted Series 1 Preferred (as defined below), (A) \$12.00 per month (subject to appropriate adjustment in the event of any stock dividend, stock split, combination, adjustment in the Stated Value or other recapitalization with respect to the Series 1 Preferred) or (ii) in the event that such share is Unconverted Series 1 Preferred, (A) \$24.00 per month (subject to appropriate adjustment in the event of any stock dividend, stock split, combination, adjustment in the Stated Value or other recapitalization with respect to the Series 1 Preferred). For the avoidance of doubt, Series 1 PIK Dividends shall be paid only in the form of shares of Series 1 Preferred and not in the form of cash. No fractional shares of Series 1 Preferred shall be issued as a Series 1 PIK Dividend. Whether or not fractional shares would be issuable as Series 1 PIK Dividends shall be determined on the basis of the total number of shares of Series 1 Preferred to be issued as a Series 1 PIK Dividend to any single holder of Series 1 Preferred based on the total shares of Series 1 Preferred held by such holder immediately prior to the payment of such Series 1 PIK Dividend. Any fractional shares not paid pursuant to this Section 1(a) shall be forfeited.

**2. VOTING RIGHTS.** The holders of Series 1 Preferred have no voting power whatsoever, other than as set forth in Section 2(a) below.

**a.** At any time when shares of Series 1 Preferred are outstanding, the Corporation shall not, either directly or indirectly by amendment, merger, consolidation or otherwise, do any of the following without (in addition to any other vote required by law or the Certificate of Incorporation) the written consent or affirmative vote of the holders of at least a majority of the then outstanding shares of Series 1 Preferred (the "**Requisite Holders**"), given in writing or by vote at a meeting, consenting or voting (as the case may be) separately as a class, and any such act or transaction entered into without such consent or vote shall be null and void *ab initio*, and of no force or effect:

**(i)** amend, alter or repeal any provision of the Certificate of Incorporation in a manner that adversely affects the powers, preferences or rights of the Series 1 Preferred in a manner that is more adverse than the effect on any other class or series of the Corporation's capital stock;

**(ii)** (A) create, or authorize the creation of, or issue or obligate itself to issue shares of, any additional class or series of capital stock unless the same ranks junior or *pari passu* to the Series 1 Preferred with respect to the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends and rights of redemption, or (B) reclassify, alter or amend any existing security of the Corporation that is junior or *pari passu* to the Series 1 Preferred with respect to the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to the Series 1 Preferred in respect of any such right, preference or privilege; or

**(iii)** enter into any transaction (or series of related transactions) the effect of which would adversely affect the holders of the Series 1 Preferred in a manner that is more adverse than the effect on any other class or series of the Corporation's capital stock; *provided; however*, that any issuances of the Corporation's capital stock in connection with any transaction (or series of related transactions) would not require approval of the Requisite Holders, unless the special rights, preferences, privileges and obligations of the Series 1 Preferred are adversely affected.



### 3. CONVERSION OF SERIES 1 PREFERRED SHARES INTO COMMON STOCK.

a. Subject to Section 3(f), upon the close of business on the second (2<sup>nd</sup>) business day following the Conversion Event Date (as defined below) (the “**Mandatory Conversion Time**”), each outstanding share of Series 1 Preferred shall automatically be converted into shares of Common Stock, without the payment of additional consideration by the holder thereof, into such number of fully paid and non-assessable shares of Common Stock as is determined by dividing the Stated Value of such share of Series 1 Preferred by the Series 1 Conversion Price (as defined below). The “**Series 1 Conversion Price**” shall be equal to the volume weighted average closing price of the Corporation’s Common Stock as reported by the Nasdaq Stock Market, LLC over the 20 trading days ending on the Conversion Event Date. The “**Conversion Event Date**” shall be the date that the first approval in the United States of (i) a ZIOPHARM Product, as defined in and developed under the Exclusive Channel Partner Agreement dated as of January 6, 2011 and as amended from time to time, by and between the Corporation and Intrexon Corporation, or (ii) a Product, as defined in and developed under the Exclusive Channel Collaboration Agreement dated September 28, 2015 and as amended from time to time, by and between the Corporation and Intrexon Corporation, or (iii) a Product, as defined in and developed under the License and Collaboration Agreement dated March 27, 2015 and as amended from time to time, by and among Intrexon Corporation, ARES TRADING Trading, S.A. and the Corporation, is publicly announced.

b. No fractional shares of Common Stock shall be issued upon conversion of the Series 1 Preferred. In lieu of any fractional shares to which the holder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the fair market value of a share of Common Stock as determined in good faith by the Board. Whether or not fractional shares would be issuable upon such conversion shall be determined on the basis of the total number of shares of Series 1 Preferred the holder is at the time converting into Common Stock and the aggregate number of shares of Common Stock issuable upon such conversion.

c. All holders of record of shares of Series 1 Preferred shall be sent written notice of the Mandatory Conversion Time and the place designated for mandatory conversion of all such shares of Series 1 Preferred pursuant to this Section 3. Such notice need not be sent in advance of the occurrence of the Mandatory Conversion Time. Upon receipt of such notice, each holder of shares of Series 1 Preferred in certificated form shall surrender his, her or its certificate or certificates for all such shares (or, if such holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation at the place designated in such notice. If so required by the Corporation, any certificates surrendered for conversion shall be endorsed or accompanied by written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or by his, her or its attorney duly authorized in writing. All rights with respect to the Series 1 Preferred converted pursuant to Section 3(a), including the rights, if any, to receive the Series 1 PIK Dividends, notices and vote (other than as a holder of Common Stock),

will terminate at the Mandatory Conversion Time (notwithstanding the failure of the holder or holders thereof to surrender any certificates at or prior to such time), except only the rights of the holders thereof, upon surrender of any certificate or certificates of such holders (or lost certificate affidavit and agreement) therefor, to receive the items provided for in the next sentence of this Section 3(c) (though for the avoidance of doubt this sentence shall not apply to Unconverted Series 1 Preferred unless and until such Unconverted Series 1 Preferred is converted). As soon as practicable after the Mandatory Conversion Time and, if applicable, the surrender of any certificate or certificates (or lost certificate affidavit and agreement) for Series 1 Preferred, the Corporation shall (i) deliver, or cause to be delivered, to the converting holder a certificate or book-entry statement representing the number of full shares of Common Stock issuable on such conversion in accordance with the provisions hereof and (ii) pay cash as provided in Section 3(b) in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion. Such converted Series 1 Preferred shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Series 1 Preferred accordingly.

d. The Corporation shall at all times when the Series 1 Preferred shall be outstanding, reserve and keep available out of its authorized but unissued capital stock, for the purpose of effecting the conversion of the Series 1 Preferred, such number of its duly authorized shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding Series 1 Preferred; and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Series 1 Preferred, the Corporation shall take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in commercially reasonable efforts to obtain the requisite stockholder approval of any necessary amendment to the Certificate of Incorporation.

e. The Corporation shall pay any and all issue and other similar taxes that may be payable in respect of any issuance or delivery of shares of Common Stock upon conversion of shares of Series 1 Preferred pursuant to this Section 3. The Corporation shall not, however, be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of shares of Common Stock in a name other than that in which the shares of Series 1 Preferred so converted were registered, and no such issuance or delivery shall be made unless and until the person or entity requesting such issuance has paid to the Corporation the amount of any such tax or has established, to the satisfaction of the Corporation, that such tax has been paid.

f. The Corporation shall not effect any conversion of the Series 1 Preferred into Common Stock pursuant to Section 3(a) to the extent that the number of shares of Common Stock issued in such conversion would represent a number of shares in excess of the Conversion Limitation (as defined below), unless prior to such conversion, stockholder approval for such issuances have been obtained in accordance with and to the extent required by the NASDAQ Stock Market Listing Rules (such approval, the "**Conversion Approval**"). In the event that the limitation provided in the preceding sentence applies, then on the Mandatory Conversion Date, the Corporation shall convert the maximum number of shares of Series 1 Preferred into

Common Stock as is possible without exceeding the Conversion Limitation. Any shares of Series 1 Preferred that are not converted on the Mandatory Conversion Date (such shares of Series 1 Preferred remaining outstanding after the Mandatory Conversion Time are referred to as “**Unconverted Series 1 Preferred**”) shall remain outstanding until the Conversion Approval is obtained, at which point all Unconverted Series 1 Preferred shall be converted into Common Stock at the Series 1 Conversion Price as provided in this Section 3. The “**Conversion Limitation**” shall be 19.9% of the lesser of (i) the number of outstanding shares of the Corporation’s Common Stock immediately prior to the closing of the transactions contemplated by that certain Share Issuance Agreement by and between the Corporation and Intrexon corporation dated on or about the date hereof or (ii) the number of outstanding shares of Corporation’s Common Stock at the time of conversion. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 3(f) to correct this paragraph (or any portion hereof) which may be defective or inconsistent with the intended Conversion Limitation contained herein or to make changes or supplements necessary or desirable to properly give effect to such limitation.

#### 4. LIQUIDATION.

a. Each of the following events shall be considered a “**Deemed Liquidation Event**”:

(i) a merger or consolidation in which (A) the Corporation is a constituent party or (B) a subsidiary of the Corporation is a constituent party and the Corporation issues shares of its capital stock pursuant to such merger or consolidation, except any such merger or consolidation involving the Corporation or a subsidiary in which the shares of capital stock of the Corporation outstanding immediately prior to such merger or consolidation continue to represent, or are converted into or exchanged for shares of capital stock that represent, immediately following such merger or consolidation, at least a majority, by voting power, of the capital stock of (1) the surviving or resulting entity; or (2) if the surviving or resulting entity is a wholly owned subsidiary of another entity immediately following such merger or consolidation, the parent entity of such surviving or resulting entity; or

(ii) the sale, lease, transfer, exclusive license or other disposition, in a single transaction or series of related transactions, by the Corporation or any subsidiary of the Corporation of all or substantially all the assets of the Corporation and its subsidiaries taken as a whole, or the sale or disposition (whether by merger, consolidation or otherwise) of one or more subsidiaries of the Corporation if substantially all of the assets of the Corporation and its subsidiaries taken as a whole are held by such subsidiary or subsidiaries, except where such sale, lease, transfer, exclusive license or other disposition is to a wholly owned subsidiary of the Corporation; or

(iii) the closing of the transfer of this Corporation’s capital stock (whether by merger, consolidation or otherwise), in one transaction or a series of related transactions, to a person or group of affiliated persons (other than an underwriter of this Corporation’s securities), if, after such closing, such person or group of affiliated persons would hold at least a majority, by voting power, of the capital stock of (1) the surviving or resulting entity; or (2) if the surviving or resulting entity is a wholly owned subsidiary of another entity immediately following such merger or consolidation, the parent entity of such surviving or resulting entity.

b. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, the assets of the Corporation available for distribution to its stockholders shall be distributed among the holders of the shares of Series 1 Preferred and Common Stock, pro rata based on the number of shares held by each such holder, treating for this purpose all shares of Series 1 Preferred as if they had been converted into such number of fully paid and non-assessable shares of Common Stock as is determined by dividing the Stated Value of such share of Series 1 Preferred by the Series 1 Liquidation Assumed Conversion Price (as defined below), rounded down to the nearest whole share. The amount per share payable to the Series 1 Preferred pursuant to the preceding sentence is referred to as the “**Series 1 Liquidation Amount.**” The “**Series 1 Liquidation Assumed Conversion Price**” shall be equal to either (i) if such shares of Series 1 Preferred are not Unconverted Series 1 Preferred, the volume weighted average closing price of the Corporation’s Common Stock as reported by the Nasdaq Stock Market, LLC over the 20 trading days ending on the public announcement of such voluntary or involuntary liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event or (ii) if such shares of Series 1 Preferred are Unconverted Series 1 Preferred, the Series 1 Conversion Price.

c. In connection with or following a Deemed Liquidation Event, the Corporation may, in lieu of distributing the proceeds of such Deemed Liquidation Event pro rata among the holders of Series 1 Preferred and Common Stock as contemplated by Section 4(b), elect to redeem all, but not less than all of the Series 1 Preferred then outstanding at a price per share of Series 1 Preferred equal to the Series 1 Liquidation Amount. A redemption of the Series 1 Preferred pursuant to this Section 4(c) shall occur upon the closing of such Deemed Liquidation Event or on such other date determined by the Corporation during the period commencing on the date of the closing of such Deemed Liquidation Event and ending on the 20<sup>th</sup> day following such Deemed Liquidation Event (such date, the “**Redemption Date**”) and shall be effected in accordance with Subsections 4(c)(i) through 4(c)(iii):

(i) The Corporation shall send written notice of the redemption (the “**Redemption Notice**”) to each holder of record of Series 1 Preferred not less than 5 days prior to the Redemption Date. Each Redemption Notice shall state: (A) the number of shares of Series 1 Preferred held by such holder that the Corporation shall redeem on the Redemption Date specified in the Redemption Notice; (B) the Redemption Date and the Series 1 Liquidation Amount payable for such holder’s shares of Series 1 Preferred; and (C) that the holder is to surrender to the Corporation, in the manner and at the place designated in the Redemption Notice, his, her or its certificate or certificates, if any, representing the shares of Series 1 Preferred to be redeemed.

(ii) On or before the Redemption Date, each holder of shares of Series 1 Preferred to be redeemed on the Redemption Date shall surrender the certificate or certificates, if any, representing such shares (or, if such registered holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to

the Corporation, in the manner and at the place designated in the Redemption Notice, and thereupon the Series 1 Liquidation Amount, for such shares shall be payable to the order of the person whose name appears on such certificate or certificates as the owner thereof.

(iii) If the Redemption Notice shall have been duly given, and if on the Redemption Date the Series 1 Liquidation Amount, payable upon redemption of the shares of Series 1 Preferred to be redeemed on the Redemption Date is paid or tendered for payment or deposited with an independent payment agent so as to be available therefor in a timely manner, then notwithstanding that the certificates, if any, evidencing any of the shares of Series 1 Preferred so called for redemption shall not have been surrendered, all rights with respect to such shares of Series 1 Preferred shall forthwith after the Redemption Date terminate, except only the right of the holders to receive the Series 1 Liquidation Amount, without interest, upon surrender of their certificate or certificates therefor.

**5. REDEEMED OR OTHERWISE ACQUIRED SHARES.** Any shares of Series 1 Preferred that are redeemed or otherwise acquired by the Corporation or any of its subsidiaries shall be automatically and immediately cancelled and retired and shall not be reissued, sold or transferred. Neither the Corporation nor any of its subsidiaries may exercise any voting or other rights granted to the holders of Series 1 Preferred following redemption.

**6. WAIVER.** Any of the rights, powers, preferences and other terms of the Series 1 Preferred set forth herein may be waived on behalf of all holders of Series 1 Preferred by the affirmative written consent or vote of the Requisite Holders.

**7. NEXT BUSINESS DAY.** Whenever any payment or other obligation hereunder shall be due on a day other than a business day, such payment shall be made on the next succeeding business day.

**IN WITNESS WHEREOF**, ZIOPHARM Oncology, Inc. has caused this Certificate of Designation, Preferences and Rights of the Terms of the Series 1 Preferred Stock to be executed by its Chief Operating Officer, Executive Vice President and Chief Legal Officer this 29<sup>th</sup> day of June, 2016.

/s/ Caesar J. Belbel

Caesar J. Belbel  
Chief Operating Officer, Executive Vice President and Chief  
Legal Officer

**ZIOPHARM ONCOLOGY, INC.**  
**SIGNATURE PAGE TO CERTIFICATE OF DESIGNATION**

## THIRD AMENDMENT TO EXCLUSIVE CHANNEL PARTNER AGREEMENT

This **THIRD AMENDMENT TO THE EXCLUSIVE CHANNEL PARTNER AGREEMENT** (the “**Third Amendment**”) is effective as of June 29, 2016 (the “**Third Amendment Effective Date**”) by and between **INTREXON CORPORATION**, a Virginia corporation with offices at 20374 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, 19<sup>th</sup> Floor, New York, NY 10036 (“**ZIOPHARM**”). Intrexon and ZIOPHARM may be referred to herein individually as a “**Party**” and collectively as the “**Parties**.”

## RECITALS

**A. WHEREAS** Intrexon and ZIOPHARM are parties to that certain Exclusive Channel Partner Agreement, effective January 6, 2011 (the “**Agreement**”), pursuant to which Intrexon appointed ZIOPHARM as its exclusive channel collaborator for developing and commercializing certain products for the treatment or prophylaxis of cancer in humans;

**B. WHEREAS** Intrexon and ZIOPHARM have previously amended the Agreement by mutual written agreements executed by the Parties on September 13, 2011 (the “**First Amendment**”) and on March 27, 2015 (the “**Second Amendment**”), and the Parties now desire to further amend the Agreement; and

**C. WHEREAS**, the Parties now mutually desire to further amend the Agreement;

**D. NOW, THEREFORE**, the Parties agree to amend the terms of the Agreement (as previously amended) as provided below, effective as of the Third Amendment Effective Date.

**1. GENERALLY**

**1.1** Capitalized terms present within this Third Amendment that are not proper names or titles, that are nor conventionally capitalized, or that are not otherwise defined within this Third Amendment shall have the meaning set forth in the Agreement (as previously amended).

**1.2** The Parties, in conjunction with and contemporaneously with this Third Amendment, have entered into Preferred Stock Purchase Agreement of even date herewith (the “**Preferred Stock Agreement**”).

**2. AMENDMENT TO THE AGREEMENT**

**2.1 Profit Sharing on ZIOPHARM Sales.** All references to “fifty percent (50%)” in Section 5.2(a) of the Agreement are hereby amended to now read “twenty percent (20%)”. For clarity, neither Section 5.2(b) of the Agreement nor Section 4.1 of the Second Amendment is amended under this Third Amendment.

**3. CLARIFICATION OF THE SECOND AMENDMENT**

**3.1 Equity Purchase Commitment.** It is hereby clarified and agreed that Section 6.1 of the Second Amendment (and the revised equity purchase obligation of Intrexon effected thereby) shall survive termination and/or expiration of the Merck Agreement and/or the Second Amendment.

**4. COMPENSATION**

**4.1 Payments from ZIOPHARM.** In partial consideration for the amendments agreed to herein by Intrexon, ZIOPHARM shall issue to Intrexon certain shares of ZIOPHARM preferred stock in accordance with the terms and conditions of the Preferred Stock Agreement. Provided that all closing conditions for delivery of stock under the Preferred Stock Agreement that are within the reasonable control of Intrexon have been satisfied or waived, the issuance of all shares under the Preferred Stock Agreement in satisfaction of this Section 4.1 is a condition subsequent to the effectiveness of this Third Amendment.

**5. MISCELLANEOUS**

**5.1 Full Force and Effect.** This Third Amendment amends the terms of the Agreement (as previously amended by the First Amendment and Second Amendment) and is deemed incorporated into the Agreement. The provisions of the Agreement as amended remain in full force and effect.

**5.2 Entire Agreement.** The Agreement, together with the Preferred Stock Agreement, the First Amendment, the Second Amendment, and this Third Amendment, constitute the entire agreement, both written and oral, between the Parties with respect to the subject matter hereof, and any and all prior agreements with respect to the subject matter hereof, either written or oral, expressed or implied, are superseded hereby, merged and canceled, and are null and void and of no effect.

**5.3 Counterparts.** This Third Amendment may be executed in one or more counterparts, each of which will be an original and all of which together will constitute one instrument.



**IN WITNESS WHEREOF**, Intrexon and ZIOPHARM have executed this Third Amendment by their respective duly authorized representatives as of the Third Amendment Effective Date.

**INTREXON CORPORATION**

**ZIOPHARM ONCOLOGY, INC.**

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

By: /s/ Laurence J. N. Cooper, M.D., Ph.D.  
Name: Laurence J. N. Cooper, M.D., Ph.D.  
Title: Chief Executive Officer

**Signature Page to Third Amendment to Exclusive Channel Partner Agreement**

## AMENDMENT TO EXCLUSIVE CHANNEL COLLABORATION AGREEMENT

This AMENDMENT TO THE EXCLUSIVE CHANNEL COLLABORATION AGREEMENT (the “*Amendment*”) is effective as of June 29, 2016 (the “*Amendment Effective Date*”) by and between INTREXON CORPORATION, a Virginia corporation with offices at 20374 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, 19<sup>th</sup> Floor, New York, NY 10036 (“*ZIOPHARM*”). Intrexon and ZIOPHARM may be referred to herein individually as a “*Party*” and collectively as the “*Parties*.”

## RECITALS

**A. WHEREAS** Intrexon and ZIOPHARM are parties to that certain Exclusive Channel Collaboration Agreement, effective September 28, 2015 (the “*Agreement*”), pursuant to which Intrexon appointed ZIOPHARM as its exclusive channel collaborator for developing and commercializing certain products for the prevention or treatment Graft vs Host Disease in humans; and

**B. WHEREAS** the Parties now mutually desire to amend the Agreement;

**D. NOW, THEREFORE**, the Parties agree to amend the terms of the Agreement as provided below, effective as of the Amendment Effective Date.

**1. GENERALLY**

**1.1** Capitalized terms present within this Amendment that are not proper names or titles, that are nor conventionally capitalized, or that are not otherwise defined within this Amendment shall have the meaning set forth in the Agreement (as previously amended).

**1.2** The Parties, in conjunction with and contemporaneously with this Amendment, have entered into Preferred Stock Purchase Agreement of even date herewith (the “*Preferred Stock Agreement*”).

**2. AMENDMENT TO THE AGREEMENT**

**2.1 Profit Sharing on ZIOPHARM Sales.** All references to “fifty percent (50%)” in Section 5.2(a) of the Agreement are hereby amended to now read “twenty percent (20%)”. For clarity, Section 5.2(b) of the Agreement is not amended under this Amendment.

**3. COMPENSATION**

**3.1 Payments from ZIOPHARM.** In partial consideration for the amendments agreed to herein by Intrexon, ZIOPHARM shall issue to Intrexon certain shares of ZIOPHARM preferred stock in accordance with the terms and conditions of the Preferred Stock Agreement. Provided that all closing conditions for delivery of stock under the Preferred Stock Agreement that are within the reasonable control of Intrexon have been satisfied or waived, the issuance of all shares under the Preferred Stock Agreement in satisfaction of this Section 3.1 is a condition subsequent to the effectiveness of this Amendment.

**4. MISCELLANEOUS**

**4.1 Full Force and Effect.** This Amendment amends the terms of the Agreement and is deemed incorporated into the Agreement. The provisions of the Agreement as amended remain in full force and effect.

**4.2 Entire Agreement.** The Agreement, together with the Preferred Stock Agreement, constitute the entire agreement, both written and oral, between the Parties with respect to the subject matter hereof, and any and all prior agreements with respect to the subject matter hereof, either written or oral, expressed or implied, are superseded hereby, merged and canceled, and are null and void and of no effect.

**4.3 Counterparts.** This Amendment may be executed in one or more counterparts, each of which will be an original and all of which together will constitute one instrument.

**IN WITNESS WHEREOF**, Intrexon and ZIOPHARM have executed this Amendment by their respective duly authorized representatives as of the Amendment Effective Date.

**INTREXON CORPORATION**

**ZIOPHARM ONCOLOGY, INC.**

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

By: /s/ Laurence J. N. Cooper, M.D., Ph.D.  
Name: Laurence J. N. Cooper, M.D., Ph.D.  
Title: Chief Executive Officer

**Signature Page to Amendment to Exclusive Channel Collaboration Agreement**

## SECURITIES ISSUANCE AGREEMENT

**THIS SECURITIES ISSUANCE AGREEMENT** (the “**Agreement**”), dated as of June 29, 2016, by and among ZIOPHARM Oncology, Inc., a Delaware corporation (the “**Issuer**”), and Intrexon Corporation, a Virginia corporation (“**Intrexon**”). Capitalized terms used herein but not otherwise defined shall have the meanings given to them in Section 1.5. Intrexon and the Issuer may be referred to herein individually as a “**Party**” and collectively as the “**Parties**.”

## RECITALS

A. Concurrently with the execution of this Agreement, the Issuer and Intrexon are entering into the Third Amendment to the Exclusive Channel Partner Agreement and an Amendment to the Exclusive Channel Collaboration Agreement (collectively, the “**Amendments**”).

B. In consideration of entering into the Amendments, the Issuer has agreed to issue and sell to Intrexon certain shares of the Issuer’s convertible preferred stock.

C. The Issuer and Intrexon are executing and delivering this Agreement in reliance upon the exemption from registration afforded by Section 4(a)(2) of the Securities Act of 1933, as amended (the “**Securities Act**”), and Rule 506(b) of Regulation D (“**Regulation D**”) as promulgated by the United States Securities and Exchange Commission (the “**Commission**”) under the Securities Act.

## AGREEMENT

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

ARTICLE I  
PURCHASE AND SALE

1.1 Authorization of Sale of Preferred Shares. Subject to the terms and conditions of this Agreement, the Issuer shall issue to Intrexon One Hundred Thousand (100,000) shares of Series 1 Preferred Stock (the “**Preferred Shares**”).

1.2 Closing. Subject to the terms and conditions set forth in this Agreement, at the Closing, (a) the Issuer shall issue and sell to Intrexon, and Intrexon shall purchase from the Issuer, the Preferred Shares. The closing of the issuance of the Preferred Shares to Intrexon by the Issuer (the “**Closing**”) will occur, subject to the conditions set forth in Article V, on or before June 30, 2016 or on such other date as the Parties may agree upon (the “**Closing Date**”). The Closing shall take place at the offices of Cooley LLP, 500 Boylston Street, Boston, Massachusetts, 02116 or at such other place as the Parties may agree upon.

1.3 Closing Deliverables. Promptly following the Closing, the Issuer shall instruct its transfer agent to record in the name of Intrexon the Preferred Shares in book entry form (and, upon request, will deliver to Intrexon stock certificates registered in the name of Intrexon representing the Preferred Shares).

1.4 Compliance with Principal Market Rules. Notwithstanding anything in this Agreement to the contrary, the total number of shares of Common Stock that may be issued under this Agreement, shall be limited to 26,212,959 shares of Common Stock (the “**Issuance Cap**”), which equals 19.9% of the Issuer’s outstanding shares of Common Stock immediately prior to the date hereof, unless stockholder approval is obtained to issue more than the Issuance Cap. The Issuance Cap shall be appropriately adjusted for any stock dividend, stock split, reverse stock split or similar transaction. The Issuer and Intrexon acknowledge and agree that any issuance of Common Stock pursuant to this Agreement in excess of the Issuance Cap will require approval by the Issuer’s stockholders prior to such issuance. The Issuer intends to seek such requisite stockholder approval, if necessary.

1.5 Defined Terms Used in This Agreement. In addition to the terms defined elsewhere in this Agreement, the following terms have the meanings indicated:

“**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.

“**Common Stock**” means the Issuer’s common stock, par value \$0.001 per share.

“**Issuer Covered Person**” means, with respect to the Issuer as an “issuer” for purposes of Rule 506 promulgated under the Securities Act, any Person listed in the first paragraph of Rule 506(d)(1).

“**NASDAQ**” means The NASDAQ Stock Market, LLC.

“**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.

“**SEC**” means the U.S. Securities and Exchange Commission.

“**Series 1 Preferred Stock**” means the Issuer’s preferred stock, par value \$0.001 per share.

“**Trading Day**” means a NASDAQ trading day.

“**Transaction Documents**” means this Agreement, the Amendments, and the schedules and exhibits attached hereto and thereto.

**ARTICLE II**  
**REPRESENTATIONS AND WARRANTIES OF THE ISSUER**

Subject to and except as set forth in the SEC Documents (as defined below), which is arranged in sections corresponding to the sub-section numbered provisions contained below in this Section, the Issuer hereby represents and warrants to Intrexon as of the date hereof as follows:

2.1 Organization, Good Standing and Power. The Issuer 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 Issuer with 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 quarterly report on Form 10-Q. The Issuer does not have any subsidiaries. The Issuer 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 Issuer that is material and adverse to the Issuer, taken as a whole, and any condition, circumstance or situation that would prohibit the Issuer from entering into and performing any of its obligations hereunder.

2.2 Authorization; Enforcement. The Issuer has the requisite corporate power and authority to enter into and perform the Transaction Documents and to issue and sell the Preferred Shares to be issued by the Issuer in accordance with the terms hereof. The execution, delivery and performance of this Agreement by the Issuer 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 Issuer, its board of directors or stockholders is required other than as set forth in Sections 1.4 and 4.5. When executed and delivered by the Issuer, this Agreement shall constitute a valid and binding obligation of the Issuer enforceable against the Issuer 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 Issuer’s board of directors, at a meeting duly called and held, adopted resolutions approving the transactions contemplated hereby, including the issuance of the Preferred Shares to be issued by the Issuer pursuant to this Agreement.

2.3 Issuance of the Preferred Shares. The Preferred Shares to be issued and sold by the Issuer 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, the Preferred 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 Issuer (collectively, “**Encumbrances**”) and rights of refusal of any kind imposed by the Issuer (other than restrictions on transfer under applicable securities laws) and the holder of the Preferred Shares shall be entitled to all rights accorded to a holder of Common Stock.

2.4 No Conflicts; Governmental Approvals. The execution, delivery and performance of the Transaction Documents by the Issuer and the consummation by the Issuer of the transactions contemplated hereby do not and will not (i) violate any provision of the Issuer's certificate of incorporation or bylaws as currently in effect, (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 Issuer is a party or by which the Issuer'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 Issuer or by which any property or asset of the Issuer is bound or affected. The Issuer 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 Preferred Shares to be issued by the Issuer in accordance with the terms hereof (other than any filings, consents and approvals which may be required to be made by the Issuer under applicable state and federal securities laws, rules or regulations prior to or subsequent to the Closing).

2.5 Capitalization. The issued and outstanding shares of capital stock of the Issuer have been validly issued, are fully paid and nonassessable and are not subject to any preemptive rights, rights of first refusal or similar rights. The Issuer has an authorized, issued and outstanding capitalization as set forth in the Issuer's most recent annual report on Form 10-K or quarterly report on Form 10-Q (other than the grant of additional awards under the Issuer's equity incentive plans or changes in the number of outstanding shares of Common Stock due to the issuance of shares upon the exercise or conversion of securities exercisable for, or convertible or exchangeable into, shares of Common Stock outstanding). Except as disclosed in the Issuer's most recent annual report on Form 10-K or quarterly report on Form 10-Q, the Issuer does not have outstanding any options to purchase, or any rights or warrants to subscribe for, or any securities or obligations convertible into, or exchangeable for, or any contracts or commitments to issue or sell, any shares of capital stock or other securities (other than the grant of additional awards under the Issuer's equity incentive plans).

2.6 SEC Documents, Financial Statements. The Issuer represents and warrants that as of the date hereof, the Issuer Common Stock is registered pursuant to Section 12(b) of the Exchange Act. Since January 1, 2014, the Issuer 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 of the Issuer 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 of the Issuer 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 Issuer meets the “Registrant Requirements” for eligibility to use Form S-3 set forth in General Instruction I.A to Form S-3. As of their respective dates, the financial statements of the Issuer included in the SEC Documents complied in all material respects with applicable accounting requirements and the published rules and regulations of the Commission or other applicable rules and regulations with respect thereto. Such financial statements have been prepared in accordance with generally accepted accounting principles applied on a consistent basis during the periods involved (except (i) as may be otherwise indicated in such financial statements or the notes thereto or (ii) in the case of unaudited interim statements, to the extent they may not include footnotes or may be condensed or summary statements), and fairly present in all material respects the consolidated financial position of the Issuer 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).

2.7 Accountants. The Issuer represents and warrants that RSM US LLP, whose report on the financial statements of the Issuer is filed with the Commission in the Issuer’s Annual Report on Form 10-K for the year ended December 31, 2015, was, at the time such report was issued, an independent registered public accounting firm as required by 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 Issuer’s knowledge, RSM US LLP has not engaged in any non-audit services prohibited by subsection (g) of Section 10A of the Exchange Act on behalf of the Issuer.

2.8 Internal Controls. The Issuer 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.

2.9 Disclosure Controls. The Issuer 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 with respect to the Issuer that could significantly affect the Issuer’s internal controls, including any corrective actions with regard to significant deficiencies and material weaknesses. The Issuer is in compliance in all material respects with all provisions currently in effect and applicable to the Issuer of the Sarbanes-Oxley Act of 2002, and all rules and regulations promulgated thereunder or implementing the provisions thereof.

2.10 No Material Adverse Change. Except as disclosed in the SEC Documents, since December 31, 2014, the Issuer 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 Issuer’s business or (iii) declared, made or paid any dividend or distribution of any kind on its capital stock.

2.11 No Undisclosed Events or Circumstances. Except as disclosed in the SEC Documents, since December 31, 2014, except for the consummation of the transactions contemplated herein, to the Issuer's knowledge, no event or circumstance has occurred or exists with respect to the Issuer or its businesses, properties, prospects, operations or financial condition, which, under applicable law, rule or regulation, requires public disclosure or announcement by the Issuer but which has not been so publicly announced or disclosed.

2.12 Litigation. Except as disclosed in the SEC Documents, no action, suit, proceeding or investigation is currently pending or, to the knowledge of the Issuer, has been threatened in writing against the Issuer that: (i) concerns or questions the validity of this Agreement; (ii) concerns or questions the right or authority of the Issuer to enter into the Transaction Documents and to perform its obligations thereunder; or (iii) is reasonably likely to have a Material Adverse Effect. The Issuer 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 Issuer currently pending or that the Issuer intends to initiate that would have a Material Adverse Effect.

2.13 Compliance. The Issuer (i) is not in violation of any provision of the Issuer's certificate of incorporation or bylaws as currently in effect, (ii) is not 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 Issuer under), nor has the Issuer 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), (iii) is not in violation of any order of any court, arbitrator or governmental body, or (iv) is not or has not 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 (other than with respect to clause (i) above) for such defaults or violations as would not have a Material Adverse Effect.

2.14 Listing and Maintenance Requirements. The Issuer is in compliance with the requirements of NASDAQ for continued listing of the Common Stock thereon and the Issuer has not received any notification that, and has no knowledge that the NASDAQ is contemplating terminating such listing. The issuance and sale of the Preferred Shares hereunder does not contravene the rules and regulations of NASDAQ in any material respect.

2.15 Investment Company Act. The Issuer is not and, after giving effect to the offering and sale of the Preferred Shares, will not be an "investment company" or an entity "controlled" by an "investment company," as such terms are defined in the Investment Company Act of 1940.

2.16 Private Placement. Neither the Issuer 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 Preferred 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 Issuer of the Preferred 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 Preferred 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 Issuer are listed or designated, nor will the Issuer or any of its Affiliates take any action or steps that would require registration of any of the Preferred Shares under the Securities Act or cause the offering of the Preferred Shares to be integrated with other offerings. Assuming the accuracy of the representations and warranties of Intrexon, the offer and sale of the Preferred Shares to be issued by the Issuer to Intrexon pursuant to this Agreement will be exempt from the registration requirements of the Securities Act.

2.17 No Manipulation of Stock. The Issuer 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.

2.18 Brokers. Neither the Issuer nor any of the officers, directors or employees of the Issuer has employed any broker or finder in connection with the transaction contemplated by this Agreement.

2.19 OFAC. Neither the Issuer nor, to the Issuer's knowledge, any director, officer, agent, employee, Affiliate or person acting on behalf of the Issuer, is currently subject to any U.S. sanctions administered by the Office of Foreign Assets Control of the U.S. Treasury Department.

2.20 Reliance. The Issuer understands that the foregoing representations and warranties shall be deemed material and to have been relied upon by Intrexon.

### **ARTICLE III** **REPRESENTATIONS, WARRANTIES AND COVENANTS OF INTREXON**

Intrexon hereby represents, warrants and covenants to the Issuer as follows:

3.1 Authorization and Power. Intrexon has the requisite power and authority to enter into and perform the Transaction Documents and to purchase the Preferred 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, stockholders or other governing body 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.

3.2 No Conflict. The execution, delivery and performance of the Transaction Documents 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 this Agreement.

3.3 Purchaser Sophistication; Accredited Investor. 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 Preferred Shares, including investments in securities issued by the Issuer 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 Preferred Shares; (b) in connection with its decision to purchase the Preferred Shares, relied only upon the SEC Documents, other publicly available information, and the representations and warranties of the Issuer contained herein; (c) is an "accredited investor" pursuant to Rule 501 of Regulation D under the Securities Act; (d) is acquiring the Preferred Shares for its own account for investment only and with no present intention of distributing any of the Preferred Shares or any arrangement or understanding with any other persons regarding the distribution of the Preferred Shares; (e) has not been organized, reorganized or recapitalized specifically for the purpose of investing in the Preferred Shares; (f) 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 Preferred Shares except in compliance with the Securities Act and applicable state securities laws; (g) understands that the Preferred 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 Issuer 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 Preferred Shares; (h) understands that its investment in the Preferred 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 Issuer hereunder); and (i) 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 Preferred Shares.

3.4 Restricted Shares. Intrexon acknowledges that the Preferred Shares (and the shares of Common Stock into which the Preferred Shares are convertible) are restricted securities and must be held indefinitely unless subsequently registered under the Securities Act or the Issuer receives an opinion of counsel reasonably satisfactory to the Issuer that such registration is not required. Intrexon is aware of the provisions of Rule 144 promulgated under the Securities Act which provide a safe harbor for the limited resale of stock purchased in a private placement subject to the satisfaction of certain conditions (if applicable), including, among other things, the existence of a public market for the stock, the availability of certain current public information about the Issuer, the resale occurring after certain holding periods have been met, the sale being conducted 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 Issuer may not be satisfying the current public information requirement of Rule 144 at the time Intrexon wishes to sell the shares of Common Stock into which the Preferred Shares are convertible and, if so, Intrexon may be precluded from selling such shares under Rule 144 even if the required holding period has been satisfied.

3.5 Ownership of Capital Stock. As of the date hereof, excluding the Preferred Shares, Intrexon and its Affiliates beneficially own 9,717,403 shares of Common Stock.

3.6 Stock Legends. Intrexon acknowledges that certificates evidencing the Preferred 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.

3.7 No Legal, Tax or Investment Advice. Intrexon understands that nothing in this Agreement or any other materials presented by or on behalf of the Issuer to Intrexon in connection with the purchase of the Preferred Shares constitutes legal, tax or investment advice. Intrexon has consulted such legal, tax and investment advisors as it, in its sole discretion, has deemed necessary or appropriate in connection with its purchase of the Preferred Shares.

3.8 Brokers and Finders. No Person will have, as a result of the transactions contemplated by this Agreement, any valid right, interest or claim against or upon the Issuer or Intrexon for any commission, fee or other compensation pursuant to any agreement, arrangement or understanding entered into by or on behalf of Intrexon.

3.9 Regulation M. Intrexon is aware that the anti-manipulation rules of Regulation M under the Exchange Act may apply to sales of Common Stock and other activities with respect to Common Stock.

#### ARTICLE IV COVENANTS OF THE PARTIES

##### 4.1 Piggyback Rights.

(a) At any time after the conversion of the Preferred Shares and until the time such shares are able to be sold under Rule 144 without regard to the volume, notice, information and manner of sale provisions, if the Issuer proposes to file on its behalf and/or on behalf of any of its stockholders a Registration Statement under the Securities Act on any form for the registration of securities with respect to its Common Stock or any other class of equity security of the Issuer, the Issuer shall give written notice ("**Piggy-Back Notice**") to Intrexon as promptly as practicable, but in no event less than five (5) business days prior to the anticipated filing thereof, specifying (x) the approximate date on which the Issuer proposes to file such Registration Statement, (y) the estimated offering price of the securities and the intended method of distribution in connection therewith, and (z) advising Intrexon of its right, subject to the provisions of this Agreement, to have shares of Common Stock resulting from the conversion of the Preferred Shares then held included among the securities to be covered by such registration statement ("**Piggy-Back Rights**").

(b) Notwithstanding paragraph (a) above, if the lead managing underwriter(s) selected for an underwritten offering for which Piggy-Back Rights are requested shall advise that marketing or other factors require a limitation on the number of shares of securities which can be sold in such offering within a price range acceptable to the Issuer, then, (i) such underwriters shall provide written notice thereof to Intrexon and (ii) there shall be included in the offering, (A) first, the Common Stock proposed to be registered by the Issuer and (B) second, on a pro rata basis, the Common Stock required to be included in such registration statement by Intrexon and any other shares of Common Stock for the account of persons other than Intrexon required to be so registered.

4.2 Further Transfers. Intrexon covenants that the Preferred Shares (and the shares of Common Stock into which the Preferred Shares are convertible) will only be sold, offered for sale, pledged, loaned, or otherwise disposed of pursuant to an effective registration statement under, and in compliance with the requirements of, the Securities Act or pursuant to an available exemption from the registration requirements of the Securities Act, and in compliance with any applicable state securities laws. In connection with any transfer of Preferred Shares other than pursuant to an effective registration statement or Rule 144, the Issuer may require Intrexon to provide to the Issuer an opinion of counsel selected by Intrexon, the form and substance of which opinion shall be reasonably satisfactory to the Issuer, to the effect that such transfer does not require registration under the Securities Act.

4.3 Furnishing of Information. The Issuer shall, at all times prior to the earlier to occur of (x) the date of sale or other disposition by Intrexon of the shares of Common Stock issued upon conversion of the Preferred Shares or (y) the registration pursuant to Section 4.1 of the shares issued upon conversion of the Preferred Shares, 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 Issuer after the date hereof pursuant to the Exchange Act. If, during such period, the Issuer is not required to file reports pursuant to the Exchange Act, it shall use its commercially reasonable efforts to prepare and furnish to Intrexon and make publicly available in accordance with Rule 144(c) such information as is required for Intrexon to sell the Preferred Shares under Rule 144.

4.4 No Integration. The Issuer shall not, and shall use its commercially reasonable efforts to ensure that no Affiliate of the Issuer shall, sell, offer for sale or solicit offers to buy or otherwise negotiate in respect of any security (as defined in Section 2 of the Securities Act) that will be integrated with the offer or sale of the Preferred Shares pursuant to this Agreement in a manner that would require the registration under the Securities Act of the sale of the Preferred Shares to Intrexon, or that will be integrated with the offer or sale of the Preferred Shares pursuant to this Agreement for purposes of the rules and regulations of NASDAQ such that it would require stockholder approval prior to the closing of such other transaction unless stockholder approval is obtained before the closing of such subsequent transaction.

4.5 Stockholder Approval. In the event the Issuer determines that the Issuance Cap will be exceeded by the conversion of the Preferred Shares, then the Issuer shall (i) no later than its next annual meeting of stockholders after the date of such determination, hold a vote with respect to the issuance by the Issuer to Intrexon of an amount of Common Stock equal to the number of shares exceeding the Issuance Cap (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 applicable NASDAQ rules, effect such issuance. The obligations of this Section 4.5 shall continue until stockholder approval has been obtained with respect to the issuance of the shares exceeding the Issuance Cap and such issuance has occurred.

4.6 Information Rights. At any time while this Agreement is outstanding or Intrexon holds Preferred Shares acquired under this Agreement (or Common Stock issued upon the conversion thereof), if (and then for only so long as) the Issuer is either (i) not subject to SEC reporting obligations under Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934, as amended, or (ii) is not timely in filing the SEC Documents (after giving effect to extensions pursuant to Rule 12b-25(b)), then Intrexon shall be entitled to receive the information required to be included in the SEC Documents. The filing of the SEC Document with the SEC shall constitute valid delivery of such reports to Intrexon hereunder.

**ARTICLE V**  
**CONDITIONS TO CLOSING**

5.1 Conditions Precedent to the Obligations of Intrexon. The obligation of Intrexon to acquire the Preferred Shares at the Closing is subject to the satisfaction or waiver by Intrexon, at or before the Closing, of each of the following conditions:

(a) Representations and Warranties. The representations and warranties of the Issuer contained in Article II shall be true and correct in all respects as of the date of this Agreement and as of the Closing Date.

(b) Performance. The Issuer shall have performed and complied with all covenants, agreements, obligations and conditions contained in this Agreement that are required to be performed or complied with by the Issuer on or before the Closing.

(c) 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 that prohibits the consummation of any of the transactions contemplated by the Transaction Documents.

(d) Listing of Additional Shares. The Issuer shall have submitted a Listing of Additional Shares Notification with NASDAQ covering all of the shares of Common Stock into which the Preferred Shares are convertible.

(e) Amendments. The Issuer shall have executed and delivered the Amendments, and the Amendments shall be in full force and effect.

(f) Certificate of Designation. The Issuer shall have filed the Certificate of Designation, Preferences and Rights of the Series 1 Preferred Stock in the form of Exhibit A (the "**Certificate of Designation**") with the Secretary of State of Delaware on or prior to the Closing, which shall continue to be in full force and effect as of the Closing.

5.2 Conditions Precedent to the Obligations of the Issuer. The obligation of the Issuer to issue the Preferred Shares at the Closing is subject to the satisfaction or waiver by the Issuer, at or before the Closing, of each of the following conditions:

(a) Representations and Warranties. The representations and warranties of Intrexon contained in Article III shall be true and correct in all respects as of the Closing.

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

(c) 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 that prohibits the consummation of any of the transactions contemplated by the Transaction Documents



(d) **“Bad Actor” Certifications.** The Issuer and each Issuer Covered Person shall have provided to the Issuer a properly completed and executed questionnaire in the form of Exhibit B hereto prior to the date hereof and on or prior to the Closing Date no “bad actor” disqualifying event described in Rule 506(d)(1)(i)-(viii) of the Securities Act (a **“Disqualification Event”**) is applicable to the Issuer or, to the Issuer’s knowledge, the Issuer Covered Person, except for a Disqualification Event as to which Rule 506(d)(2)(ii–iv) or (d)(3), is applicable.

(e) **Amendment.** Intrexon shall have executed and delivered the Amendments, and the Amendments shall be in full force and effect.

## **ARTICLE VI MISCELLANEOUS**

6.1 **Survival of Warranties.** Unless otherwise set forth in this Agreement, the representations and warranties of the Issuer and Intrexon contained in or made pursuant to this Agreement (a) shall survive the execution and delivery of this Agreement and the Closing for a period of three (3) years after the Closing; *provided, however*, notwithstanding the foregoing, the representations and warranties of the Issuer set forth in Sections 2.1, 2.2 and 2.3 shall survive the execution and delivery of this Agreement and the Closing indefinitely; and (b) shall in no way be affected by any investigation or knowledge of the subject matter thereof made by or on behalf of Intrexon or the Issuer.

6.2 **No Finder’s Fees.** Each party represents that it neither is nor will be obligated for any finder’s fee or commission in connection with this transaction. The Issuer agrees to indemnify and to hold harmless Intrexon from any liability for any commission or compensation in the nature of a finder’s or broker’s fee arising out of this transaction (and the costs and expenses of defending against such liability or asserted liability) for which the Issuer or any of its officers, employees or representatives is responsible. Intrexon, severally, agrees to indemnify and hold harmless the Issuer from any liability for any commission or compensation in the nature of a finder’s or broker’s fee arising out of this transaction (and the costs and expenses of defending against such liability or asserted liability) for which Intrexon or any of its officers, employees or representatives is responsible.

6.3 **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.

6.4 **Entire Agreement.** The Transaction Documents, together with the Exhibits and Schedules thereto, contain the entire understanding of the Parties with respect to the subject matter hereof and supersede all prior agreements and understandings, oral or written, with respect to such matters, which the Parties acknowledge have been merged into such documents, exhibits and schedules.

6.5 **Notices.** Any and all notices or other communications or deliveries required or permitted to be provided hereunder shall be in writing and shall be deemed given and effective on the earliest of (a) the date of transmission, if such notice or communication is delivered via

facsimile or email at the facsimile number or email address specified in this Section prior to 4:00 p.m. (New York City time) on a Trading Day, (b) the next Trading Day after the date of transmission, if such notice or communication is delivered via facsimile or email at the facsimile number or email address specified in this Section on a day that is not a Trading Day or later than 4:00 p.m. (New York City time) on any Trading Day, (c) the Trading Day following the date of deposit with a nationally recognized overnight courier service, or (d) upon actual receipt by the party to whom such notice is required to be given. The addresses, facsimile numbers and email addresses for such notices and communications are those set forth below, or such other address or facsimile number as may be designated in writing hereafter, in the same manner, by any such Person:

If to the Issuer: ZIOPHARM Oncology, Inc.  
1 First Avenue  
Parris Building, #34  
Boston, MA 02129  
Attention: Chief Executive Officer  
Fax No.:

with copies (which copies shall not constitute notice to the Issuer) to: Cooley LLP  
500 Boylston Street  
Boston, MA 02116  
Attention: Marc Recht  
Fax No.:

If to Intrexon Intrexon Corporation  
20358 Seneca Meadows Parkway  
Germantown, MD 20876  
Attention: Legal Department  
Fax No.:

6.6 Amendments; Waivers. This Agreement and any term hereof may be amended, terminated or waived only with the written consent of the Issuer and Intrexon. No waiver 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 subsequent default or a waiver of any other provision, condition or requirement hereof, nor shall any delay or omission of either party to exercise any right hereunder in any manner impair the exercise of any such right.

6.7 Construction. 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. The language used in this Agreement will be deemed to be the language chosen by the Parties to express their mutual intent, and no rules of strict construction will be applied against any party.

6.8 Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the Parties and their successors and permitted assigns. The Issuer may not assign this Agreement or any rights or obligations hereunder without the prior written consent of Intrexon;

provided, however, that no such consent shall be required in connection with any assignment (i) occurring by operation of law in connection with any merger or consolidation to which the Issuer is a party, (ii) in connection with the acquisition of all or substantially all of the assets of the Issuer or (iii) any other similar business combination transaction involving the Issuer. Intrexon may assign its rights under this Agreement only to a Person to whom Intrexon assigns or transfers all Preferred Shares held by Intrexon; provided, that (i) following such transfer or assignment, the further disposition of the Preferred Shares by the transferee or assignee is restricted under the Securities Act and applicable state securities laws, (ii) as a condition of such transfer, such transferee agrees in writing to be bound by all of the terms and conditions of this Agreement as a party hereto and (iii) such transfer shall have been made in accordance with the applicable requirements of this Agreement and with all laws applicable thereto.

6.9 Persons Entitled to Benefit of Agreement. 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.

6.10 Governing Law. This Agreement will be governed by 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 conflict of law principles.

6.11 Counterparts; Execution. This Agreement may be executed in three (3) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, e.g., www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

6.12 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.

6.13 Waiver of Conflicts. Each party to this Agreement acknowledges that Cooley LLP (“**Cooley**”), outside general counsel to the Issuer, has in the past performed and is or may now or in the future represent Intrexon or its affiliates in matters unrelated to the transactions contemplated by the Transaction Documents and the Certificate of Designation (collectively, the “**Transactions**”). The applicable rules of professional conduct require that Cooley inform the parties hereunder of this representation and obtain their consent. Cooley has served as outside general counsel to the Issuer and has negotiated the terms of the Transactions solely on behalf of the Issuer. The Issuer and Intrexon hereby (a) acknowledge that they have had an opportunity to ask for and have obtained information relevant to such representation, including disclosure of the reasonably foreseeable adverse consequences of such representation; (b) acknowledge that with respect to the Transactions, Cooley has represented solely the Issuer, and not Intrexon or any stockholder, director or employee of the Issuer or Intrexon; and (c) gives its informed consent to Cooley’s representation of the Issuer in the Transactions.

[SIGNATURE PAGES TO FOLLOW]

**IN WITNESS WHEREOF**, the parties hereto have caused this Securities Issuance Agreement to be duly executed by their respective authorized signatories as of the date first indicated above.

**ZIOPHARM ONCOLOGY, INC.**

By: /s/ Laurence J.N. Cooper, M.D., Ph.D.

Laurence J.N. Cooper, M.D., Ph.D.

Chief Executive Officer

**IN WITNESS WHEREOF**, the parties hereto have caused this Securities Issuance Agreement to be duly executed by their respective authorized signatories as of the date first indicated above.

**INTREXON CORPORATION**

By: /s/ Randal J. Kirk

Name: Randal J. Kirk

Title: Chief Executive Officer

**CERTIFICATE OF DESIGNATION**

ZIOPHARM ONCOLOGY, INC.

CERTIFICATE OF DESIGNATION, PREFERENCES AND RIGHTS  
OF THE SERIES 1 PREFERRED STOCK

Pursuant to Section 151(g) of the General Corporation Law of the State of Delaware (the “*DGCL*”) and Article 4 of the Corporation’s Amended and Restated Certificate of Incorporation (the “*Certificate of Incorporation*”):

I, Caesar J. Belbel, Chief Operating Officer, Executive Vice President and Chief Legal Officer of ZIOPHARM Oncology, Inc. (the “*Corporation*”), organized and existing under the General Corporation Law of the State of Delaware, in accordance with the provisions of Section 103 thereof, DO HEREBY CERTIFY:

That pursuant to the authority conferred upon the Board of Directors of the Corporation (the “*Board*”) by Article 4 of the Certificate of Incorporation, the Board on June 28, 2016 adopted the following resolution creating a series of 250,000 shares of Preferred Stock designated as “Series 1 Preferred Stock”:

“**RESOLVED**, that pursuant to the authority vested in the Board in accordance with the provisions of Article 4 of the Certificate of Incorporation, a series of Preferred Stock of the Corporation be, and it hereby is, created, and that the designation and amount thereof and the voting powers, preferences and relative, participating, optional and other special rights of the shares of each such series, and the qualifications, limitations or restrictions thereof are as follows:

**A.** 250,000 of the authorized shares of the Corporation’s preferred stock, par value \$0.001 per share (the “*Preferred Stock*”) are hereby designated “Series 1 Preferred Stock” (the “*Series 1 Preferred*”). Each share of Series 1 Preferred shall have a stated value equal to \$1,200 (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other recapitalization with respect to the Series 1 Preferred) (the “*Stated Value*”).

**B.** The rights, preferences, privileges, restrictions and other matters relating to the Series 1 Preferred are as follows:

**1. DIVIDEND RIGHTS.**

**a.** From and after the date of the issuance of any shares of Series 1 Preferred, dividends at the rate per month of the Series 1 Dividend Rate (as defined below) shall accrue on such shares of Series 1 Preferred (the “*Series 1 PIK Dividends*”). The Series 1 PIK Dividends shall accrue on each share of Series 1 Preferred from day to day and shall be paid monthly in the form of a number of additional shares of Series 1 Preferred equal to the cash value of the Series 1 PIK Dividend on such share that accrued during the preceding month, divided by the Stated Value of such share of Series 1 Preferred, within 10 days following the end of the preceding calendar month. The payment of the Series 1 PIK Dividend each calendar month shall be mandatory for so long as the Corporation has funds legally available therefor. The “*Series 1 Dividend Rate*” for each share of Series 1 Preferred shall equal: (i) in the event

that such share is not Unconverted Series 1 Preferred (as defined below), (A) \$12.00 per month (subject to appropriate adjustment in the event of any stock dividend, stock split, combination, adjustment in the Stated Value or other recapitalization with respect to the Series 1 Preferred) or (ii) in the event that such share is Unconverted Series 1 Preferred, (A) \$24.00 per month (subject to appropriate adjustment in the event of any stock dividend, stock split, combination, adjustment in the Stated Value or other recapitalization with respect to the Series 1 Preferred). For the avoidance of doubt, Series 1 PIK Dividends shall be paid only in the form of shares of Series 1 Preferred and not in the form of cash. No fractional shares of Series 1 Preferred shall be issued as a Series 1 PIK Dividend. Whether or not fractional shares would be issuable as Series 1 PIK Dividends shall be determined on the basis of the total number of shares of Series 1 Preferred to be issued as a Series 1 PIK Dividend to any single holder of Series 1 Preferred based on the total shares of Series 1 Preferred held by such holder immediately prior to the payment of such Series 1 PIK Dividend. Any fractional shares not paid pursuant to this Section 1(a) shall be forfeited.

**2. VOTING RIGHTS.** The holders of Series 1 Preferred have no voting power whatsoever, other than as set forth in Section 2(a) below.

**a.** At any time when shares of Series 1 Preferred are outstanding, the Corporation shall not, either directly or indirectly by amendment, merger, consolidation or otherwise, do any of the following without (in addition to any other vote required by law or the Certificate of Incorporation) the written consent or affirmative vote of the holders of at least a majority of the then outstanding shares of Series 1 Preferred (the "**Requisite Holders**"), given in writing or by vote at a meeting, consenting or voting (as the case may be) separately as a class, and any such act or transaction entered into without such consent or vote shall be null and void *ab initio*, and of no force or effect:

**(i)** amend, alter or repeal any provision of the Certificate of Incorporation in a manner that adversely affects the powers, preferences or rights of the Series 1 Preferred in a manner that is more adverse than the effect on any other class or series of the Corporation's capital stock;

**(ii)** (A) create, or authorize the creation of, or issue or obligate itself to issue shares of, any additional class or series of capital stock unless the same ranks junior or *pari passu* to the Series 1 Preferred with respect to the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends and rights of redemption, or (B) reclassify, alter or amend any existing security of the Corporation that is junior or *pari passu* to the Series 1 Preferred with respect to the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to the Series 1 Preferred in respect of any such right, preference or privilege; or

**(iii)** enter into any transaction (or series of related transactions) the effect of which would adversely affect the holders of the Series 1 Preferred in a manner that is more adverse than the effect on any other class or series of the Corporation's capital stock; *provided; however*, that any issuances of the Corporation's capital stock in connection with any transaction (or series of related transactions) would not require approval of the Requisite Holders, unless the special rights, preferences, privileges and obligations of the Series 1 Preferred are adversely affected.



### 3. CONVERSION OF SERIES 1 PREFERRED SHARES INTO COMMON STOCK.

a. Subject to Section 3(f), upon the close of business on the second (2<sup>nd</sup>) business day following the Conversion Event Date (as defined below) (the “**Mandatory Conversion Time**”), each outstanding share of Series 1 Preferred shall automatically be converted into shares of Common Stock, without the payment of additional consideration by the holder thereof, into such number of fully paid and non-assessable shares of Common Stock as is determined by dividing the Stated Value of such share of Series 1 Preferred by the Series 1 Conversion Price (as defined below). The “**Series 1 Conversion Price**” shall be equal to the volume weighted average closing price of the Corporation’s Common Stock as reported by the Nasdaq Stock Market, LLC over the 20 trading days ending on the Conversion Event Date. The “**Conversion Event Date**” shall be the date that the first approval in the United States of (i) a ZIOPHARM Product, as defined in and developed under the Exclusive Channel Partner Agreement dated as of January 6, 2011 and as amended from time to time, by and between the Corporation and Intrexon Corporation, or (ii) a Product, as defined in and developed under the Exclusive Channel Collaboration Agreement dated September 28, 2015 and as amended from time to time, by and between the Corporation and Intrexon Corporation, or (iii) a Product, as defined in and developed under the License and Collaboration Agreement dated March 27, 2015 and as amended from time to time, by and among Intrexon Corporation, ARES TRADING Trading, S.A. and the Corporation, is publicly announced.

b. No fractional shares of Common Stock shall be issued upon conversion of the Series 1 Preferred. In lieu of any fractional shares to which the holder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the fair market value of a share of Common Stock as determined in good faith by the Board. Whether or not fractional shares would be issuable upon such conversion shall be determined on the basis of the total number of shares of Series 1 Preferred the holder is at the time converting into Common Stock and the aggregate number of shares of Common Stock issuable upon such conversion.

c. All holders of record of shares of Series 1 Preferred shall be sent written notice of the Mandatory Conversion Time and the place designated for mandatory conversion of all such shares of Series 1 Preferred pursuant to this Section 3. Such notice need not be sent in advance of the occurrence of the Mandatory Conversion Time. Upon receipt of such notice, each holder of shares of Series 1 Preferred in certificated form shall surrender his, her or its certificate or certificates for all such shares (or, if such holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation at the place designated in such notice. If so required by the Corporation, any certificates surrendered for conversion shall be endorsed or accompanied by written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or by his, her or its attorney duly authorized in writing. All rights with respect to the Series 1 Preferred converted pursuant to Section 3(a), including the rights, if any, to receive the Series 1 PIK Dividends, notices and vote (other than as a holder of Common Stock),

will terminate at the Mandatory Conversion Time (notwithstanding the failure of the holder or holders thereof to surrender any certificates at or prior to such time), except only the rights of the holders thereof, upon surrender of any certificate or certificates of such holders (or lost certificate affidavit and agreement) therefor, to receive the items provided for in the next sentence of this Section 3(c) (though for the avoidance of doubt this sentence shall not apply to Unconverted Series 1 Preferred unless and until such Unconverted Series 1 Preferred is converted). As soon as practicable after the Mandatory Conversion Time and, if applicable, the surrender of any certificate or certificates (or lost certificate affidavit and agreement) for Series 1 Preferred, the Corporation shall (i) deliver, or cause to be delivered, to the converting holder a certificate or book-entry statement representing the number of full shares of Common Stock issuable on such conversion in accordance with the provisions hereof and (ii) pay cash as provided in Section 3(b) in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion. Such converted Series 1 Preferred shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Series 1 Preferred accordingly.

d. The Corporation shall at all times when the Series 1 Preferred shall be outstanding, reserve and keep available out of its authorized but unissued capital stock, for the purpose of effecting the conversion of the Series 1 Preferred, such number of its duly authorized shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding Series 1 Preferred; and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Series 1 Preferred, the Corporation shall take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in commercially reasonable efforts to obtain the requisite stockholder approval of any necessary amendment to the Certificate of Incorporation.

e. The Corporation shall pay any and all issue and other similar taxes that may be payable in respect of any issuance or delivery of shares of Common Stock upon conversion of shares of Series 1 Preferred pursuant to this Section 3. The Corporation shall not, however, be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of shares of Common Stock in a name other than that in which the shares of Series 1 Preferred so converted were registered, and no such issuance or delivery shall be made unless and until the person or entity requesting such issuance has paid to the Corporation the amount of any such tax or has established, to the satisfaction of the Corporation, that such tax has been paid.

f. The Corporation shall not effect any conversion of the Series 1 Preferred into Common Stock pursuant to Section 3(a) to the extent that the number of shares of Common Stock issued in such conversion would represent a number of shares in excess of the Conversion Limitation (as defined below), unless prior to such conversion, stockholder approval for such issuances have been obtained in accordance with and to the extent required by the NASDAQ Stock Market Listing Rules (such approval, the "**Conversion Approval**"). In the event that the limitation provided in the preceding sentence applies, then on the Mandatory Conversion Date, the Corporation shall convert the maximum number of shares of Series 1 Preferred into

Common Stock as is possible without exceeding the Conversion Limitation. Any shares of Series 1 Preferred that are not converted on the Mandatory Conversion Date (such shares of Series 1 Preferred remaining outstanding after the Mandatory Conversion Time are referred to as “**Unconverted Series 1 Preferred**”) shall remain outstanding until the Conversion Approval is obtained, at which point all Unconverted Series 1 Preferred shall be converted into Common Stock at the Series 1 Conversion Price as provided in this Section 3. The “**Conversion Limitation**” shall be 19.9% of the lesser of (i) the number of outstanding shares of the Corporation’s Common Stock immediately prior to the closing of the transactions contemplated by that certain Share Issuance Agreement by and between the Corporation and Intrexon corporation dated on or about the date hereof or (ii) the number of outstanding shares of Corporation’s Common Stock at the time of conversion. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 3(f) to correct this paragraph (or any portion hereof) which may be defective or inconsistent with the intended Conversion Limitation contained herein or to make changes or supplements necessary or desirable to properly give effect to such limitation.

#### 4. LIQUIDATION.

a. Each of the following events shall be considered a “**Deemed Liquidation Event**”:

(i) a merger or consolidation in which (A) the Corporation is a constituent party or (B) a subsidiary of the Corporation is a constituent party and the Corporation issues shares of its capital stock pursuant to such merger or consolidation, except any such merger or consolidation involving the Corporation or a subsidiary in which the shares of capital stock of the Corporation outstanding immediately prior to such merger or consolidation continue to represent, or are converted into or exchanged for shares of capital stock that represent, immediately following such merger or consolidation, at least a majority, by voting power, of the capital stock of (1) the surviving or resulting entity; or (2) if the surviving or resulting entity is a wholly owned subsidiary of another entity immediately following such merger or consolidation, the parent entity of such surviving or resulting entity; or

(ii) the sale, lease, transfer, exclusive license or other disposition, in a single transaction or series of related transactions, by the Corporation or any subsidiary of the Corporation of all or substantially all the assets of the Corporation and its subsidiaries taken as a whole, or the sale or disposition (whether by merger, consolidation or otherwise) of one or more subsidiaries of the Corporation if substantially all of the assets of the Corporation and its subsidiaries taken as a whole are held by such subsidiary or subsidiaries, except where such sale, lease, transfer, exclusive license or other disposition is to a wholly owned subsidiary of the Corporation; or

(iii) the closing of the transfer of this Corporation’s capital stock (whether by merger, consolidation or otherwise), in one transaction or a series of related transactions, to a person or group of affiliated persons (other than an underwriter of this Corporation’s securities), if, after such closing, such person or group of affiliated persons would hold at least a majority, by voting power, of the capital stock of (1) the surviving or resulting entity; or (2) if the surviving or resulting entity is a wholly owned subsidiary of another entity immediately following such merger or consolidation, the parent entity of such surviving or resulting entity.

b. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, the assets of the Corporation available for distribution to its stockholders shall be distributed among the holders of the shares of Series 1 Preferred and Common Stock, pro rata based on the number of shares held by each such holder, treating for this purpose all shares of Series 1 Preferred as if they had been converted into such number of fully paid and non-assessable shares of Common Stock as is determined by dividing the Stated Value of such share of Series 1 Preferred by the Series 1 Liquidation Assumed Conversion Price (as defined below), rounded down to the nearest whole share. The amount per share payable to the Series 1 Preferred pursuant to the preceding sentence is referred to as the “**Series 1 Liquidation Amount.**” The “**Series 1 Liquidation Assumed Conversion Price**” shall be equal to either (i) if such shares of Series 1 Preferred are not Unconverted Series 1 Preferred, the volume weighted average closing price of the Corporation’s Common Stock as reported by the Nasdaq Stock Market, LLC over the 20 trading days ending on the public announcement of such voluntary or involuntary liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event or (ii) if such shares of Series 1 Preferred are Unconverted Series 1 Preferred, the Series 1 Conversion Price.

c. In connection with or following a Deemed Liquidation Event, the Corporation may, in lieu of distributing the proceeds of such Deemed Liquidation Event pro rata among the holders of Series 1 Preferred and Common Stock as contemplated by Section 4(b), elect to redeem all, but not less than all of the Series 1 Preferred then outstanding at a price per share of Series 1 Preferred equal to the Series 1 Liquidation Amount. A redemption of the Series 1 Preferred pursuant to this Section 4(c) shall occur upon the closing of such Deemed Liquidation Event or on such other date determined by the Corporation during the period commencing on the date of the closing of such Deemed Liquidation Event and ending on the 20<sup>th</sup> day following such Deemed Liquidation Event (such date, the “**Redemption Date**”) and shall be effected in accordance with Subsections 4(c)(i) through 4(c)(iii):

(i) The Corporation shall send written notice of the redemption (the “**Redemption Notice**”) to each holder of record of Series 1 Preferred not less than 5 days prior to the Redemption Date. Each Redemption Notice shall state: (A) the number of shares of Series 1 Preferred held by such holder that the Corporation shall redeem on the Redemption Date specified in the Redemption Notice; (B) the Redemption Date and the Series 1 Liquidation Amount payable for such holder’s shares of Series 1 Preferred; and (C) that the holder is to surrender to the Corporation, in the manner and at the place designated in the Redemption Notice, his, her or its certificate or certificates, if any, representing the shares of Series 1 Preferred to be redeemed.

(ii) On or before the Redemption Date, each holder of shares of Series 1 Preferred to be redeemed on the Redemption Date shall surrender the certificate or certificates, if any, representing such shares (or, if such registered holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to

the Corporation, in the manner and at the place designated in the Redemption Notice, and thereupon the Series 1 Liquidation Amount, for such shares shall be payable to the order of the person whose name appears on such certificate or certificates as the owner thereof.

(iii) If the Redemption Notice shall have been duly given, and if on the Redemption Date the Series 1 Liquidation Amount, payable upon redemption of the shares of Series 1 Preferred to be redeemed on the Redemption Date is paid or tendered for payment or deposited with an independent payment agent so as to be available therefor in a timely manner, then notwithstanding that the certificates, if any, evidencing any of the shares of Series 1 Preferred so called for redemption shall not have been surrendered, all rights with respect to such shares of Series 1 Preferred shall forthwith after the Redemption Date terminate, except only the right of the holders to receive the Series 1 Liquidation Amount, without interest, upon surrender of their certificate or certificates therefor.

**5. REDEEMED OR OTHERWISE ACQUIRED SHARES.** Any shares of Series 1 Preferred that are redeemed or otherwise acquired by the Corporation or any of its subsidiaries shall be automatically and immediately cancelled and retired and shall not be reissued, sold or transferred. Neither the Corporation nor any of its subsidiaries may exercise any voting or other rights granted to the holders of Series 1 Preferred following redemption.

**6. WAIVER.** Any of the rights, powers, preferences and other terms of the Series 1 Preferred set forth herein may be waived on behalf of all holders of Series 1 Preferred by the affirmative written consent or vote of the Requisite Holders.

**7. NEXT BUSINESS DAY.** Whenever any payment or other obligation hereunder shall be due on a day other than a business day, such payment shall be made on the next succeeding business day.

**IN WITNESS WHEREOF**, ZIOPHARM Oncology, Inc. has caused this Certificate of Designation, Preferences and Rights of the Terms of the Series 1 Preferred Stock to be executed by its Chief Operating Officer, Executive Vice President and Chief Legal Officer this 29<sup>th</sup> day of June, 2016.

/s/ Caesar J. Belbel

Caesar J. Belbel  
Chief Operating Officer, Executive Vice President and Chief  
Legal Officer

**ZIOPHARM ONCOLOGY, INC.**  
**SIGNATURE PAGE TO CERTIFICATE OF DESIGNATION**

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**Exhibit B**

**“BAD ACTOR” QUESTIONNAIRE FORMS**

ZIOPHARM ONCOLOGY, INC.

CONFIDENTIAL Rule 506 Disqualification Event Questionnaire (“*Individual*”)

COMPLETED ON BEHALF OF: \_\_\_\_\_

This questionnaire is being furnished to you to obtain information in connection with a potential offering (the “*Offering*”) of securities under Rule 506 of the Securities Act of 1933 (the “*Securities Act*”). As used in this questionnaire, “*you*” also refers to any entity on whose behalf you are responding.

Please review Exhibit A and confirm that you can make all of the statements on behalf of yourself, as well as any entity that you control, directly or indirectly. If you cannot make one or more of the statements, please contact us to provide details. If you have doubts regarding whether you can make all of the statements, please contact us.

By completing and signing this questionnaire, you also indicate: (i) your consent for Cooley LLP and its clients to rely upon the information provided; (ii) your agreement to promptly notify Cooley LLP and the Issuer of securities of any changes in information provided that occurs after the date you sign the questionnaire and prior to the applicable offering of securities; and (iii) your confirmation that the statements on Exhibit A are true and correct, to the best of your knowledge and belief after a reasonable investigation, as of the date you sign the questionnaire, as they pertain to you and to any entity that you control.<sup>1</sup>

Please return this Questionnaire to Cooley LLP, Attn: Christopher Gerry, by e-mail to \_\_\_\_\_. If you have any questions with respect to these matters, please contact Chris at \_\_\_\_\_ or \_\_\_\_\_.

**The statements on Exhibit A are true and correct to the best of my knowledge, information and belief after a reasonable investigation as of the date below.**

\_\_\_\_\_  
Date

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Printed Name)

\_\_\_\_\_  
Title (if applicable)

Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

<sup>1</sup> While the SEC has not provided specific guidance as to what they mean by “control” in this context, in other contexts the SEC has determined that *control* means the possession, direct or indirect, of the power to direct or cause the direction of the management and policies of a person, whether through the ownership of voting securities, by contract, or otherwise.



## Exhibit A

### 1. Criminal Convictions.

You have not been convicted, within ten years before the sale of the securities (or five years, in the case of issuers, their predecessors and affiliated issuers), of any felony or misdemeanor:

- in connection with the purchase or sale of any security;
- involving the making of any false filing with the SEC; or
- arising out of the conduct of the business of an underwriter, broker, dealer, municipal securities dealer, investment advisor or paid solicitor of purchasers of securities.

### 2. Court Orders, Injunctions and Decrees.

You are not subject to any order, judgment or decree of any court of competent jurisdiction, entered within five years before the sale of the securities, that, at the time of such sale, restrains or enjoins you from engaging or continuing to engage in any conduct or practice:

- in connection with the purchase or sale of any security;
- involving the making of any false filing with the SEC; or
- arising out of the conduct of the business of an underwriter, broker, dealer, municipal securities dealer, investment advisor or paid solicitor of purchasers of securities.

### 3. Final Orders from Specified State or Federal Regulators.

You are not subject to a final order of a state securities commission (or an agency or officer of a state performing similar functions); a state authority that supervises or examines banks, savings associations, or credit unions; a state insurance commission (or an agency or officer of a state performing similar functions); an appropriate federal banking agency; the Commodity Futures Trading Commission; or the National Credit Union Administration that:

- at the time of the sale of the securities, bars you from:
  - association with an entity regulated by such commission, authority, agency or officer;
  - engaging in the business of securities, insurance or banking; or
  - engaging in savings association or credit union activities; or
- constitutes a final order based on a violation of any law or regulation that prohibits fraudulent, manipulative, or deceptive conduct entered within ten years before the sale of the securities.

### 4. SEC Disciplinary Orders.

You are not subject to an order of the SEC entered pursuant to section 15(b) or 15B(c) of the Securities Exchange Act of 1934 (the "Exchange Act") or section 203(e) or 203(f) of the Investment Advisers Act of 1940 (the "Advisers Act") that, at the time of the sale of the securities:

- suspends or revokes your registration as a broker, dealer, municipal securities dealer or investment adviser;
- places limitations on the activities, functions or operations of, or imposes civil money penalties on, such person; or
- bars you from being associated with any entity or from participating in the offering of any penny stock.

**5. SEC Cease and Desist Orders.**

You are not subject to any order of the SEC, entered within five years before the sale of the securities, that, at the time of such sale, orders you to cease and desist from committing or causing a future violation of:

- any scienter-based anti-fraud provision of the federal securities laws, including, but not limited to, Section 17(a)(1) of the Securities Act, Section 10(b) of the Exchange Act and Rule 10b-5 thereunder, and Section 206(1) of the Advisers Act or any other rule or regulation thereunder; or
- Section 5 of the Securities Act.

**6. Suspension or Expulsion from SRO Membership or Association with an SRO Member.**

You have not been suspended or expelled from membership in, or suspended or barred from association with a member of, a securities self-regulatory organization (e.g., a registered national securities exchange or a registered national or affiliated securities association) for any act or omission to act constituting conduct inconsistent with just and equitable principles of trade.

**7. SEC Refusal or Stop Order.**

You have not filed (as a registrant or issuer), nor were you named as an underwriter in any registration statement or Regulation A offering statement filed with the SEC that, within five years before the sale of the securities, was the subject of a refusal order, stop order, or order suspending the Regulation A exemption, or is, at the time of the sale of the securities, the subject of an investigation or proceeding to determine whether a stop order or suspension order should be issued.

**8. U.S. Postal Service False Representation Orders.**

You are not subject to a United States Postal Service false representation order entered within five years before the sale of the securities, nor are you, at the time of the sale of the securities, subject to a temporary restraining order or preliminary injunction with respect to conduct alleged by the United States Postal Service to constitute a scheme or device for obtaining money or property through the mail by means of false representations.

**9. Commission-based Solicitors.**

You are not aware of any person or entity, other than any person or entity engaged directly by the issuer, entitled (directly or indirectly) to receive any remuneration in connection with this offering other than as identified by you in writing to the issuer's outside corporate counsel within the 20 days prior to the consummation of the offering.

CONFIDENTIAL Rule 506 Disqualification Event Questionnaire (“Entity”)

COMPLETED ON BEHALF OF: INTREXON CORPORATION

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This questionnaire is being furnished to you to obtain information in connection with a potential offering (the “Offering”) of securities under Rule 506 of the Securities Act of 1933 (the “Securities Act”). As used in this questionnaire, “you” refers to any entity on whose behalf you are responding.

Please review Exhibit A and confirm that you can make all of the statements on behalf of Entity. If you cannot make one or more of the statements, please contact us to provide details. If you have doubts regarding whether you can make all of the statements, please contact us.

By completing and signing this questionnaire, you also indicate that: (i) Cooley LLP and its clients may rely upon the information provided; (ii) you will notify Cooley LLP and the Issuer of securities of any changes in information provided that occurs after the date you sign the questionnaire and prior to the applicable offering of securities; and (iii) the statements on Exhibit A are true and correct, to the best of your knowledge and belief after a reasonable investigation, as of the date you sign the questionnaire.

Please return this Questionnaire to Cooley LLP, Attn: Christopher Gerry, by e-mail to \_\_\_\_\_. If you have any questions with respect to these matters, please contact Chris at \_\_\_\_\_.

**The statements on Exhibit A are true and correct to the best of my knowledge, information and belief after a reasonable investigation as of the date below.**

**INTREXON CORPORATION**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

## Exhibit A

### 1. Criminal Convictions.

You have not been convicted, within ten years before the sale of the securities (or five years, in the case of issuers, their predecessors and Affiliated Issuers), of any felony or misdemeanor:

- in connection with the purchase or sale of any security;
- involving the making of any false filing with the SEC; or
- arising out of the conduct of the business of an underwriter, broker, dealer, municipal securities dealer, investment advisor or paid solicitor of purchasers of securities.

### 2. Court Orders, Injunctions and Decrees.

You are not subject to any order, judgment or decree of any court of competent jurisdiction, entered within five years before the sale of the securities, that, at the time of such sale, restrains or enjoins Entity from engaging or continuing to engage in any conduct or practice:

- in connection with the purchase or sale of any security;
- involving the making of any false filing with the SEC; or
- arising out of the conduct of the business of an underwriter, broker, dealer, municipal securities dealer, investment advisor or paid solicitor of purchasers of securities.

### 3. Final Orders from Specified State or Federal Regulators.

You are not subject to a final order of a state securities commission (or an agency or officer of a state performing similar functions); a state authority that supervises or examines banks, savings associations, or credit unions; a state insurance commission (or an agency or officer of a state performing similar functions); an appropriate federal banking agency; the Commodity Futures Trading Commission; or the National Credit Union Administration that:

- at the time of the sale of the securities, bars Entity from:
  - association with an entity regulated by such commission, authority, agency or officer;
  - engaging in the business of securities, insurance or banking; or
  - engaging in savings association or credit union activities; or
- constitutes a final order based on a violation of any law or regulation that prohibits fraudulent, manipulative, or deceptive conduct entered within ten years before the sale of the securities.

### 4. SEC Disciplinary Orders.

You are not subject to an order of the SEC entered pursuant to section 15(b) or 15B(c) of the Securities Exchange Act of 1934 (the "Exchange Act") or section 203(e) or 203(f) of the Investment Advisers Act of 1940 (the "Advisers Act") that, at the time of the sale of the securities:

- suspends or revokes Entity's registration as a broker, dealer, municipal securities dealer or investment adviser;
- places limitations on the activities, functions or operations of, or imposes civil money penalties on, such person; or
- bars Entity from being associated with any entity or from participating in the offering of any penny stock.

**5. SEC Cease and Desist Orders.**

You are not subject to any order of the SEC, entered within five years before the sale of the securities, that, at the time of such sale, orders Entity to cease and desist from committing or causing a future violation of:

- any scienter-based anti-fraud provision of the federal securities laws, including, but not limited to, Section 17(a)(1) of the Securities Act, Section 10(b) of the Exchange Act and Rule 10b-5 thereunder, and Section 206(1) of the Advisers Act or any other rule or regulation thereunder; or
- Section 5 of the Securities Act.

**6. Suspension or Expulsion from SRO Membership or Association with an SRO Member.**

You have not been suspended or expelled from membership in, or suspended or barred from association with a member of, a securities self-regulatory organization (e.g., a registered national securities exchange or a registered national or affiliated securities association) for any act or omission to act constituting conduct inconsistent with just and equitable principles of trade.

**7. SEC Refusal or Stop Order.**

You have not filed (as a registrant or issuer), nor was Entity named as an underwriter in any registration statement or Regulation A offering statement filed with the SEC that, within five years before the sale of the securities, was the subject of a refusal order, stop order, or order suspending the Regulation A exemption, or is, at the time of the sale of the securities, the subject of an investigation or proceeding to determine whether a stop order or suspension order should be issued.

**8. U.S. Postal Service False Representation Orders**

You are not subject to a United States Postal Service false representation order entered within five years before the sale of the securities, nor is Entity, at the time of the sale of the securities, subject to a temporary restraining order or preliminary injunction with respect to conduct alleged by the United States Postal Service to constitute a scheme or device for obtaining money or property through the mail by means of false representations.

**9. Affiliated Issuers**

If you are controlled by any other entity or if any other entity is an affiliated issuer of the issuer conducting the Offering as a result of your voting power or beneficial ownership of the issuer conducting the Offering, then you can confirm that each such entity can also make the statements set forth in paragraphs 1 through 8 above.

***[If You are the issuer in the offering, include the item below:]***

**10. Other Issuer Covered Persons**

Entity, the issuer in the offering, has distributed, collected, and thoroughly reviewed a “Rule 506 Disqualification Questionnaire” from each Other Issuer Covered Person (defined herein). With respect to securities of the issuer to be offered and sold in the offering, each of issuer’s predecessors (if any), affiliated issuers, directors, executive officers, other officers of the issuer participating in the offering, beneficial owner of 20% or more of the issuer’s outstanding voting equity securities, calculated on the basis of voting power, promoters (as that term is defined in Rule 405 under the Securities Act) (each, an “**Other Issuer Covered Person**” and, together, “**Other Issuer Covered**”

**Persons**”) completed such questionnaire and confirmed that the statements on Exhibit A of such Other Issuer Covered Person’s questionnaire is true and correct as of the date such Other Issuer Covered Person signed the questionnaire. You have no reason to believe, nor has any fact or circumstance come to the attention of the Entity, that (i) any of the Other Issuer Covered Persons incorrectly completed their questionnaire or (ii) any of the Other Issuer Covered Persons will be unable to make the statements set forth in Exhibit A to their questionnaire prior to the offering of the securities.


 The logo for Intrexon, featuring the word "INTREXON" in a blue, sans-serif font. The letter "X" is highlighted in orange. A registered trademark symbol (®) is located to the upper right of the "N".

**ZIOPHARM Oncology, Inc.**
**Intrexon and ZIOPHARM Amend Exclusive Channel Collaborations to Improve Alignment as Programs Advance through Development**

**Germantown, MD, and Boston, MA June 30, 2016** – Intrexon Corporation (NYSE: XON), a leader in synthetic biology, and ZIOPHARM Oncology, Inc. (Nasdaq: ZIOP), a biopharmaceutical company focused on new cancer immunotherapies, today announced amendments to their Exclusive Channel Collaborations (ECCs) in the fields of oncology and graft-versus-host-disease (GvHD) to improve alignment between both companies as ZIOPHARM broadens its pipeline and advances multiple therapeutic programs into the clinic. The new structure is intended to facilitate increased investment in clinical development by ZIOPHARM, including the execution of pivotal studies, across a number of cellular and gene therapies that it employs.

Geno Germano, President of Intrexon, stated, “Intrexon is engaged in an array of collaborations with a wide variety of partners. Our goal is always to work together to create value for both Intrexon shareholders and the shareholders of our collaborators. As these relationships mature, business needs and conditions can evolve and create new opportunities. In the case of ZIOPHARM and the tremendous prospects they possess with their cellular and gene based approaches within oncology, both companies saw an opportunity to adjust the terms of our relationship for mutual benefit.”

Laurence Cooper, M.D., Ph.D., Chief Executive Officer of ZIOPHARM Oncology commented, “Intrexon and ZIOPHARM are integral partners, working closely together to create innovative and more efficacious therapies for the treatment of cancer and GvHD toward the ultimate goal of finding cures. By amending the terms of our collaborations, ZIOPHARM is better positioned to advance its immunotherapy assets from first-in-human trials to eventual commercialization.”

Under the terms of the amendments:

- Operating profit rates payable to Intrexon from ZIOPHARM on products developed under its two existing collaborations will be reduced from 50% to 20%. This reduction will not apply to any royalties or other payments made with respect to the companies’ existing collaboration with Merck Serono, the biopharmaceutical business of Merck KGaA;
- Economics from any future sublicensing arrangements with potential third party collaborators will remain evenly split;
- In consideration of the amendments, ZIOPHARM will issue shares of a new class of preferred stock that would carry an initial stated value of \$120 million and a monthly dividend of 1% payable in additional preferred shares; and
- Upon the first approval of a product in the United States or upon certain fundamental transactions, such as a change of control of ZIOPHARM, the preferred shares issued to Intrexon will be converted into ZIOPHARM common stock equal to the aggregate stated value divided by the volume weighted average closing price of ZIOPHARM’s common stock over the 20 trading days ending on the date that the product approval is announced or such transaction occurs.

Additional details of the agreement can be found in the companies’ filings with the U.S. Securities and Exchange Commission.

Already with three active trials at leading institutions, two utilizing controlled gene therapy to express a powerful anti-cancer effector in interleukin-12 and the other incorporating the innovative non-viral *Sleeping Beauty* gene delivery system in chimeric antigen receptor T cell therapy (CAR-T) for advanced lymphoid malignancies, ZIOPHARM has positioned itself to meaningfully expand its clinical programs through the remainder of 2016 and over the course of 2017. For the current year these will include viral CAR-T for myeloid malignancies, natural killer (NK) cells for acute myeloid leukemia, and for the first time a combination approach with Ad-RTS-hIL-12 used in conjunction with checkpoint inhibitors.

Additionally, ZIOPHARM and Intrexon continue to advance preclinical efforts leveraging the *Sleeping Beauty* platform, the clinical-stage RheoSwitch® (RTS®), and cell manufacturing for the clinical applications of T cells engineered to express CAR and TCR, as well as off-the-shelf approaches in NK and other cell types. Employing novel cell engineering techniques and multigenic programs, the collaboration has progressed next-generation non-viral adoptive cellular therapies based on designer cytokines and CARs under control of RheoSwitch® technology targeting both hematologic and solid tumor malignancies. Many of these initiatives benefit from the companies' ongoing collaboration with The University of Texas MD Anderson Cancer Center, which facilitates a faster and more cost effective approach to move these promising treatments from the bench to the clinic.

### **About Intrexon Corporation**

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

### **About ZIOPHARM Oncology, Inc.**

ZIOPHARM Oncology is a Boston, Massachusetts-based biotechnology company employing novel gene expression, control and cell technologies to deliver safe, effective and scalable cell- and viral-based therapies for the treatment of cancer. The Company's immuno-oncology programs, in collaboration with Intrexon Corporation (NYSE: XON) and the MD Anderson Cancer Center, include chimeric antigen receptor T cell (CAR-T) and other adoptive cell-based approaches that use non-viral gene transfer methods for broad scalability. The Company is advancing programs in multiple stages of development together with Intrexon Corporation's RheoSwitch Therapeutic System® technology, a switch to turn on and off, and precisely modulate, gene expression in order to improve therapeutic index. The Company's pipeline includes a number of cell-based therapeutics in both clinical and preclinical testing which are focused on hematologic and solid tumor malignancies.

### **Trademarks**

Intrexon, Powering the Bioindustrial Revolution with Better DNA, and Better DNA are trademarks of Intrexon and/or its affiliates. Other names may be trademarks of their respective owners.

### **Safe Harbor Statement**

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



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