

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

OMB APPROVAL	
OMB Number:	3235-0287
Estimated average burden hours per response:	0.5

1. Name and Address of Reporting Person* <u>KIRK RANDAL J</u> (Last) (First) (Middle) <u>C/O THIRD SECURITY, LLC</u> <u>1881 GROVE AVENUE</u> (Street) <u>RADFORD VA 24141</u> (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>ZIOPHARM ONCOLOGY INC [ZIOP]</u>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director 10% Owner Officer (give title below) Other (specify below)
	3. Date of Earliest Transaction (Month/Day/Year) <u>12/30/2016</u>	
	4. If Amendment, Date of Original Filed (Month/Day/Year)	6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	12/30/2016		A		17,204 ⁽¹⁾	A	\$0	139,513	D	
Common Stock								3,479,685	I	by R.J. Kirk DOT ⁽²⁾
Common Stock								23,349	I	by JPK 2008 ⁽²⁾
Common Stock								23,504	I	by MGK 2008 ⁽²⁾
Common Stock								40,954	I	by ZSK 2008 ⁽²⁾
Common Stock								240	I	by Lotus ⁽²⁾
Common Stock								53,245	I	by Staff 2001 ⁽²⁾
Common Stock								9,537	I	by Sr. Staff ⁽²⁾
Common Stock								337,333	I	by JPK 2009 ⁽²⁾
Common Stock								358,386	I	by MGK 2009 ⁽²⁾
Common Stock								34,318	I	by ZSK 2009 ⁽²⁾
Common Stock								29,066	I	by ADC 2010 ⁽²⁾
Common Stock								154,181	I	by MGK 2011 ⁽²⁾
Common Stock								138,975	I	by JPK 2012 ⁽²⁾
Common Stock								61,262	I	by Kellie L. Banks LTT ⁽²⁾
Common Stock								2,359,608	I	by Kapital Joe ⁽³⁾
Common Stock								889,513	I	by Mascara Kaboom ⁽³⁾

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock								395,791	I	by Senior Staff 2008 ⁽³⁾
Common Stock								222,680	I	by Staff 2010 ⁽³⁾
Common Stock								111,339	I	by Incentive 2010 ⁽³⁾
Common Stock								352,477	I	by Senior Staff 2007 ⁽³⁾
Common Stock								176,238	I	by Staff 2007 ⁽³⁾
Common Stock								58,746	I	by Incentive 2007 ⁽³⁾
Common Stock								173,111	I	by Staff 2009 ⁽³⁾
Common Stock								86,556	I	by Incentive 2009 ⁽³⁾

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)	8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)	
				Code	V	(A)	(D)	Date Exercisable	Expiration Date						Title
Series 1 Preferred Stock	(4)	12/30/2016		J		1,051		(4)	(4)	Common Stock	(4)	(5)	106,184	I	by Intrexon ⁽⁶⁾

1. Name and Address of Reporting Person*

[KIRK RANDAL J](#)

(Last) (First) (Middle)

C/O THIRD SECURITY, LLC
1881 GROVE AVENUE

(Street)
RADFORD VA 24141

(City) (State) (Zip)

1. Name and Address of Reporting Person*

[INTREXON CORP](#)

(Last) (First) (Middle)

C/O LEGAL DEPARTMENT
20374 SENECA MEADOWS PARKWAY

(Street)
GERMANTOWN MD 20876

(City) (State) (Zip)

Explanation of Responses:

1. Restrictions related to the grant of restricted stock will lapse one year from the grant date.
2. Randal J. Kirk controls each of Randal J. Kirk Declaration of Trust ("R.J. Kirk DOT"), JPK 2008, LLC ("JPK 2008"), MGK 2008, LLC ("MGK 2008"), ZSK 2008, LLC ("ZSK 2008"), Lotus Capital (2000) Co., Inc. ("Lotus"), Third Security Staff 2001 LLC ("Staff 2001"), Third Security Senior Staff LLC ("Sr. Staff"), JPK 2009, LLC ("JPK 2009"), MGK 2009, LLC ("MGK 2009"), ZSK 2009, LLC ("ZSK 2009"), ADC 2010, LLC ("ADC 2010"), MGK 2011, LLC ("MGK 2011"), JPK 2012, LLC ("JPK 2012") and Kellie L. Banks (2009) Long Term Trust ("Kellie L. Banks LTT"). Shares held by these entities may be deemed to be beneficially owned (as defined under Rule 13d-3 promulgated under the Securities Exchange Act of 1934, as amended) by Mr. Kirk. Mr. Kirk disclaims beneficial ownership of such shares, except to the extent of any pecuniary interest therein.
3. Randal J. Kirk controls each of Kapital Joe, LLC ("Kapital Joe"), Mascara Kaboom, LLC ("Mascara Kaboom"), Third Security Senior Staff 2008 LLC ("Senior Staff 2008"), Third Security Staff 2010 LLC ("Staff 2010"), Third Security Incentive 2010 LLC ("Incentive 2010"), Third Security Senior Staff 2007 LLC ("Senior Staff 2007"), Third Security Staff 2007 LLC ("Staff 2007"), Third Security Incentive 2007 LLC ("Incentive 2007"), Third Security Staff 2009 LLC ("Staff 2009") and Third Security Incentive 2009 LLC ("Incentive 2009"). Shares held by these entities may be deemed to be beneficially owned (as defined under Rule 13d-3 promulgated under the Securities Exchange Act of 1934, as amended) by Mr. Kirk. Mr. Kirk disclaims beneficial ownership of such shares, except to the extent of any pecuniary interest therein.
4. Each share of Series 1 Preferred Stock ("Preferred Stock") 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 shares of Preferred Stock. The shares of Preferred Stock shall automatically convert into shares of the issuer's common stock upon the date of commercialization of a product pursuant to the collaboration between Intrexon Corporation ("Intrexon") and the issuer, subject to conversion limitations set forth in the Securities Issuance Agreement entered into between the issuer and Intrexon on June 29, 2016 (the "Issuance Agreement"). The conversion price in connection with such automatic conversion shall be determined as set forth in the Amended and Restated Certificate of Designation, Preferences and Rights of Series 1 Preferred Stock, which the issuer has filed as an exhibit to its Amendment to Current Report on Form 8-K/A, dated July 1, 2016.
5. Intrexon received the shares of Preferred Stock as payment-in-kind dividends in connection with its ownership of shares of Preferred Stock. The holders of Preferred Stock are entitled to receive a monthly dividend payable in additional shares of Preferred Stock equal to \$12.00 per share of Preferred Stock per month (subject to adjustment), divided by the stated value of \$1,200, rounded down to the nearest whole share.
6. Randal J. Kirk, directly and through certain affiliates, has voting and dispositive power over a majority of the outstanding capital stock of Intrexon. Mr. Kirk may therefore be deemed to have voting and dispositive power over the shares of the issuer owned by Intrexon. Shares held by Intrexon may be deemed to be indirectly beneficially owned (as defined under Rule 13d-3 promulgated under the Securities Exchange Act of 1934, as amended) by Mr. Kirk. Mr. Kirk disclaims beneficial ownership of such shares, except to the extent of any pecuniary interest therein.

/s/ Randal J. Kirk 12/30/2016

/s/ Randal J. Kirk, CEO of
Intrexon Corporation 12/30/2016

** Signature of Reporting Person Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

* If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.