

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

SCHEDULE 13D

(Amendment No. 8)*

Under the Securities Exchange Act of 1934

ZIOPHARM ONCOLOGY, INC.

(Name of Issuer)

Common Stock, par value \$0.01 per share

(Title of Class of Securities)

98973P101

(CUSIP Number)

Third Security, LLC
1881 Grove Avenue
Radford, Virginia 24141
Attention: Marcus E. Smith, Esq.
(540) 633-7900

(Name, Address and Telephone Number of Person
Authorized to Receive Notices and Communications)

Copy to:
Intrexon Corporation
Attention: Legal
20374 Seneca Meadows Parkway
Germantown, Maryland 20876
(301) 556-9809

June 29, 2016

(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition which is the subject of this Schedule 13D, and is filing this schedule because of Rule 13d-1(b)(3) or (4), check the following box .

NOTE: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See §240.13d-7 for other parties to whom copies are to be sent.

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

This Amendment No. 8 (the "Amendment") amends and supplements the Statement on Schedule 13D, dated January 12, 2011 and filed on January 20, 2011, as amended by Amendment No. 1 dated February 3, 2011 and filed on February 11, 2011, Amendment No. 2 dated August 9, 2011 and filed on August 16, 2011, Amendment No. 3 dated January 20, 2012 and filed on January 25, 2012, Amendment No. 4 dated November 7, 2012 and filed November 9, 2012, Amendment No. 5 dated October 29, 2013 and filed October 31, 2013, Amendment No. 6 dated February 9, 2015 and filed February 10, 2015 and Amendment No. 7 dated June 4, 2015 and filed June 8, 2015 (the "Original Schedule 13D"), relating to the Common Stock, par value \$0.01 per share (the "Common Stock"), of ZIOPHARM Oncology, Inc., a Delaware corporation (the "Company"). Mr. Randal J. Kirk ("Mr. Kirk") and Intrexon Corporation, a Virginia corporation ("Intrexon" and, together with Mr. Kirk, the "Reporting Persons"), are filing this Amendment to disclose the terms of 100,000 shares of Series 1 Preferred Stock of the Company acquired by Intrexon as of July 1, 2016 pursuant to a private placement transaction.

Except as set forth below, there are no changes to the information set forth in the Original Schedule 13D.

Item 4. Purpose of Transaction.

Item 4 of the Original Schedule 13D is hereby amended and supplemented as follows:

On June 29, 2016, the Company and Intrexon entered into a Third Amendment to Exclusive Channel Partner Agreement (the "ECP Amendment"), amending their existing Exclusive Channel Partner Agreement, effective January 6, 2011 and as amended to date, (hereinafter referred to as the "Existing ECP Agreement"), and an Amendment to Exclusive Channel Collaboration Agreement (the "ECC Amendment"), amending their existing Exclusive Channel Collaboration Agreement, effective September 28, 2015 (hereinafter referred 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 GvHD Agreement.

In consideration for the execution and delivery of the ECP Amendment and the ECC Amendment (hereinafter 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.

On June 29, 2016, the Company and Intrexon entered into a Securities Issuance Agreement (“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 (the “Issued Shares”), in consideration of the parties entering into the Amendments to amend the royalty percentage terms. The Issued Shares were issued to Intrexon by the Company as of July 1, 2016.

The parties 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 the Company’s Current Report on Form 8-K dated June 29, 2016 and filed on June 30, 2016, 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.

As indicated 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 Preferred Shares, are set forth in the Amended and Restated Certificate of Designation, Preferences and Rights of Series 1 Preferred Stock (the “A&R Certificate of Designation”), which was filed as Exhibit 3.1 to the Company’s Current Report on Form 8-K/A dated July 1, 2016 and filed on July 1, 2016. The A&R 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 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, S.A. and the Company, is publicly announced. The public announcement of such an approval is referred to as the Conversion Event Date. Pursuant to the A&R Certificate of Designation, on the second business day following the Conversion Event Date (as defined in the A&R Certificate of Designation), each Preferred Share shall convert into a number of shares of the Company's Common Stock equal to the stated value of such Preferred Share, divided by the greater of: (i) the volume weighted average closing price of Common Stock as reported by The NASDAQ Stock Market LLC over the 20 trading days ending on the Conversion Event Date or (ii) \$1.00; 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 Common Stock or (ii) the outstanding shares of Common Stock at the time of conversion.

Without stockholder approval in accordance with the Listing Rules of The NASDAQ Stock Market LLC, the Company shall not effect any conversion of the Preferred Shares into Common Stock to the extent that the number of shares of Common Stock issued in such conversion should constitute a change of control under the Listing Rules of The NASDAQ Stock Market LLC, taking into account for these purposes, the policy of The NASDAQ Stock Market LLC to calculate beneficial ownership in accordance with Section 13 of the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

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 A&R 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 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 Common Stock equal to (i) the stated value of such Preferred Share, divided by (ii) the volume weighted average price of 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 A&R Certificate of Designation is only a summary and is qualified in its entirety by reference to the A&R Certificate of Designation, which is filed as Exhibit 3.1 to the Company’s Current Report on Form 8-K/A dated July 1, 2016 and filed on July 1, 2016 and incorporated herein by reference.

Other than as set forth herein, at the date of this Statement, none of the Reporting Persons have present plans or proposals which would result in:

- (a) The acquisition by any person of additional securities of the Company, or the disposition of securities of the Company;
 - (b) An extraordinary corporate transaction such as a merger, reorganization or disposition, involving the Company or any of its subsidiaries;
 - (c) A sale or transfer of a material amount of assets of the Company or any of its subsidiaries;
 - (d) Any change in the present board of directors or management of the Company, including any plans or proposals to change the number or term of directors or to fill any existing vacancies on the board;
 - (e) Any material change in the present capitalization or dividend policy of the Company;
 - (f) Any other material change in the Company’s business or corporate structure, including but not limited to, if the Company is a registered closed-end investment company, any plans or proposals to make any changes in its investment policy for which a vote is required by Section 13 of the Investment Company Act of 1940;
 - (g) Changes in the Company’s charter, bylaws or instruments corresponding thereto or other actions which may impede the acquisition of control of the Company by any person;
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(h) Causing a class of securities of the Company to be delisted from a national securities exchange or to cease to be authorized to be quoted in an inter-dealer quotation system of a registered national securities association;

(i) A class of equity securities of the Company becoming eligible for termination of registration pursuant to Section 12(g)(4) of the Securities Exchange Act of 1934; or

(j) Any action similar to any of those actions enumerated above.

Item 6. Contracts, Arrangements, Understanding or Relationships with Respect to Securities of the Issuer.

Item 6 of the Original Schedule 13D is hereby amended and supplemented to include the responses in Item 4 above.

Item 7. Material to be Filed as Exhibits.

- Exhibit 1 Securities Issuance Agreement entered into by and between the Company and Intrexon dated as of June 29, 2016 (filed as Exhibit 10.3 to the Company's Current Report on Form 8-K, dated and filed on June 30, 2016 and incorporated herein by reference)
- Exhibit 2 Amended and Restated Certificate of Designation entered into by and between the Company and Intrexon dated as of July 1, 2016 (filed as Exhibit 3.1 to the Company's Current Report on Form 8-K/A, dated and filed on July 1, 2016 and incorporated herein by reference)
- Exhibit 3 Joint Filing Agreement, dated as of July 6, 2016, by and between Mr. Kirk and Intrexon
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SIGNATURES

After reasonable inquiry and to the best of their knowledge and belief, the undersigned certify that the information set forth in this statement is true, complete and correct.

Date: July 6, 2016

/s/ Randal J. Kirk

Randal J. Kirk

INTREXON CORPORATION

By: /s/ Randal J. Kirk

Randal J. Kirk
Chief Executive Officer

EXHIBIT INDEX

- Exhibit 1 Securities Issuance Agreement entered into by and between the Company and Intrexon dated as of June 29, 2016 (filed as Exhibit 10.3 to the Company's Current Report on Form 8-K, dated and filed on June 30, 2016 and incorporated herein by reference)
- Exhibit 2 Amended and Restated Certificate of Designation entered into by and between the Company and Intrexon dated as of July 1, 2016 (filed as Exhibit 3.1 to the Company's Current Report on Form 8-K/A, dated and filed on July 1, 2016 and incorporated herein by reference)
- [Exhibit 3](#) Joint Filing Agreement, dated as of July 6, 2016, by and between Mr. Kirk and Intrexon
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Joint Filing Agreement

In accordance with Rule 13d-1(k) promulgated under the Securities Exchange Act of 1934, as amended, the persons named below agree to the joint filing on behalf of each of them a Statement on Schedule 13D (including amendments thereto) with regard to the common stock of ZIOPHARM Oncology, Inc., and further agree that this Joint Filing Agreement be included as an exhibit to such joint filings. In evidence thereof, the undersigned, being duly authorized, hereby execute this agreement as of the 6th day of July, 2016.

/s/ Randal J. Kirk

Randal J. Kirk

INTREXON CORPORATION

By: /s/ Randal J. Kirk

Randal J. Kirk
Chief Executive Officer