INTREXON CORP
Form 10-Q
May 11, 2015
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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-Q

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

For the quarterly period ended March 31, 2015

OR

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

For the transition period from to .

Commission File Number: 001-36042

INTREXON CORPORATION
(Exact name of registrant as specified in its charter)

Virginia	26-0084895
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)
20374 Seneca Meadows Parkway Germantown, Maryland	20876
(Address of principal executive offices)	(Zip Code)

(301) 556-9900
(Registrant's telephone number, including area code)
(Former name, former address and former fiscal year, if changed since last report date)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes x No ¨

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes x No ¨

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

Large accelerated filer	x	Accelerated filer	¨
Non-accelerated filer	¨ (Do not check if a smaller reporting company)	Smaller reporting company	¨

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ¨ No x

As of April 30, 2015, 109,245,719 shares of common stock, no par value per share, were outstanding.

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Special Note Regarding Forward-Looking Statements

This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of the federal securities laws, which statements involve substantial risks and uncertainties. All statements, other than statements of historical facts, included in this Quarterly Report on Form 10-Q regarding our strategy, future events, future operations, future financial position, future revenue, projected costs, prospects, plans, objectives of management and expected market growth are forward-looking statements. The words "anticipate," "believe," "estimate," "expect," "intend," "may," "plan," "predict," "project," "would" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. These forward-looking statements include, among other things, statements about:

- our current and future exclusive channel collaborations ("ECCs") and other collaborations;
- developments concerning our collaborators;
- our ability to successfully enter new markets or develop additional products, whether with our collaborators or independently;
- competition from existing technologies and products or new technologies and products that may emerge;
- actual or anticipated variations in our operating results;
- actual or anticipated fluctuations in our competitors' or our collaborators' operating results or changes in their respective growth rates;
- our cash position;
- market conditions in our industry;
- our ability, and the ability of our collaborators, to protect our intellectual property and other proprietary rights and technologies;
- our ability, and the ability of our collaborators, to adapt to changes in laws or regulations and policies;
- the ability of our collaborators to secure any necessary regulatory approvals to commercialize any products developed under the ECCs;
- the rate and degree of market acceptance of any products developed by a collaborator under an ECC or through a joint venture;
- our ability to retain and recruit key personnel;
- our expectations related to the use of proceeds from our public offerings and other financing efforts; and
- our estimates regarding expenses, future revenue, capital requirements and needs for additional financing.

Forward-looking statements may also concern our expectations relating to our subsidiaries and other affiliates. We caution you that the foregoing list may not contain all of the forward-looking statements made in this Quarterly Report on Form 10-Q.

We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. We have included important factors in the cautionary statements included in this Quarterly Report on Form 10-Q, particularly in Part II, Item 1A. "Risk Factors," that could cause actual results or events to differ materially from the forward-looking statements that we make. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments that we may make.

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You should read this Quarterly Report on Form 10-Q, the documents that we reference in this Quarterly Report on Form 10-Q, our Annual Report on Form 10-K for the year ended December 31, 2014 and the documents that we have filed as exhibits to our filings with the Securities and Exchange Commission completely and with the understanding that our actual future results may be materially different from what we expect. We do not assume any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

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PART I. FINANCIAL INFORMATION
Item 1. Consolidated Financial Statements

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Intrexon Corporation and Subsidiaries
Consolidated Balance Sheets
(Unaudited)

(Amounts in thousands, except share data)	March 31, 2015	December 31, 2014
Assets		
Current assets		
Cash and cash equivalents	$99,015	$27,466
Short-term investments	82,461	88,495
Receivables		
Trade, net	15,001	14,582
Related parties	9,795	12,622
Note	1,517	1,501
Other	766	559
Inventory	26,171	25,789
Prepaid expenses and other	4,073	3,759
Total current assets	238,799	174,773
Long-term investments	9,049	27,113
Equity securities	294,922	164,889
Property, plant and equipment, net	38,015	38,000
Intangible assets, net	129,308	65,947
Goodwill	104,045	101,059
Investments in affiliates	3,024	3,220
Other assets	2,825	1,271
Total assets	$819,987	$576,272
Liabilities and Total Equity		
Current liabilities		
Accounts payable	$6,904	$6,267
Accrued compensation and benefits	8,029	7,736
Other accrued liabilities	7,072	5,731
Deferred revenue	17,289	16,522
Lines of credit	621	2,273
Current portion of long term debt	1,426	1,675
Current portion of deferred consideration	7,310	7,064
Related party payables	52	214
Total current liabilities	48,703	47,482
Long term debt, net of current portion	8,300	8,694
Deferred consideration, net of current portion	13,406	13,421
Deferred revenue, net of current portion	93,998	96,687
Deferred tax liability	1,379	—
Other long term liabilities	856	699
Total liabilities	166,642	166,983
Commitments and contingencies (Note 16)		
Total equity		
Common stock, no par value, 200,000,000 shares authorized as of March 31, 2015 and December 31, 2014; 108,522,561 and 100,557,932 shares issued and outstanding as of March 31, 2015 and December 31, 2014, respectively	—	—
Additional paid-in capital	1,074,944	843,001
Accumulated deficit	(431,139)	(458,236)

Accumulated other comprehensive loss	(3,137)	(4)
Total Intrexon shareholders' equity	640,668	384,761
Noncontrolling interests	12,677	24,528
Total equity	653,345	409,289
Total liabilities and total equity	$819,987	$576,272

The accompanying notes are an integral part of these consolidated financial statements.

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Intrexon Corporation and Subsidiaries
Consolidated Statements of Income
(Unaudited)

	Three Months Ended March 31,	
(Amounts in thousands, except share and per share data)	2015	2014
Revenues		
Collaboration revenues	$14,735	$7,837
Product revenues	8,933	—
Service revenues	9,957	—
Other revenues	224	17
Total revenues	33,849	7,854
Operating Expenses		
Cost of products	8,675	33
Cost of services	5,362	—
Research and development	79,307	12,058
Selling, general and administrative	27,628	13,635
Total operating expenses	120,972	25,726
Operating loss	(87,123)	(17,872)
Other Income, Net		
Unrealized appreciation in fair value of equity securities	115,454	21,922
Interest expense	(343)	(39)
Interest income	300	88
Other income (expense), net	267	(8)
Total other income, net	115,678	21,963
Equity in net loss of affiliates	(1,956)	(536)
Income before income taxes	26,599	3,555
Income tax expense	(795)	(306)
Net income	$25,804	$3,249
Net loss attributable to the noncontrolling interests	1,293	866
Net income attributable to Intrexon	$27,097	$4,115
Net income attributable to Intrexon per share, basic	$0.26	$0.04
Net income attributable to Intrexon per share, diluted	$0.25	$0.04
Weighted average shares outstanding, basic	106,103,848	97,325,729
Weighted average shares outstanding, diluted	108,141,734	99,338,398

The accompanying notes are an integral part of these consolidated financial statements.

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Intrexon Corporation and Subsidiaries
Consolidated Statements of Comprehensive Income
(Unaudited)

	Three Months Ended March 31,	
(Amounts in thousands)	2015	2014
Net income	$25,804	$3,249
Other comprehensive income (loss):		
Unrealized gain on investments	27	69
Foreign currency translation adjustments	(3,120)	41
Comprehensive income	22,711	3,359
Comprehensive loss attributable to the noncontrolling interests	1,253	848
Comprehensive income attributable to Intrexon	$23,964	$4,207

The accompanying notes are an integral part of these consolidated financial statements.

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Intrexon Corporation and Subsidiaries
Consolidated Statements of Shareholders' and Total Equity
(Unaudited)

(Amounts in thousands, except share data)	Common Stock Shares	Amount	Additional Paid-in Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Intrexon Shareholders' Equity	Noncontrolling Interests	Total Equity
Balances at December 31, 2014	100,557,932	$—	$843,001	$ (4)	$ (458,236)	$ 384,761	$ 24,528	$409,289
Stock-based compensation expense	—	—	10,156	—	—	10,156	103	10,259
Exercises of stock options and warrants	269,487	—	2,567	—	—	2,567	—	2,567
Shares issued to nonemployee members of the Board of Directors	10,106	—	480	—	—	480	—	480
Shares issued in public offering, net of offering costs	4,312,500	—	110,041	—	—	110,041	—	110,041
Shares issued as consideration of license agreement	2,100,085	—	59,579	—	—	59,579	—	59,579
Shares issued in acquisitions	965,377	—	39,735	—	—	39,735	—	39,735
Acquisition of noncontrolling interest	307,074	—	9,412	—	—	9,412	(10,978)	(1,566)
Adjustments for noncontrolling interests	—	—	(27)	—	—	(27)	277	250
Net income (loss)	—	—	—	—	27,097	27,097	(1,293)	25,804
Other comprehensive income (loss)	—	—	—	(3,133)	—	(3,133)	40	(3,093)
Balances at March 31, 2015	108,522,561	$—	$1,074,944	$ (3,137)	$ (431,139)	$ 640,668	$ 12,677	$653,345

The accompanying notes are an integral part of these consolidated financial statements

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Intrexon Corporation and Subsidiaries
Consolidated Statements of Cash Flows
(Unaudited)

	Three Months Ended March 31,	
(Amounts in thousands)	2015	2014
Cash flows from operating activities		
Net income	$25,804	$3,249
Adjustments to reconcile net income to net cash provided by (used in) operating activities:		
Depreciation and amortization	3,549	1,805
Loss on disposal of property, plant and equipment	92	7
Unrealized appreciation on equity securities	(115,454)	(21,922)
Amortization of discount/premium on investments	124	414
Equity in net loss of affiliates	1,956	536
Stock-based compensation expense	10,259	3,774
Contribution of services by shareholder	—	470
Shares issued to nonemployee members of the Board of Directors	480	426
Shares issued as consideration for license agreement	59,579	—
Provision for bad debts	393	—
Deferred income taxes	795	—
Other noncash items	264	35
Changes in operating assets and liabilities:		
Receivables:		
Trade	(815)	92
Related parties	2,807	(759)
Note	(16)	—
Other	67	(104)
Inventory	(382)	—
Prepaid expenses and other	(292)	2
Other assets	(1,216)	37
Accounts payable	672	516
Accrued compensation and benefits	(297)	(2,480)
Other accrued liabilities	1,210	234
Deferred revenue	(2,621)	23,184
Related party payables	(156)	(47)
Other long term liabilities	157	10
Net cash provided by (used in) operating activities	(13,041)	9,479
Cash flows from investing activities		
Maturities of investments	24,000	35,249
Purchases of equity securities and warrants	(14,900)	—
Acquisitions of businesses, net of cash received	(29,559)	(4,912)
Acquisition of noncontrolling interest	(1,566)	—
Investments in affiliates	(1,491)	(1,500)
Purchases of property, plant and equipment	(2,711)	(2,982)
Proceeds from sale of property, plant and equipment	194	—
Net cash provided by (used in) investing activities	(26,033)	25,855

The accompanying notes are an integral part of these consolidated financial statements.

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Intrexon Corporation and Subsidiaries
Consolidated Statements of Cash Flows
(Unaudited)

	Three Months Ended March 31,	
(Amounts in thousands)	2015	2014
Cash flows from financing activities		
Proceeds from issuance of shares in a private placement	—	25,000
Proceeds from issuance of shares in a public offering, net of issuance costs	110,041	—
Advances from lines of credit	5,559	—
Repayments of advances from lines of credit	(7,211)	—
Payments of capital lease obligations	(6)	(8)
Proceeds from long term debt	44	148
Payments of long term debt	(335)	—
Proceeds from stock option exercises	2,567	330
Payment of stock issuance costs	—	(256)
Net cash provided by financing activities	110,659	25,214
Effect of exchange rate changes on cash and cash equivalents	(36)	(5)
Net increase in cash and cash equivalents	71,549	60,543
Cash and cash equivalents		
Beginning of period	27,466	49,509
End of period	$99,015	$110,052
Supplemental disclosure of cash flow information		
Cash paid during the period for interest	$84	$13
Significant noncash financing and investing activities		
Stock received as consideration for collaboration agreements	$—	$5,225
Stock issued in acquisitions, net	39,735	19,368
Stock issued to acquire noncontrolling interest	9,412	—

The accompanying notes are an integral part of these consolidated financial statements.

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Intrexon Corporation and Subsidiaries
Notes to Consolidated Financial Statements
(Unaudited)
(Amounts in thousands, except share and per share data)

1. Organization and Basis of Presentation

Intrexon Corporation ("Intrexon"), a Virginia corporation, forms collaborations to create biologically based products and processes using synthetic biology. Intrexon has domestic operations in California, Florida, Maryland, and Virginia, and foreign operations in Belgium and Hungary. There have been no commercialized products derived from Intrexon's collaborations to date.

Trans Ova Genetics, L.C. and Subsidiaries ("Trans Ova"), a provider of bovine reproductive technologies and other genetic processes to cattle breeders and producers, is a wholly owned subsidiary of Intrexon with primary operations in Iowa, Maryland, Missouri, Oklahoma, and Texas (Note 3). ViaGen, L.C. ("ViaGen"), a provider of genetic preservation and cloning technologies, is a wholly owned subsidiary of Trans Ova. Exemplar Genetics, LLC ("Exemplar"), a provider of genetically engineered swine for medical and genetic research, is a wholly owned subsidiary through the combined investments of Intrexon, Trans Ova, and ViaGen.

At March 31, 2015, Intrexon owned approximately 60% of AquaBounty Technologies, Inc. ("AquaBounty"), a biotechnology company focused on improving productivity in commercial aquaculture, and 51% of Biological & Popular Culture, Inc. ("BioPop").

Intrexon Corporation and its consolidated subsidiaries are hereinafter referred to as the "Company."

These consolidated financial statements are presented in United States dollars and are prepared under accounting principles generally accepted in the United States of America ("U.S. GAAP").

2. Summary of Significant Accounting Policies

Principles of Consolidation

The accompanying consolidated financial statements reflect the operations of the Company and its subsidiaries. All intercompany accounts and transactions have been eliminated.

Unaudited Financial Information

The accompanying interim consolidated financial statements are unaudited and have been prepared in accordance with U.S. GAAP. Certain information and footnote disclosures normally included in the Company's annual financial statements have been condensed or omitted. These interim consolidated financial statements, in the opinion of management, reflect all normal recurring adjustments necessary for fair statement of the Company's financial position as of March 31, 2015 and results of operations and cash flows for the interim periods ended March 31, 2015 and 2014. These interim financial results are not necessarily indicative of the results to be expected for the year ending December 31, 2015, or for any other future annual or interim period. The accompanying interim unaudited consolidated financial statements should be read in conjunction with the audited consolidated financial statements and related notes thereto included in the Company's Annual Report on Form 10-K for the year ended December 31, 2014.

Revenue Recognition

The Company generates revenue through contractual agreements with collaborators (known as exclusive channel collaborations, "ECC" or "ECCs") whereby the collaborators obtain exclusive access to the Company's proprietary technologies for use in the research, development and commercialization of products and/or treatments in a contractually specified field of use. Generally, the terms of these collaborative agreements provide that the Company receives some or all of the following: (i) upfront payments upon consummation of the agreement, (ii) reimbursements for costs incurred by the Company for research and development and/or manufacturing efforts related to specific applications provided for in the agreement, (iii) milestone payments upon the achievement of specified development, regulatory and commercial activities, and (iv) royalties on sales of products arising from the collaboration.

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The Company's collaboration agreements typically contain multiple elements, or deliverables, including technology licenses, research and development services, and in certain cases manufacturing services. The Company identifies the deliverables within the agreements and evaluates which deliverables represent separate units of accounting. Analyzing the agreements to identify deliverables requires the use of judgment. A deliverable is considered a separate unit of accounting when the deliverable has value to the collaborator on a standalone basis based on the consideration of the relevant facts and circumstances for each agreement.

Consideration received is allocated at the inception of the agreement to all identified units of accounting based on their relative selling price. When available, the relative selling price for each deliverable is determined using vendor specific objective evidence ("VSOE") of the selling price or third-party evidence of the selling price, if VSOE does not exist. If neither VSOE nor third-party evidence of the selling price exists, the Company uses its best estimate of the selling price ("BESP") for the deliverable. The amount of allocable consideration is limited to amounts that are fixed or determinable. The consideration received is allocated among the separate units of accounting, and the applicable revenue recognition criteria are applied to each of the separate units. The Company recognizes the revenue allocated to each unit of accounting as the Company delivers the related goods or services. If the Company determines that certain deliverables should be treated as a single unit of accounting, then the revenue is recognized using either a proportional performance or straight-line method, depending on whether the Company can reasonably estimate the level of effort required to complete its performance obligations under an arrangement and whether such performance obligations are provided on a best-efforts basis. As the Company cannot reasonably estimate its performance obligations related to its collaborators, the Company recognizes revenue on a straight-line basis over the period it expects to complete its performance obligations.

The terms of the Company's agreements may provide for milestone payments upon achievement of certain defined events. The Company applies the Milestone Method for recognizing milestone payments. Under the Milestone Method, the Company recognizes consideration that is contingent upon the achievement of a milestone in its entirety as revenue in the period in which the milestone is achieved only if the milestone is substantive in its entirety. A milestone is considered substantive when it meets all of the following criteria:

(1) The consideration is commensurate with either the entity's performance to achieve the milestone or the enhancement of the value of the delivered item or items as a result of a specific outcome resulting from the entity's performance to achieve the milestone;

(2) The consideration relates solely to past performance; and

(3) The consideration is reasonable relative to all of the deliverables and payment terms within the arrangement.

In the event that a milestone is not considered substantive, the Company recognizes the milestone consideration as revenue using the same method applied to upfront payments.

Research and development services are a deliverable satisfied by the Company in accordance with the terms of the collaboration agreements and the Company considers these services to be inseparable from the license to the core technology; therefore, reimbursements of services performed are recognized as revenue. Because reimbursement (i) is contingent upon performance of the services by the Company, (ii) does not include a profit component, and (iii) does not relate to any future deliverable, the revenue is recognized during the period in which the related services are performed and collection of such amounts is reasonably assured. Payments received for manufacturing services will be recognized when the earnings process related to the manufactured materials has been completed. Royalties to be received under the agreements will be recognized as earned.

The Company also generates revenue through sales of advanced reproductive technologies, including bovine embryos derived from the Company's embryo transfer and in vitro fertilization processes and from genetic preservation and sexed semen processes and applications of such processes to other livestock, as well as sales of livestock used in production. Revenue is recognized when (i) persuasive evidence of an arrangement exists, (ii) services have been rendered or delivery has occurred such that risk of loss has passed to the customer, (iii) the price is fixed or determinable, and (iv) collection from the customer is reasonably assured.

Research and Development

The Company considers that regulatory and other uncertainties inherent in the research and development of new products preclude it from capitalizing such costs. Research and development expenses include salaries and related

costs of research and development personnel, and the costs of consultants, certain in-licensed technology rights, facilities, materials and supplies

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associated with research and development projects as well as various laboratory studies. Indirect research and development costs include depreciation, amortization and other indirect overhead expenses.

The Company has research and development arrangements with third parties that include upfront and milestone payments and primarily relate to collaborations. At March 31, 2015 and December 31, 2014, the Company had research and development commitments with third parties that had not yet been incurred totaling $6,828 and $2,183, respectively. The commitments are generally cancellable by the Company at any time upon written notice.

Cash and Cash Equivalents

All highly liquid investments with an original maturity of three months or less at the date of purchase are considered to be cash equivalents. Cash balances at a limited number of banks may periodically exceed insurable amounts. The Company believes that it mitigates its risk by investing in or through major financial institutions with high quality credit ratings. Recoverability of investments is dependent upon the performance of the issuer. At March 31, 2015 and December 31, 2014, the Company had cash equivalent investments in highly liquid money market accounts at major financial institutions of $87,768 and $16,598, respectively.

Short-term and Long-term Investments

At March 31, 2015, short-term and long-term investments include U.S. government debt securities and certificates of deposit. The Company determines the appropriate classification as short-term or long-term at the time of purchase based on original maturities and management's reasonable expectation of sales and redemption. The Company reevaluates such classification at each balance sheet date. The Company's written investment policy requires investments to be explicitly rated by two of the three following rating services: Standard & Poor's, Moody's and/or Fitch and to have a minimum rating of A1, P1 and/or F-1, respectively, from those agencies. In addition, the investment policy limits the amount of credit exposure to any one issuer.

Equity Securities

The Company holds equity securities received and/or purchased from certain collaborators. Other than investments accounted for using the equity method, the Company elected the fair value option to account for its equity securities held in these collaborators. These equity securities are recorded at fair value at each reporting date and are subject to market price volatility. Unrealized gains and losses resulting from fair value adjustments are reported in the consolidated statement of income. The fair value of these equity securities is subject to fluctuation in the future due to the volatility of the stock market, changes in general economic conditions and changes in the financial conditions of these collaborators. These equity securities are classified as noncurrent in the consolidated balance sheet since the Company does not intend to sell these equity securities within one year. The Company has not sold any of these equity securities to date.

The Company records the fair value of securities received on the date the collaboration is consummated or the milestone is achieved using the closing, quoted price of the collaborator's security on that date, assuming the transfer of consideration is considered perfunctory. If the transfer of the consideration is not considered perfunctory, the Company considers the specific facts and circumstances to determine the appropriate date on which to evaluate fair value. The Company also evaluates whether any discounts for trading restrictions or other basis for lack of marketability should be applied to the fair value of the securities at inception of the collaboration. In the event the Company concludes that a discount should be applied, the fair value of the securities is adjusted at inception of the collaboration and re-evaluated at each reporting period thereafter.

Fair Value of Financial Instruments

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset and liability. As a basis for considering such assumptions, the Company uses a three-tier fair value hierarchy that prioritizes the inputs used in its fair value measurements. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy are as follows:

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Level 1: Quoted prices in active markets for identical assets and liabilities;

Level 2: Other than quoted prices included in Level 1 inputs that are observable for the asset or liability, either directly or indirectly; and

Level 3: Unobservable inputs for the asset or liability used to measure fair value to the extent that observable inputs are not available.

Concentrations of Risk

Due to the Company's mix of fixed and variable rate securities holdings, the Company's investment portfolio is susceptible to changes in interest rates. As of March 31, 2015, gross unrealized losses on the Company's investments were not material. From time to time, the Company may liquidate some or all of its investments to fund operational needs or other activities, such as capital expenditures or business acquisitions. Depending on which investments the Company liquidates to fund these activities, the Company could recognize a portion, or all, of the gross unrealized losses.

Financial instruments which potentially subject the Company to concentrations of credit risk consist primarily of trade receivables. The Company controls credit risk through credit approvals, credit limits and monitoring procedures. The Company performs ongoing credit evaluations of its customers, but generally does not require collateral to support accounts receivable.

Equity Method Investments

The Company has entered into three strategic joint ventures (Note 4). The Company accounts for its investments in these joint ventures using the equity method of accounting since the Company has the ability to exercise significant influence, but not control, over the operating activities of these entities.

The Company determined that it has significant influence over two of its collaborators, ZIOPHARM Oncology, Inc. ("ZIOPHARM") and Oragenics, Inc. ("Oragenics"), as of March 31, 2015 and December 31, 2014, based on its ownership interests, representation on the board of directors of the collaborators and other qualitative factors. The Company accounts for its investments in ZIOPHARM and Oragenics using the fair value option.

The fair value of the Company's equity securities of ZIOPHARM was $192,032 and $83,099 as of March 31, 2015 and December 31, 2014, respectively, and is included as equity securities in the respective consolidated balance sheets. The Company's ownership percentage of ZIOPHARM was 13.9% and 15.7% at March 31, 2015 and December 31, 2014, respectively. Unrealized appreciation in the fair value of the Company's equity securities held in ZIOPHARM was $96,334 and $3,934 for the three months ended March 31, 2015 and 2014, respectively.

The fair value of the Company's equity securities of Oragenics was $8,128 and $7,192 as of March 31, 2015 and December 31, 2014, respectively, and is included as equity securities in the respective consolidated balance sheets. The Company's ownership percentage of Oragenics was 22.4% and 24.4% at March 31, 2015 and December 31, 2014, respectively. Unrealized appreciation in the fair value of the Company's equity securities held in Oragenics was $936 and $710 for the three months ended March 31, 2015 and 2014, respectively.

Summarized unaudited financial data as of March 31, 2015 and December 31, 2014 and for the three months ended March 31, 2015 and 2014 for the Company's equity method investments are as follows:

	March 31, 2015	December 31, 2014
Current assets	$147,728	$63,627
Non-current assets	1,213	1,259
Total assets	148,941	64,886
Current liabilities	14,763	15,346
Non-current liabilities	553	570
Total liabilities	15,316	15,916
Net assets	$133,625	$48,970

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	Three Months Ended March 31,	
	2015	2014
Revenues	$636	$415
Operating expenses	84,069	12,920
Loss from operations	(83,433)	(12,505)
Other	(1)	81
Net loss	$(83,434)	$(12,424)

Variable Interest Entities

The Company identifies entities that (i) do not have sufficient equity investment at risk to permit the entity to finance its activities without additional subordinated financial support or (ii) in which the equity investors lack an essential characteristic of a controlling financial interest as variable interest entities ("VIE" or "VIEs"). The Company performs an initial and on-going evaluation of the entities with which the Company has variable interests to determine if any of these entities are VIEs. If an entity is identified as a VIE, the Company performs an assessment to determine whether the Company has both (i) the power to direct activities that most significantly impact the VIE's economic performance and (ii) have the obligation to absorb losses from or the right to receive benefits of the VIE that could potentially be significant to the VIE. If both of these criteria are satisfied, the Company is identified as the primary beneficiary of the VIE.

As of March 31, 2015, the Company determined that Genopaver, LLC ("Genopaver"); Intrexon Energy Partners, LLC ("Intrexon Energy Partners"); OvaXon, LLC ("OvaXon"); Persea Bio, LLC ("Persea Bio"); and ZIOPHARM were VIEs. As of December 31, 2014, the Company determined that Genopaver, Intrexon Energy Partners, OvaXon, and Persea Bio were VIEs. The Company was not the primary beneficiary for these entities since it did not have the power to direct the activities that most significantly impact the economic performance of the VIEs. The Company's aggregate investment balances of these VIEs as of March 31, 2015 was $192,228, which represents the Company's maximum risk of loss related to the identified VIEs. As of December 31, 2014, the Company did not hold any investment balances in the identified VIEs and therefore had no risk of loss as of that date.

Trade Receivables

Trade receivables consist of credit extended to the Company's customers and collaborators in the normal course of business and are reported net of an allowance for doubtful accounts. The Company reviews its customer accounts on a periodic basis and records bad debt expense for specific amounts the Company evaluates as uncollectible. Past due status is determined based upon contractual terms. Amounts are written off at the point when collection attempts have been exhausted. Management estimates uncollectible amounts considering such factors as current economic conditions and historic and anticipated customer performance. This estimate can fluctuate due to changes in economic, industry or specific customer conditions which may require adjustment to the allowance recorded by the Company. Management has included amounts believed to be uncollectible in the allowance for doubtful accounts.

The following table shows the activity in the allowance for doubtful accounts for the three months ended March 31, 2015:

	Three Months Ended March 31, 2015
Beginning balance	$565
Charged to operating expenses	393
Write offs of accounts receivable	(87)
Ending balance	$871

Inventory

The Company's inventory primarily includes adult female cows which are used in certain production processes and are recorded at acquisition cost using the first-in, first-out method or at market, whichever is lower. Work-in-process inventory

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includes allocations of production costs and facility costs for products currently in production and is recorded at the lower of cost or market. Significant declines in the price of cows could result in unfavorable adjustments to inventory balances.

Property, Plant and Equipment

Property, plant and equipment are stated at cost, less accumulated depreciation and amortization. Major additions or betterments are capitalized and repairs and maintenance are generally expensed as incurred. Depreciation and amortization is calculated using the straight-line method over the estimated useful lives of the assets. The estimated useful lives of these assets are as follows:

	Years
Land improvements	4–15
Buildings and building improvements	3–23
Furniture and fixtures	1–7
Equipment	1–10
Computer hardware and software	1–7

Leasehold improvements are amortized over the shorter of the useful life of the asset or the applicable lease term, generally one to fourteen years.

Goodwill

Goodwill represents the future economic benefits arising from other assets acquired in a business combination that are not individually identified and separately recognized (Note 3). Goodwill is reviewed for impairment at least annually. The Company performs a qualitative assessment to determine whether it is more-likely-than-not that the fair value of a reporting unit is less than its carrying amount prior to performing the two-step goodwill impairment test. If this is the case, the two-step goodwill impairment test is required. If it is more-likely-than-not that the fair value of a reporting unit is greater than the carrying amount, the two-step goodwill impairment test is not required.

If the two-step goodwill impairment test is required, first, the fair value of the reporting unit is compared with its carrying amount (including goodwill). If the fair value of the reporting unit is less than its carrying amount, an indication of goodwill impairment exists for the reporting unit and the entity must perform step two of the impairment test. Under step two, an impairment loss is recognized for any excess of the carrying amount of the reporting unit's goodwill over the implied fair value of that goodwill. The implied fair value of goodwill is determined by allocating the fair value of the reporting unit in a manner similar to a purchase price allocation and the residual fair value after this allocation is the implied fair value of the reporting unit goodwill. Fair value of the reporting unit is determined using a discounted cash flow analysis. If the fair value of the reporting unit exceeds its carrying amount, step two does not need to be performed.

The Company performs its annual impairment review of goodwill in the fourth quarter, or sooner if a triggering event occurs prior to the annual impairment review.

Intangible Assets

Intangible assets subject to amortization consist of patents, related technologies and know-how; customer relationships; trademarks; and a covenant not to compete acquired as a result of mergers and acquisitions (Note 3). These intangible assets are subject to amortization, were recorded at fair value at the date of acquisition and are stated net of accumulated amortization. Indefinite-lived intangible assets consist of in-process research and development acquired in mergers and acquisitions (Note 3) and were recorded at fair value at the dates of the respective acquisitions.

The Company amortizes long-lived intangible assets to reflect the pattern in which the economic benefits of the intangible assets are expected to be realized. The intangible assets are amortized over their remaining estimated useful lives, ranging from two to fourteen years for the patents, related technologies and know-how; customer relationships; trademarks; and the covenant not to compete.

Impairment of Long-Lived Assets

Long-lived assets to be held and used, including property, plant and equipment and intangible assets subject to amortization, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the assets may not

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be recoverable. Conditions that would necessitate an impairment assessment include a significant decline in the observable market value of an asset, a significant change in the extent or manner in which an asset is used, or a significant adverse change that would indicate that the carrying amount of an asset or group of assets is not recoverable.

Indefinite-lived intangible assets, including in-process research and development, are tested for impairment annually, or more frequently if events or circumstances between annual tests indicate that the asset may be impaired. Impairment losses on indefinite-lived intangible assets are recognized based solely on a comparison of their fair value to carrying value, without consideration of any recoverability test. The Company monitors the progression of its in-process research and development, as the likelihood of success is contingent upon commercial development or regulatory approval.

Foreign Currency Translation

The assets and liabilities of foreign subsidiaries, where the local currency is the functional currency, are translated from their respective functional currencies into United States dollars at the exchange rates in effect at the balance sheet date, with resulting foreign currency translation adjustments recorded in the consolidated statement of comprehensive income. Revenue and expense amounts are translated at average rates during the period.

Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to both differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases as well as operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date of the change. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized.

The Company identifies any uncertain income tax positions and recognizes the effect of income tax positions only if those positions are more likely than not of being sustained. Recognized income tax positions are measured at the largest amount that is greater than 50% likely of being realized. Changes in recognition or measurement are reflected in the period in which the change in judgment occurs. The Company records interest, if any, related to unrecognized tax benefits as a component of interest expense. Penalties, if any, are recorded in selling, general and administrative expenses.

Net Income per Share

For the three months ended March 31, 2015 and 2014, basic net income per share is calculated by dividing net income attributable to common shareholders by the weighted average shares outstanding during the period, without consideration of common stock equivalents. Diluted net income per share is calculated by adjusting weighted average shares outstanding for the dilutive effect of common stock equivalents outstanding for the period, using the treasury-stock method. For purposes of the diluted net income per share calculation, stock options and warrants are considered to be common stock equivalents.

Segment Information

The Company has determined that it operates in one segment. The Company applies its technologies to create products and services which may be either sold directly to customers or developed through collaboration with third parties. Substantially all of the Company's revenues are derived in the United States of America. As of March 31, 2015 and December 31, 2014, the Company had $82,133 and $17,100, respectively, of long-lived assets in foreign countries. For the three months ended March 31, 2015, the Company recognized $1,290 of revenues derived in foreign countries. There were no revenues derived in foreign countries for the three months ended March 31, 2014.

Recently Issued Accounting Pronouncements

In February 2015, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2015-02, Consolidation (Topic 810) - Amendments to the Consolidation Analysis ("ASU 2015-02"). The provisions of ASU 2015-02 provide guidance which changes the analysis that a reporting entity must perform to determine whether it should consolidate certain types of legal entities. This guidance is effective for annual and interim periods

within those annual periods, beginning after December 15, 2015, and is effective for the Company for the year ending December 31, 2016, with early adoption permitted. The Company is currently evaluating the impact that the implementation of this standard will have on the Company's consolidated financial statements.

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In June 2014, the FASB issued ASU 2014-10, Development Stage Entities (Topic 915): Elimination of Certain Financial Reporting Requirements, Including an Amendment to Variable Interest Entities Guidance in Topic 810, Consolidation ("ASU 2014-10"). The provisions of ASU 2014-10 related to Topic 915 will not have a significant impact to the Company. ASU 2014-10 removes an exception provided to development-stage entities in Consolidation (Topic 810) for determining whether an entity is a variable interest entity. The revisions to Consolidation (Topic 810) are effective for interim and annual periods beginning after December 15, 2015, and are effective for the Company for the year ending December 31, 2016. The Company does not expect the implementation of this standard to have a significant impact on the Company's consolidated financial statements.

In May 2014, the FASB issued ASU 2014-9, Revenue from Contracts with Customers ("ASU 2014-9"). The FASB issued ASU 2014-9 to clarify the principles for recognizing revenue and to develop a common revenue standard for U.S. GAAP. The standard outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and supersedes the most current revenue recognition guidance. This guidance is effective for fiscal years and interim periods within those years beginning after December 15, 2016, and is effective for the Company for the year ending December 31, 2017. The Company is currently evaluating the impact that the implementation of this standard will have on the Company's consolidated financial statements.

Reclassifications

Certain insignificant reclassifications have been made to the prior interim period consolidated financial statements to conform to the current interim period presentation.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates.

3. Mergers and Acquisitions

ActoGeniX Acquisition

In February 2015, the Company acquired 100% of the membership interests of ActoGeniX NV ("ActoGeniX"), a European clinical stage biopharmaceutical company, pursuant to a Stock Purchase Agreement (the "ActoGeniX Purchase Agreement"). ActoGeniX's platform technology complements our broad collection of technologies available for current and future collaborators. Pursuant to the ActoGeniX Purchase Agreement, the former members of ActoGeniX received an aggregate of 965,377 shares of the Company's common stock and $32,739 in cash in exchange for all membership interests of ActoGeniX. The results of ActoGeniX's operations subsequent to the acquisition date have been included in the consolidated financial statements.

The fair value of the total consideration transferred was $72,474. The acquisition date fair value of each class of consideration transferred is presented below:

Cash	$32,739
Common shares	39,735
	$72,474

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The fair value of the shares of the Company's common stock issued was based on the quoted closing price of the Company's common stock as of the date of the acquisition. The preliminary estimated fair value of assets acquired and liabilities assumed at the acquisition date is shown below:

Cash	$3,180
Other receivables	305
Prepaid expenses and other	31
Property, plant and equipment	209
Intangible assets	68,100
Other assets	23
Total assets acquired	71,848
Accounts payable	230
Accrued compensation and benefits	624
Other accrued liabilities	307
Deferred revenue	732
Deferred tax liability	612
Total liabilities assumed	2,505
Net assets acquired	69,343
Goodwill	3,131
Total consideration	$72,474

The fair value of assets acquired and liabilities assumed at the acquisition date are based on preliminary valuations and the estimates and assumptions are subject to change as the Company obtains additional information during the measurement period which may be up to one year from the acquisition date. The acquired intangible assets primarily include in-process research and development, and the fair values of the acquired assets were determined using the multi-period excess earnings and with-and-without methods, which are both variations of the income approach that convert future cash flows to single discounted present value amounts. The in-process research and development is currently an indefinite-lived intangible asset. Goodwill, which is not expected to be deductible for tax purposes, represents the assembled workforce and anticipated buyer-specific synergies arising from the combination of the Company's and ActoGeniX's technologies.

As of March 31, 2015, the Company had incurred $446 of acquisition related costs, of which $409 is included in selling, general and administrative expenses in the accompanying consolidated statement of income for the three months ended March 31, 2015.

Trans Ova Acquisition

In August 2014, the Company acquired 100% of the membership interests of Trans Ova, a provider of bovine reproductive technologies, pursuant to an Amended and Restated Membership Interest Purchase Agreement (the "Trans Ova Purchase Agreement"). The Company and Trans Ova intend to build upon Trans Ova's current platform with new capabilities with a goal of achieving higher levels of delivered value to dairy and beef cattle producers. Pursuant to the Trans Ova Purchase Agreement, the former members of Trans Ova received an aggregate of 1,444,388 shares of the Company's common stock and $63,625 in cash, and will receive deferred cash consideration valued at $20,115 in exchange for all membership interests of Trans Ova. The deferred cash consideration is payable in three equal installments upon the first, second, and third anniversaries of the transaction date. The Trans Ova Purchase Agreement also provides for payment to the former members of Trans Ova a portion of certain cash proceeds in the event there is an award under certain litigation matters pending as of the transaction date to which Trans Ova is a party. The results of Trans Ova's operations subsequent to the acquisition date have been included in the consolidated financial statements, including revenues of $18,926 and net loss of $237 for the three months ended March 31, 2015.

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The fair value of the total consideration transferred, including the noncontrolling interest in a majority-owned subsidiary of Trans Ova, was $127,875. The acquisition date fair value of each class of consideration transferred and noncontrolling interest is presented below:

Cash	$63,625
Common shares	32,802
Deferred cash consideration	20,115
Total consideration transferred	116,542
Fair value of noncontrolling interest	11,333
Total	$127,875

The fair value of the shares of the Company's common stock issued was based on the quoted closing price of the Company's common stock as of the date of the acquisition. The estimated fair value of assets acquired and liabilities assumed at the acquisition date is shown in the table below.

Cash	$960
Trade receivables	18,693
Related party receivables	1,219
Inventory	18,476
Prepaid expenses and other	590
Property, plant and equipment	21,164
Intangible assets	23,700
Other assets	147
Total assets acquired	84,949
Accounts payable	3,317
Accrued compensation and benefits	913
Other accrued liabilities	271
Deferred revenue	4,458
Lines of credit	4,091
Related party payables	1,246
Long term debt	9,090
Total liabilities assumed	23,386
Net assets acquired	61,563
Goodwill	66,312
Total consideration and fair value of noncontrolling interest	$127,875

The fair value of acquired inventory was determined using the cost approach, which establishes value based on the cost of reproducing or replacing the asset. The fair value of acquired property, plant and equipment was determined using the cost approach and the market approach. The market approach uses prices and other relevant information generated by market transactions involving identical or comparable assets. The acquired intangible assets include various developed technologies and know-how, customer relationships, and trademarks, and the fair values of these assets were determined using the relief-from-royalty, multi-period excess earnings, and with-and-without methods, which are all variations of the income approach. The acquired intangible assets are being amortized over useful lives ranging from three to nine years. Goodwill, which will be deductible for tax purposes, represents the assembled workforce, potential future expansion of Trans Ova business lines and anticipated buyer-specific synergies arising from the combination of the Company's and Trans Ova's technologies.

In conjunction with a prior transaction associated with Trans Ova's subsidiary, ViaGen, in September 2012, the Company may be obligated to make certain future contingent payments to the former equity holders of ViaGen, up to a total of $6,000 if certain revenue targets, as defined in the share purchase agreement, are met. The Company does not expect these revenue targets to be met and accordingly has assigned no value to this liability.

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The Company incurred $713 of costs primarily for legal and due diligence services related to this acquisition, which were all recorded in 2014.

In February 2015, the Company acquired, through an exchange offer, the remaining outstanding membership interests of Trans Ova's majority-owned subsidiary, Exemplar, for $1,566 in cash and 307,074 shares of Company common stock.

Medistem Acquisition

In March 2014, the Company acquired 100% of the outstanding common stock and securities convertible into common stock of Medistem, Inc. ("Medistem"), an entity engaged in the development of Endometrial Regenerative Cells ("ERCs"), for a combination of cash and Company common stock. The acquisition allows the Company to employ its synthetic biology platforms to engineer a diverse array of cell-based therapeutic candidates using Medistem's multipotent ERCs. Pursuant to the terms of the merger agreement, Medistem equity holders received 714,144 shares of the Company's common stock and $4,920 in cash in exchange for the outstanding Medistem common stock and securities convertible into common stock. Additionally, Medistem had issued the Company two promissory notes in the amount of $707, including accrued interest, both of which were settled upon closing of the merger. Certain members of Medistem's management surrendered a total of 17,695 shares of their merger consideration to reimburse the Company for required payroll tax withholdings. The results of Medistem's operations subsequent to the acquisition date have been included in the consolidated financial statements.

The fair value of the total consideration transferred was $24,995. The acquisition date fair value of each class of consideration transferred is presented below:

Cash	$4,920
Common shares	19,368
Settlement of promissory notes	707
	$24,995

The fair value of the shares of the Company's common stock issued was based on the quoted closing price of the Company's common stock as of the date of the acquisition. The estimated fair value of assets acquired and liabilities assumed at the acquisition date is shown in the table below.

Cash	$8
Intangible assets	4,824
Total assets acquired	4,832
Accounts payable	644
Accrued compensation and benefits	67
Other accrued expenses	50
Total liabilities assumed	761
Net assets acquired	4,071
Goodwill	20,924
Total consideration	$24,995

The fair value of acquired intangible assets was determined using the cost approach. The acquired intangible assets consist of in-process research and development, which is an indefinite-lived intangible asset. The goodwill consists of buyer-specific synergies between the Company's and Medistem's technologies present. The goodwill is not expected to be deductible for tax purposes.

The Company incurred $680 of acquisition related costs, all of which was recorded in 2014 and $291 is included in selling, general and administrative expenses in the accompanying consolidated statement of income for the three months ended March 31, 2014.

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Unaudited Condensed Pro Forma Financial Information

The results of operations of the 2015 acquisition discussed above are included in the consolidated statements of income beginning on the day after the acquisition date. The following unaudited condensed pro forma financial information for the three months ended March 31, 2015 and 2014 is presented as if the acquisition had been consummated on January 1, 2014:

	Three Months Ended March 31,	
	2015	2014
	Pro forma	
Revenues	$33,927	$7,854
Income before income taxes	23,282	1,582
Net Income	22,487	1,276
Net loss attributable to the noncontrolling interests	1,293	866
Net income attributable to Intrexon	23,780	2,142

The results of operations of the 2014 acquisitions discussed above are included in the consolidated statements of income beginning on the day after their respective acquisition dates. The following unaudited condensed pro forma financial information for the three months ended March 31, 2014 is presented as if the acquisitions had been consummated on January 1, 2013:

	Three Months Ended March 31, 2014
	Pro forma
Revenues	$22,211
Income before income taxes	1,319
Net income	1,013
Net income attributable to the noncontrolling interests	976
Net income attributable to Intrexon	1,989

4. Investments in Joint Ventures

Intrexon Energy Partners

In March 2014, the Company and certain investors (the "Investors"), including an affiliate of Third Security, LLC ("Third Security"), entered into a Limited Liability Company Agreement which governs the affairs and conduct of business of Intrexon Energy Partners, a joint venture formed to optimize and scale-up the Company's gas-to-liquid bioconversion platform for the production of certain fuels and lubricants. The Company also entered into an ECC with Intrexon Energy Partners providing exclusive rights to our technology for the use in bioconversion, as a result of which the Company received a technology access fee of $25,000 while retaining a 50% membership interest in Intrexon Energy Partners. The Investors made initial capital contributions, totaling $25,000 in the aggregate, in exchange for pro rata membership interests in Intrexon Energy Partners totaling 50%. In addition, Intrexon has committed to make additional capital contributions of up to $25,000, and the Investors, as a group and pro rata in accordance with their respective membership interests in Intrexon Energy Partners, have committed to make additional capital contributions of up to $25,000, at the request of Intrexon Energy Partners' Board of Managers (the "Intrexon Energy Partners Board") and subject to certain limitations. As of March 31, 2015, the Company's remaining commitment was $22,884. The Company and the Investors have the right, but not the obligation, to make additional capital contributions above these limits when and if solicited by the Intrexon Energy Partners Board. Intrexon Energy Partners is governed by a board of managers which has five members. Two members of the Intrexon Energy Partners Board are designated by the Company and three members of the Intrexon Energy Partners Board are designated by a majority of the Investors.

See further discussion of the ECC at Note 5. See discussion of a concurrent private placement securities purchase made by the Investors at Note 13.

The Company's investment in Intrexon Energy Partners was $(1,091) and $(740) as of March 31, 2015 and December 31, 2014, respectively, and is included in other accrued liabilities in the accompanying consolidated

balance sheets.

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OvaXon

In December 2013, the Company and OvaScience, Inc. ("OvaScience"), a life sciences company focused on the discovery, development and commercialization of new treatments for infertility, entered into a Limited Liability Company Agreement ("OvaXon LLC Agreement") to form OvaXon, LLC ("OvaXon"), a joint venture to create new applications for improving human and animal health. Both the Company and OvaScience made an initial capital contribution of $1,500 in January 2014 for a 50% membership interest in OvaXon. OvaXon is governed by the OvaXon board of managers ("OvaXon Board") which has four members, two each from the Company and OvaScience. In cases in which the OvaXon Board determines that additional capital contributions are necessary in order for OvaXon to conduct business and comply with its obligations, each of the Company and OvaScience have the right, but not the obligation, to make additional capital contributions to OvaXon subject to the OvaXon LLC Agreement.

Contemporaneously with the formation of the joint venture, the Company entered into an ECC with OvaXon (see Note 5).

The Company's investment in OvaXon was $196 and $(83) as of March 31, 2015 and December 31, 2014, respectively, and is included in investments in affiliates and other accrued liabilities, respectively, in the accompanying consolidated balance sheets.

S & I Ophthalmic

In September 2013, the Company entered into a Limited Liability Company Agreement ("Sun LLC Agreement") with Caraco Pharmaceutical Laboratories, Ltd. ("Sun Pharmaceutical Subsidiary"), an indirect subsidiary of Sun Pharmaceutical Industries Ltd. ("Sun Pharmaceutical"), an international specialty pharmaceutical company focused on chronic diseases, to form S & I Ophthalmic, LLC ("S & I Ophthalmic"). The Sun LLC Agreement governs the affairs and the conduct of business of S & I Ophthalmic. S & I Ophthalmic leverages experience and technology from both the Company and Sun Pharmaceutical. Both the Company and Sun Pharmaceutical Subsidiary made an initial capital contribution of $5,000 in October 2013 for a 50% membership interest in S & I Ophthalmic. S & I Ophthalmic is governed by a board of managers ("S & I Ophthalmic Board") which has four members, two each from the Company and Sun Pharmaceutical Subsidiary. In cases in which the S & I Ophthalmic Board determines that additional capital contributions are necessary in order for S & I Ophthalmic to conduct business and comply with its obligations, each of the Company and Sun Pharmaceutical Subsidiary have committed to making additional capital contributions to S & I Ophthalmic subject to certain limits defined in the agreement. Each has the right, but not the obligation, to make additional capital contributions above the defined limits when and if solicited by the S & I Ophthalmic Board. Beginning on the seventh anniversary of the effective date of the Sun LLC Agreement, and upon the second anniversary thereafter, the Company, as well as Sun Pharmaceutical Subsidiary, may make a cash offer to purchase all of the other party's interest in S & I Ophthalmic. Upon receipt of such an offer, the other party must either agree to tender its interests at the offered price or submit a counteroffer at a price higher than the original offer. Such offer and counteroffer may continue until one party agrees to the other's price.

Contemporaneously with the formation of the joint venture, the Company entered into an ECC with S & I Ophthalmic (see Note 5).

The Company's investment in S & I Ophthalmic was $2,828 and $3,220 as of March 31, 2015 and December 31, 2014, respectively, and is included in investments in affiliates in the accompanying consolidated balance sheets.

5. Collaboration Revenue

The Company's collaborations provide for multiple deliverables to be delivered by the Company and typically include a license to the Company's technology platforms, participation in collaboration committees, performance of certain research and development services and may include obligations for certain manufacturing services. The Company groups these deliverables into two units of accounting based on the nature of the deliverables and the separation criteria. The first deliverable ("Unit of Accounting 1") includes the license to the Company's technology platform, the Company's participation on the collaboration committees and any research and development services associated with its technology platforms. The deliverables for Unit of Accounting 1 are combined because they cannot be individually separated. The second deliverable ("Unit of Accounting 2") includes manufacturing services to be provided for any Company materials in an approved product. These services have standalone value and are contingent due to

uncertainties on whether an approved product will ever be developed thereby requiring manufacture by the Company at that time. As VSOE and third party evidence of selling price is not available or practical, the BESP for each unit of accounting is determined using a historical cost approach due to the early stage of

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development of the Company's technology. In establishing BESP for Unit of Accounting 1, the Company uses the accumulated costs incurred as of the collaboration by the Company on its technology platform licensed to the collaborator to approximate the cost to recreate the deliverables included in this unit of accounting. All upfront consideration is allocated to Unit of Accounting 1. Unit of Accounting 2 is determined to be a contingent deliverable at the inception of the collaboration due to the uncertainties surrounding whether an approved product will ever be developed and require manufacturing by the Company. The upfront consideration allocated to Unit of Accounting 1 is recognized over the expected life of the Company's technology platform using a straight-line approach.

The Company recognizes the reimbursement payments received for research and development services in the period when the services are performed and collection is reasonably assured. At the inception of each collaboration, the Company determines whether any milestone payments are substantive and can be recognized when earned. The milestone payments are typically not considered substantive. Royalties related to product sales will be recognized when earned since payments relate directly to products that have been fully developed and for which the Company has satisfied all of its obligations.

The Company determines whether collaborations are individually significant for disclosure based on a number of factors, including total revenue recorded by the Company pursuant to the collaboration, collaborators either consolidated or accounted for using the equity method, or other qualitative factors. Collaboration revenues generated from consolidated subsidiaries are eliminated in consolidation. The following table summarizes the amounts recorded in the consolidated statements of income for each significant collaboration for the three months ended March 31, 2015 and 2014.

	Three Months Ended March 31, 2015		
	Collaboration Revenue Recognized From		
	Upfront and Milestone Payments	Research and Development Services	Total
ZIOPHARM Oncology, Inc.	$644	$3,157	$3,801
Oragenics, Inc.	262	8	270
Fibrocell Science, Inc.	448	1,713	2,161
Genopaver, LLC	69	600	669
S & I Ophthalmic, LLC	—	755	755
OvaXon, LLC	—	644	644
Intrexon Energy Partners, LLC	625	2,185	2,810
Persea Bio, LLC	125	115	240
Other	858	2,527	3,385
Total	$3,031	$11,704	$14,735

	Three Months Ended March 31, 2014		
	Collaboration Revenue Recognized From		
	Upfront and Milestone Payments	Research and Development Services	Total
ZIOPHARM Oncology, Inc.	$644	$2,036	$2,680
Oragenics, Inc.	262	533	795
Fibrocell Science, Inc.	448	862	1,310
Genopaver, LLC	69	421	490
S & I Ophthalmic, LLC	—	879	879
OvaXon, LLC	—	169	169
Other	459	1,055	1,514
Total	$1,882	$5,955	$7,837

The following is a summary of the terms of the Company's significant collaborations.

ZIOPHARM Collaboration

In January 2011, the Company entered into an ECC with ZIOPHARM, a related party. Pursuant to the ECC, ZIOPHARM received a license to the Company's technology platform within the field of oncology as defined more

specifically in the

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agreement. Upon execution of the ECC, the Company received 3,636,926 shares of ZIOPHARM's common stock valued at $17,457 as upfront consideration. In addition to the deliverables discussed above, the Company transferred two clinical product candidates to ZIOPHARM that resulted in a separate unit of accounting for which $1,115 of the upfront consideration was allocated and recognized as collaboration revenue in 2011. The remaining $16,342 of upfront consideration was allocated to Unit of Accounting 1 discussed above. The Company is entitled to additional shares of common stock representing the lesser of (i) the original shares received or (ii) the number of shares representing 7.495% of ZIOPHARM's outstanding shares at the date of the dosing of the first patient in a Phase II clinical trial of a product candidate created, produced or developed by ZIOPHARM using the Company's technology ("ZIOPHARM Milestone"). In October 2012, the ZIOPHARM Milestone was achieved and the Company received 3,636,926 shares of ZIOPHARM's common stock valued at $18,330 as milestone consideration. Since the ZIOPHARM Milestone was not substantive, the Company allocated the ZIOPHARM Milestone to the applicable units of accounting and is recognizing it in a manner similar to these units of accounting. The remaining balance of deferred revenue associated with upfront and milestone payments was $22,549 and $23,193 at March 31, 2015 and December 31, 2014, respectively. The Company receives reimbursement payments for research and development services provided and manufacturing services for Company materials provided to ZIOPHARM during the ECC. Subject to certain expense allocations, ZIOPHARM will pay the Company 50% of the quarterly net profits derived from the sale of products developed from the ECC, as defined in the agreement. ZIOPHARM is responsible for conducting preclinical and clinical development of product candidates, as well as for other aspects of commercialization or manufacturing of product candidates. The term of the ECC commenced in January 2011 and continues until terminated pursuant to the ECC agreement. The ECC may be terminated by either party in the event of certain material breaches defined in the agreement and may be terminated voluntarily by ZIOPHARM upon 90 days written notice to the Company.

See Notes 17 and 19 for further discussion related to ZIOPHARM.

Oragenics Collaborations

In June 2012, the Company entered into an ECC with Oragenics, a publicly traded company focused on becoming the world leader in novel antibiotics against infectious disease and probiotics for oral health for humans and pets and a related party. Pursuant to the ECC, at the transaction effective date, Oragenics received a license to the Company's technology platform within the field of lantibiotics for the treatment of infectious diseases in humans and companion animals as defined more specifically in the agreement. Upon execution of the ECC, the Company received a technology access fee of 4,392,425 shares of Oragenics' common stock valued at $6,588 as upfront consideration. The Company is entitled to receive additional shares of common stock, or at Oragenics' option, receive a cash payment based upon the fair market value of the shares, upon the separate achievement of certain regulatory milestones of the first product candidate developed from the ECC ("Oragenics ECC 1 Milestones"). The Oragenics ECC 1 Milestones include: (i) 1% of Oragenics' outstanding shares as defined in the ECC agreement at the date of the filing of the first Investigative New Drug Application with the U.S. FDA for a product candidate created, produced or developed using the Company's technology ("Oragenics ECC 1 Product"); (ii) 1.5% of Oragenics' outstanding shares as defined in the ECC agreement at the date of the dosing of the first patient in the first Phase II clinical trial of an Oragenics ECC 1 Product; (iii) 2% of Oragenics' outstanding shares as defined in the ECC agreement at the date of the dosing of the first patient in the first Phase III clinical trial of an Oragenics ECC 1 Product; (iv) 2.5% of Oragenics' outstanding shares as defined in the ECC agreement at the date of the first New Drug Application or Biologics License Application with the U.S. FDA for an Oragenics ECC 1 Product, or alternatively the first equivalent regulatory filing with a foreign agency; and (v) 3% of Oragenics' outstanding shares as defined in the ECC agreement at the date of the granting of the first regulatory approval of an Oragenics ECC 1 Product. The remaining balance of deferred revenue associated with upfront and milestone payments was $5,033 and $5,171 at March 31, 2015 and December 31, 2014, respectively. The Company receives reimbursement payments for research and development services provided pursuant to the agreement during the ECC and manufacturing services for Company materials provided to Oragenics during the ECC. Oragenics will pay the Company 25% of the quarterly profits derived from the sale of products developed from the ECC, as defined in the agreement.

Oragenics is responsible for funding the further development of lantibiotics toward the goal of commercialization, conducting preclinical and clinical development of product candidates, as well as for other aspects of commercialization or manufacturing of the product candidates. The term of the ECC commenced in June 2012 and continues until terminated pursuant to the ECC agreement. The ECC may be terminated by either party in the event of certain material breaches defined in the agreement and may be terminated voluntarily by Oragenics upon 90 days written notice to the Company.

In September 2013, the Company entered into its second ECC with Oragenics ("ECC 2"). Pursuant to ECC 2, at the transaction effective date, Oragenics received a license to the Company's technology platform to develop and commercialize probiotics, specifically the direct administration to humans of genetically modified probiotics for the treatment of diseases of the oral cavity, throat, sinus and esophagus as defined more specifically in the agreement. Upon execution of ECC 2, the Company received a technology access fee of 1,348,000 shares of Oragenics' common stock valued at $3,503 and a $1,956 convertible

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promissory note maturing on or before December 31, 2013 as upfront consideration. Prior to the maturity date, Oragenics had the right to convert the promissory note into shares of Oragenics' common stock subject to its shareholders' approval. The conversion price is equal to the closing price of Oragenics' common stock on the last trading day immediately prior to the date of conversion. In December 2013, Oragenics converted the promissory note into 698,241 shares of Oragenics' common stock. The Company is entitled to receive additional shares of common stock, or at Oragenics' option, receive a cash payment based upon the fair market value of the shares, upon the first instance of attainment of certain commercialization milestones of a product candidate developed from ECC 2 ("Oragenics ECC 2 Milestones"). The Oragenics ECC 2 Milestones include: (i) $2,000 within thirty days of the first instance of the achievement of the first dosing of a patient in a phase II clinical trial for an Oragenics product developed from ECC 2 ("Oragenics ECC 2 Product"); (ii) $5,000 within thirty days of the first instance of the achievement of the meeting of the primary endpoint in a phase III clinical trial for an Oragenics ECC 2 Product; and (iii) $10,000 within thirty days of the first instance of the achievement of the first to occur of (a) the first commercial sale of an Oragenics ECC 2 Product anywhere in the world, or (b) the regulatory approval for an Oragenics ECC 2 Product. The remaining balance of deferred revenue associated with upfront and milestone payments was $4,715 and $4,839 at March 31, 2015 and December 31, 2014, respectively. The Company receives reimbursement payments for research and development services provided pursuant to the agreement during the ECC and manufacturing services for Company materials provided to Oragenics during ECC 2. Oragenics will pay the Company 10% of the net sales derived from the sale of products developed from ECC 2, as defined in the agreement.

Oragenics is responsible for funding the further development of probiotics toward the goal of commercialization, conducting preclinical and clinical development of product candidates, as well as for other aspects of commercialization or manufacturing of the product candidates. The term of ECC 2 commenced in September 2013 and continues until terminated pursuant to ECC 2. ECC 2 may be terminated by either party in the event of certain material breaches defined in the agreement and may be terminated voluntarily by Oragenics upon 90 days written notice to the Company.

See Note 17 for a discussion of additional arrangements with Oragenics.

Fibrocell Science, Inc. Collaboration

In October 2012, the Company entered into an ECC with Fibrocell Science, Inc. ("Fibrocell"), a publicly traded, autologous cellular therapeutic company focused on the development of innovative products for aesthetic, medical and scientific applications. Pursuant to the ECC, at the transaction effective date, Fibrocell received a license to the Company's technology platform to develop and commercialize genetically modified and non-genetically modified autologous fibroblasts and autologous dermal cells in the United States of America. Upon execution of the ECC, the Company received a technology access fee of 1,317,520 shares of Fibrocell's common stock valued at $7,576 as upfront consideration. The number of shares received reflects a 1-for-25 reverse stock split of Fibrocell's common stock effective April 30, 2013. The Company receives reimbursement payments for research and development services provided pursuant to the agreement during the ECC and manufacturing services for Company materials provided to Fibrocell during the ECC. On a quarterly basis, Fibrocell will pay the Company royalties of 7% of net sales up to $25,000 and 14% of net sales above $25,000 on each product developed from the ECC, as defined in the agreement. If Fibrocell uses the Company's technology platform to improve the production of a current or new Fibrocell product not developed from the ECC, Fibrocell will pay the Company a quarterly royalty equal to 33% of the cost of goods sold savings generated by the improvement, as defined in the agreement. Fibrocell is responsible for conducting preclinical and clinical development of product candidates, as well as for other aspects of commercialization and manufacturing of the product candidates. The term of the ECC commenced in October 2012 and continues until terminated pursuant to the ECC agreement. The ECC may be terminated by either party in the event of certain material breaches defined in the agreement and may be terminated voluntarily by Fibrocell upon 90 days written notice to the Company.

In June 2013, the Company entered into an amendment to the ECC with Fibrocell. The amendment expands the field of use defined in the ECC agreement. Under the terms of the amendment to the ECC, the Company received 1,243,781 shares of Fibrocell's common stock valued at $7,612 as a supplemental technology access fee. The Company allocated this additional consideration to the appropriate unit of accounting and is recognizing it consistent

with the unit of accounting.

In January 2014, the Company entered into a second amendment to the ECC with Fibrocell. The second amendment further expanded the field of use defined in the ECC agreement. Under the terms of the second amendment to the ECC, the Company received 1,024,590 shares of Fibrocell's common stock valued at $5,225 as a technology access fee. The Company allocated this additional consideration to the appropriate unit of accounting and is recognizing it consistent with the unit of accounting. The remaining balance of deferred revenue associated with upfront and milestone payments was $17,043 and $17,491 at March 31, 2015 and December 31, 2014, respectively.

See Note 17 for further discussion related to Fibrocell.

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Genopaver Collaboration

In March 2013, the Company entered into an ECC with Genopaver, an affiliate of Third Security (Note 17) and a related party. Genopaver was formed for the purpose of entering into the ECC and developing and commercializing products in the field of the fermentative production of alkaloids through genetically modified cell-lines and substrate feeds for use as active pharmaceutical ingredients or as commercially sold intermediates in the manufacture of active pharmaceutical ingredients. Upon execution of the ECC, the Company received a technology access fee of $3,000 as upfront consideration. The remaining balance of deferred revenue associated with upfront and milestone payments was $2,454 and $2,523 at March 31, 2015 and December 31, 2014, respectively. The Company receives reimbursement payments for research and development services provided pursuant to the agreement during the ECC. Genopaver will pay the Company a royalty as a percentage in the lower-double digits on the quarterly gross profits of product sales from products developed under the ECC, as defined in the agreement. Genopaver is responsible for the development and commercialization of the product candidates. The term of the ECC commenced in March 2013 and continues until terminated pursuant to the ECC agreement. The ECC may be terminated by either party in the event of certain material breaches defined in the agreement and may be terminated voluntarily by Genopaver upon 90 days days written notice to the Company.

AquaBounty Collaboration

In February 2013, the Company entered into an ECC with AquaBounty, a majority-owned consolidated subsidiary. The Company will be reimbursed for research and development services as provided for in the ECC agreement. In the event of product sales from a product developed from the ECC, the Company will receive 16.66% of quarterly gross profits for each product, as defined in the agreement. All revenues and expenses related to this ECC are eliminated in consolidation.

S & I Ophthalmic Collaboration

In September 2013, the Company entered into an ECC with S & I Ophthalmic, a joint venture between the Company and Sun Pharmaceutical Subsidiary, an indirect subsidiary of Sun Pharmaceutical, an international specialty pharmaceutical company focused on chronic diseases (Note 4). The ECC grants S & I Ophthalmic an exclusive license to the Company's technology platform to develop and commercialize therapies in humans for the treatment of ocular diseases defined more specifically in the agreement. The Company will be reimbursed for research and development services pursuant to the agreement and manufacturing services for Company materials provided to S & I Ophthalmic during the ECC. Subject to certain expense allocations, S & I Ophthalmic will pay the Company royalties with percentages ranging from mid-single digits and above of the net sales derived from the sale of products developed under the ECC, as defined in the agreement. The term of the ECC commenced in September 2013 and continues until terminated by either party in the event of certain material breaches defined in the agreement and may be terminated voluntarily by S & I Ophthalmic upon 90 days written notice to the Company.

BioPop Collaboration

In October 2013, the Company entered into an ECC with BioPop, a majority-owned consolidated subsidiary. The ECC grants BioPop an exclusive license to the Company's technology platform to develop and commercialize artwork, children's toys and novelty goods that are derived from living organisms or are enabled by synthetic biology. The Company will be reimbursed for research and development services and manufacturing services as provided for in the ECC agreement. The Company is entitled to royalties in the mid-single digits as a percentage of the net product sales of a product developed under the ECC, as defined in the agreement. All revenues and expenses related to this ECC are eliminated in consolidation.

OvaXon Collaboration

In December 2013, the Company entered into an ECC with OvaXon, a joint venture between the Company and OvaScience, a life sciences company focused on infertility treatments (Note 4) and a related party. The ECC grants OvaXon an exclusive license to the Company's technology platform to create new applications for improving human and animal health. OvaScience also licensed certain technology to OvaXon pursuant to a separate license agreement. The Company will be reimbursed for research and development services and manufacturing services as provided for in the ECC agreement. The term of the ECC commenced in December 2013 and continues until terminated by either party in the event of certain material breaches defined in the agreement and may be terminated voluntarily by OvaXon

upon 90 days written notice to the Company.

Intrexon Energy Partners Collaboration

In March 2014, the Company entered into an ECC with Intrexon Energy Partners, a joint venture between the Company and certain investors, including an affiliate of Third Security (Note 4), and a related party. The ECC grants Intrexon Energy Partners

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an exclusive license to the Company's technology platform to optimize and scale-up the Company's gas-to-liquid bioconversion platform for the production of certain fuels and lubricants. Upon execution of the ECC, the Company received a technology access fee of $25,000 as upfront consideration. The remaining balance of deferred revenue associated with upfront and milestone payments was $22,500 and $23,125 at March 31, 2015 and December 31, 2014, respectively. The Company will be reimbursed for research and development services as provided for in the ECC agreement. The term of the ECC commenced in March 2014 and continues until March 2034 unless terminated prior to that date by either party in the event of certain material breaches defined in the agreement and may be terminated voluntarily by Intrexon Energy Partners upon 90 days written notice to the Company.

Persea Bio Collaboration

In December 2014, the Company entered into an ECC with Persea Bio, an affiliate of Third Security (Note 17) and a related party. Persea Bio was formed for the purpose of entering into the ECC and developing and commercializing a food program, as defined in the agreement. Upon execution of the ECC, the Company received a technology access fee of $5,000 as upfront consideration. The remaining balance of deferred revenue associated with upfront and milestone payments was $4,875 and $5,000 at March 31, 2015 and December 31, 2014, respectively. The Company receives reimbursement payments for research and development services provided pursuant to the agreement during the ECC. Persea Bio will pay the Company royalties as a percentage in the lower-double digits on the quarterly gross profits of product sales from products derived from the ECC, as defined in the agreement. Persea Bio is responsible for the development and commercialization of the product candidates. The term of the ECC commenced in December 2014 and continues until terminated by either party in the event of certain material breaches defined in the agreement and may be terminated voluntarily by Persea Bio upon 90 days written notice to the Company.

Deferred Revenue

Deferred revenue primarily consists of consideration received for upfront and milestone payments in connection with the Company's collaborations, prepayments for research and development services performed for collaborators and prepayments for product and service revenues. Deferred revenue consists of the following:

	March 31, 2015	December 31, 2014
Upfront and milestone payments	$104,297	$107,228
Prepaid research and development services	1,038	1,045
Prepaid product and service revenues	4,740	4,365
Other	1,212	571
Total	$111,287	$113,209
Current portion of deferred revenue	$17,289	$16,522
Long-term portion of deferred revenue	93,998	96,687
Total	$111,287	$113,209

6. Short-term and Long-term Investments

The Company's investments are classified as available-for-sale. The following table summarizes the amortized cost, gross unrealized gains and losses and fair value of available-for-sale investments as of March 31, 2015:

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Aggregate Fair Value
U.S. government debt securities	$91,169	$69	$—	$91,238
Certificates of deposit	272	—	—	272
Total	$91,441	$69	$—	$91,510

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The following table summarizes the amortized cost, gross unrealized gains and losses and fair value of available-for-sale investments as of December 31, 2014:

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Aggregate Fair Value
U.S. government debt securities	$115,293	$54	$(12)	$115,335
Certificates of deposit	273	—	—	273
Total	$115,566	$54	$(12)	$115,608

For more information on our method for determining the fair value of our assets, see Note 2 – "Fair Value of Financial Instruments".

The estimated fair value of available-for-sale investments classified by their contractual maturities as of March 31, 2015 was as follows:

Due within one year	$82,461
After one year through two years	9,049
Total	$91,510

Changes in market interest rates and bond yields cause certain investments to fall below their cost basis, resulting in unrealized losses on investments. The unrealized losses of the Company's investments were primarily a result of unfavorable changes in interest rates subsequent to the initial purchase of these investments and have been in a loss position for less than 12 months.

As of March 31, 2015 and December 31, 2014, the Company did not consider any of its investments to be other-than-temporarily impaired. When evaluating its investments for other-than-temporary impairment, the Company reviews factors such as the length of time and extent to which fair value has been below its cost basis, the financial condition of the issuer, the Company's ability and intent to hold the security and whether it is more likely than not that it will be required to sell the investment before recovery of its cost basis.

7. Fair Value Measurements

The carrying amount of cash and cash equivalents, receivables, prepaid expenses and other current assets, accounts payable, accrued compensation and benefits, other accrued liabilities, and related party payables approximate fair value due to the short maturity of these instruments.

The following table presents the placement in the fair value hierarchy of financial assets that are measured at fair value on a recurring basis, including the items for which the fair value option has been elected, at March 31, 2015:

	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	March 31, 2015
Assets				
U.S. government debt securities (Note 6)	$—	$91,238	$—	$91,238
Equity securities (Note 5)	277,903	17,019	—	294,922
Other	—	1,028	—	1,028
Total	$277,903	$109,285	$—	$387,188

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The following table presents the placement in the fair value hierarchy of financial assets that are measured at fair value on a recurring basis, including the items for which the fair value option has been elected, at December 31, 2014:

	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	December 31, 2014
Assets				
U.S. government debt securities (Note 6)	$—	$115,335	$—	$115,335
Equity securities (Note 5)	143,927	20,962	—	164,889
Other	—	273	—	273
Total	$143,927	$136,570	$—	$280,497

The carrying values of the Company's long term debt approximates fair value due to the length of time to maturity and/or the existence of interest rates that approximate prevailing market rates. Financial liabilities measured on a recurring basis were not significant at March 31, 2015 and December 31, 2014.

The method used to estimate the fair value of the Level 1 assets in the tables above is based on observable market data as these equity securities are publicly-traded. The method used to estimate the fair value of the Level 2 short-term and long-term investments in the tables above is based on professional pricing sources for identical or comparable instruments, rather than direct observations of quoted prices in active markets. The method used to estimate the fair value of the Level 2 equity securities in the tables above is based on the quoted market price of the publicly-traded security, adjusted for a discount for lack of marketability.

At March 31, 2015, $7,200 of certain equity securities have been transferred from Level 2 to Level 1 as a result of no longer needing to apply a discount for lack of marketability to these transferred equity securities.

8. Inventory

Inventory consists of the following:

	March 31, 2015	December 31, 2014
Supplies, semen and embryos	$1,408	$1,184
Work in process	6,074	5,637
Livestock	17,298	16,996
Feed	1,391	1,972
Total inventory	$26,171	$25,789

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9. Property, Plant and Equipment, net

Property, plant and equipment consist of the following:

	March 31, 2015	December 31, 2014
Land and land improvements	$7,875	$7,565
Buildings and building improvements	7,201	7,265
Furniture and fixtures	1,415	1,236
Equipment	33,049	31,983
Leasehold improvements	6,422	6,382
Computer hardware and software	5,221	5,060
Construction in progress	837	1,002
	62,020	60,493
Less: Accumulated depreciation and amortization	(24,005)	(22,493)
Property, plant and equipment, net	$38,015	$38,000

Depreciation expense was $1,953 and $1,118 for the three months ended March 31, 2015 and 2014, respectively.

10. Goodwill and Intangible Assets, net

The changes in the carrying amount of goodwill for the three months ended March 31, 2015 and 2014 are as follows:

	Three Months Ended March 31,	
	2015	2014
Beginning balance	$101,059	$13,823
Acquisitions	3,131	25,866
Foreign currency translation adjustment	(145)	—
Ending balance	$104,045	$39,689

No goodwill or accumulated impairment losses existed as of March 31, 2015 and December 31, 2014.

Intangible assets consist of the following at March 31, 2015:

	Weighted Average Useful Life (Years)	Gross Carrying Amount	Accumulated Amortization	Net
Patents, related technologies and know-how	11.5	$41,872	$(11,768)	$30,104
Customer relationships	6.5	10,700	(1,289)	9,411
Trademarks	8.4	5,900	(476)	5,424
Covenant not to compete	2.0	382	(16)	366
In-process research and development		84,003	—	84,003
Total		$142,857	$(13,549)	$129,308

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Intangible assets consist of the following at December 31, 2014:

	Gross Carrying Amount	Accumulated Amortization	Net
Patents, related technologies and know-how	$41,872	$(10,849)	$31,023
Customer relationships	10,700	(806)	9,894
Trademarks	5,900	(298)	5,602
In-process research and development	19,428	—	19,428
Total	$77,900	$(11,953)	$65,947

Amortization expense was $1,596 and $687 for the three months ended March 31, 2015 and 2014, respectively.

11. Lines of Credit and Long Term Debt

Lines of Credit

Trans Ova has a $10,000 revolving line of credit with First National Bank of Omaha which matures on June 1, 2015. The line of credit bears interest at the greater of 2.95% above the London Interbank Offered Rate or 3.00% and was 3.13% at March 31, 2015. As of March 31, 2015, there was no outstanding balance. The amount available under the line of credit is based on eligible accounts receivable and inventory or the maximum line of credit amount. As of March 31, 2015, the amount available under the line of credit was $10,000.

Trans Ova's revolving line of credit is collateralized by certain of its assets and contain certain restricted covenants that include maintaining minimum tangible net worth, maximum allowable annual capital expenditures and working capital. Trans Ova was in compliance with these covenants as of March 31, 2015.

Exemplar has a $700 revolving line of credit with American State Bank which matures on November 1, 2015. The line of credit bears interest at 4.50% per annum. As of March 31, 2015, there was an outstanding balance of $621. As of March 31, 2015, the amount available under the line of credit was $79.

Long Term Debt

Long term debt consists of the following:

	March 31, 2015	December 31, 2014
Notes payable	$7,360	$7,653
Royalty-based financing	1,868	1,926
Other	498	790
Long term debt	9,726	10,369
Less current portion	1,426	1,675
Long term debt, less current portion	$8,300	$8,694

Trans Ova has a note payable to American State Bank which matures in April 2033 and has an outstanding principal balance of $5,866 as of March 31, 2015. Trans Ova pays monthly installments of $39, which includes interest at 3.95%. The note payable is collateralized by all of Trans Ova's assets.

Trans Ova has a note payable to the Iowa Economic Development Authority which matures in July 2016 and has an outstanding principal balance of $916 as of March 31, 2015. Trans Ova pays quarterly installments of $183. The note payable in collateralized by certain of Trans Ova's real estate.

Exemplar has notes payable with outstanding principal balances totaling $578 as of March 31, 2015. Exemplar pays monthly installments ranging from $1 to $4 with interest rates ranging from 0% to 3.00%. These notes mature from September 2018 to May 2020 and are collateralized by certain of Exemplar's real estate or letters of credit of certain of its members.

AquaBounty has a royalty-based financing grant from the Atlantic Canada Opportunities Agency ("ACOA"), a Canadian government agency, to provide funding of a research and development project. The total amount available under the award is $2,271, which AquaBounty can claim over a five year period. All amounts claimed by AquaBounty must be repaid in the form of a 10% royalty on any products commercialized out of this research and development project until fully paid. Because the timing of commercialization is subject to regulatory approval, the timing of repayment is uncertain. As of the acquisition date, AquaBounty had claimed $1,952 of the available funds and this amount was recorded at its acquisition date fair value of $1,107. The Company accretes the difference of $845 between the face value of amounts drawn and the acquisition date fair value over the expected period of repayment. Since the acquisition date and through March 31, 2015, AquaBounty has made subsequent claims of $811 resulting in total long term debt of $1,868 as of March 31, 2015.

Future maturities of long term debt are as follows:

2015	$1,117
2016	896
2017	364
2018	361
2019	338
2020	457
Thereafter	4,325
Total	$7,858

The AquaBounty royalty-based financing grant is not included in the table above due to the uncertainty of the timing of repayment.

12. Income Taxes

Tax provisions for interim periods are calculated using an estimate of actual taxable income or loss for the respective period, rather than estimating the Company's annual effective income tax rate, as the Company is currently unable to reliably estimate its income for the full year. For the three months ended March 31, 2015, the Company had a taxable loss of approximately $26,600 and no current income tax benefit was recognized. For the three months ended March 31, 2014, the Company had taxable income of approximately $15,300, which, after offset by available loss carryforwards, resulted in $306 of current tax expense due to the corporate alternative minimum tax. For the three months ended March 31, 2015, the Company recorded deferred tax expense of $795. There was no deferred tax expense for the three months ended March 31, 2014. The Company's net deferred tax assets, excluding certain deferred tax liabilities totaling $1,379, are offset by a valuation allowance due to the Company's history of net losses combined with an inability to confirm recovery of the tax benefits of the Company's losses and other net deferred tax assets. In assessing the realizability of deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. Management considers the scheduled reversal of deferred tax liabilities, projected future taxable income and tax planning strategies in making this assessment.

At March 31, 2015, the Company has loss carryforwards for federal income tax purposes of approximately $281,100 available to offset future taxable income and federal and state research and development tax credits of approximately $6,800, prior to consideration of annual limitations that may be imposed under Section 382. These carryforwards will begin to expire in 2022. Of these loss carryforwards, approximately $15,800 relate to benefits from stock compensation deductions that will be recorded as a component of paid-in capital when realized. The Company's direct foreign subsidiaries have foreign loss carryforwards of approximately $75,500, all of which do not expire.

13. Shareholders' Equity

Issuances of Common Stock

In January 2015, the Company closed a public offering of 4,312,500 shares of its common stock, inclusive of 562,500 shares of common stock sold by the Company pursuant to the full exercise of an overallotment option granted to the underwriters in connection with the offering and 555,556 shares of common stock purchased by affiliates of Third Security (Note 17), at a

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public offering price of $27.00 per share. The aggregate proceeds of the offering were $110,041, net of underwriting discounts and commissions of $6,086 and offering expenses paid by the Company of approximately $311, all of which were capitalized.

In March 2014 and concurrent with the formation of Intrexon Energy Partners, the Company entered into securities purchase agreements with each of the Investors in Intrexon Energy Partners for the private placement of 972,004 shares of the Company's common stock at a price per share of $25.72 for gross proceeds of $25,000. Each Investor purchased an amount proportionate to its investment in Intrexon Energy Partners, including 243,001 shares, or $6,250, purchased by an affiliate of Third Security (Note 17).

Components of Accumulated Other Comprehensive Income (Loss)

The components of accumulated other comprehensive income (loss) were as follows:

	March 31, 2015	December 31, 2014
Unrealized gain on investments	$69	$42
Foreign currency translation adjustments	(3,206)	(46)
Total accumulated other comprehensive loss	$(3,137)	$(4)

14. Stock Option Plans

The Company records the fair value of stock options issued to employees and non-employees as of the grant date as stock-based compensation expense. Stock-based compensation expense for employees and non-employees is recognized over the requisite service period, which is typically the vesting period. Stock-based compensation costs included in the consolidated statements of income are presented below:

	Three Months Ended March 31,	
	2015	2014
Cost of products	$34	$—
Cost of services	98	—
Research and development	1,769	348
Selling, general and administrative	8,358	3,426
Total	$10,259	$3,774

Intrexon Stock Option Plans

In April 2008, Intrexon adopted the 2008 Equity Incentive Plan (the "2008 Plan") for employees and nonemployees pursuant to which Intrexon's board of directors may grant share based awards, including stock options, to officers, key employees and nonemployees. Upon the effectiveness of the 2013 Omnibus Incentive Plan (the "2013 Plan"), no new awards may be granted under the 2008 Plan. As of March 31, 2015, there are 1,584,059 stock options outstanding under the 2008 Plan.

In July 2013, the Company adopted the 2013 Plan for employees and nonemployees pursuant to which Intrexon's board of directors may grant share based awards, including stock options and shares of common stock, to employees, officers, consultants, advisors and nonemployee directors. The 2013 Plan became effective upon the closing of the IPO. In June 2014, Intrexon's shareholders voted to amend the 2013 Plan to increase the numbers of shares authorized for issuance under the 2013 Plan from 7,000,000 to 10,000,000. In March 2015, Intrexon's board of directors approved, subject to shareholder approval at Intrexon's annual meeting in June 2015, an increase of 3,000,000 shares of common stock to be reserved for issuance under the 2013 Plan. As of March 31, 2015, there were 7,367,320 stock options outstanding under the 2013 Plan, and there were 2,486,364 remaining shares available for Intrexon to grant under the 2013 Plan.

Stock option activity under Intrexon's award plans was as follows:

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (Years)
Balances at December 31, 2014	8,323,544	$22.59	8.64
Granted	950,500	43.17	
Exercised	(204,487)	(12.56)	
Forfeited	(118,036)	(24.76)	
Expired	(142)	(7.12)	
Balances at March 31, 2015	8,951,379	24.97	8.49
Exercisable at March 31, 2015	2,568,344	18.74	7.32
Vested and Expected to Vest at March 31, 2015(1)	7,447,767	24.20	8.38

(1)The number of stock options expected to vest takes into account an estimate of expected forfeitures.

Total unrecognized compensation costs related to nonvested awards at March 31, 2015 and December 31, 2014 were $72,675 and $62,281, respectively, and are expected to be recognized over a weighted-average period of approximately three years.

Intrexon currently uses authorized and unissued shares to satisfy share award exercises.

Other Plans

As of March 31, 2015, there were 7,672,000 options outstanding under the AquaBounty 2006 Equity Incentive Plan ("AquaBounty Plan") at a weighted average exercise price of $0.30 per share of which 6,481,521 were exercisable. As of December 31, 2014 , there were 7,347,000 options outstanding under the AquaBounty Plan at a weighted average exercise price of $0.31 per share of which 6,171,520 were exercisable.

15. License Agreement

In January 2015, the Company and ZIOPHARM jointly entered into a license agreement with the University of Texas System Board of Regents on behalf of the University of Texas MD Anderson Cancer Center ("MD Anderson") whereby the Company received an exclusive license to certain research and development technologies owned and licensed by MD Anderson, including technologies relating to novel chimeric antigen receptor (CAR) T-cell therapies, as well as co-licenses and non-exclusive licenses to certain other related technologies. ZIOPHARM shall receive access to these technologies pursuant to the terms of the Company's ECC with ZIOPHARM. The Company issued 2,100,085 shares of its common stock valued at $59,579 to MD Anderson as consideration, which is included in research and development expenses in the accompanying consolidated statement of income for the three months ended March 31, 2015. Subject to certain exceptions, the license agreement expires on the last to occur of (i) the expiration of all patents licensed thereunder, or (ii) the twentieth anniversary of the date of the license agreement.

In connection with the license agreement, the Company, ZIOPHARM, and MD Anderson agreed to enter into a research and development agreement which will govern certain operational activities between the parties and pursuant to which ZIOPHARM will provide funding for certain research and development activities of MD Anderson for a period of three years, in an amount between $15,000 and $20,000 per year. The Company and ZIOPHARM are obligated to reimburse MD Anderson for out of pocket expenses for maintaining patents covering the licensed technologies.

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16. Commitments and Contingencies

Operating Leases

The Company leases facilities and certain equipment under noncancelable operating leases. The equipment leases are renewable at the option of the Company. At March 31, 2015, future minimum lease payments under operating leases having initial or remaining noncancelable lease terms in excess of one year are as follows:

2015	$2,914
2016	4,227
2017	2,709
2018	1,360
2019	1,276
2020	1,311
Thereafter	1,118
Total	$14,915

Rent expense, including other facility expenses, was $2,134 and $1,370 for the three months ended March 31, 2015 and 2014, respectively.

The Company maintains subleases for certain of its facilities. Rental income under sublease agreements was $425 and $91 for the three months ended March 31, 2015 and 2014, respectively. Future rental income approximates $991 for 2015, $993 for 2016, and $96 for 2017.

Contingencies

In March 2012, Trans Ova was named as a defendant in a licensing and patent infringement suit brought by XY, Inc. alleging that certain of Trans Ova's activities breach a licensing agreement and infringe on patents that XY, Inc. allegedly owns. Trans Ova is reviewing, defending and filing counter claims in the case. The matter may go to trial in 2015. Based on advice from legal counsel, Trans Ova believes that XY, Inc.'s complaints are without merit; however, no assurances can be given that this matter will be resolved in Trans Ova's favor. Furthermore, no assurances can be made that the legal proceedings will be concluded in accordance with the present schedule.

The Company may become subject to claims and assessments from time to time in the ordinary course of business. Such matters are subject to many uncertainties and outcomes are not predictable with assurance. The Company accrues liabilities for such matters when it is probable that future expenditures will be made and such expenditures can be reasonably estimated. As of March 31, 2015 and December 31, 2014, the Company does not believe that any such matters, individually or in the aggregate, will have a material adverse effect on the Company's business, financial condition, results of operations, or cash flows.

17. Related Party Transactions

Third Security and Affiliates

The Company reimburses Third Security for certain administrative services and out-of-pocket expenses incurred on the Company's behalf. The total amount of expenses reimbursed by the Company for the three months ended March 31, 2015 and 2014 was $41 and $24, respectively.

The Manager of Third Security is also the Chief Executive Officer ("CEO") and Chairman of the Board of Directors of the Company. Prior to 2015, the CEO did not receive compensation for his services as CEO, and as a result, the Company recorded $470 in compensation expense for the three months ended March 31, 2014 based on the estimated salary and benefits appropriate for the role. The Company anticipates that the CEO will participate in the Company's executive annual incentive compensation plan beginning in 2015.

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Transactions with ECC Parties

In addition to entities controlled by Third Security, any entity in which the Company holds equity securities, including securities received as upfront or milestone consideration, and which also are party to a collaboration with the Company are considered to be related parties.

In March 2015, the Company purchased 13,939,392 shares of common stock of AmpliPhi Biosciences Corporation ("AmpliPhi"), a collaborator, and 3,484,848 warrants for $2,300. Of the total purchase price, $1,979 was allocated to the value of the shares of common stock and $321 was allocated to the value of the warrants. The AmpliPhi warrants have been included in other assets on the consolidated balance sheet with a value of $756 as of March 31, 2015.

In conjunction with the ECC with ZIOPHARM (Note 5), the Company agreed to purchase up to an additional $50,000 of common stock in conjunction with securities offerings that may be conducted by ZIOPHARM in the future, subject to certain conditions and limitations. Between February 2011 and October 2013, the Company purchased an aggregate of $30,982 of ZIOPHARM securities. In February 2015, the Company purchased an additional $12,600 of ZIOPHARM securities. See Note 19 for additional discussion regarding this commitment.

The Company entered into an ECC with Histogenics Corporation ("Histogenics") in September 2014 and received a $10,000 convertible promissory note as upfront consideration. The note originally matured in September 2015 and accrued interest at 6.0% per annum. Upon the closing of Histogenics' IPO in December 2014, the note, with accrued interest, was converted to Histogenics common stock. Additionally, the Company purchased 1,772,364 shares of Histogenics common stock at $11.00 per share in the IPO.

In conjunction with the ECC with Oragenics (Note 5), the Company is entitled to, at its election, purchase up to 30% of securities offerings that may be conducted by Oragenics in the future, subject to certain conditions and limitations. In November 2013, the Company purchased 1,100,000 shares of Oragenics common stock at $2.50 per share. In September 2013, the Company purchased 1,300,000 shares of Oragenics common stock at $3.00 per share in a private transaction.

The Company recognized $12,796 and $7,398 of collaboration revenues from related parties in the three months ended March 31, 2015 and 2014, respectively.

18. Net Income per Share

The following table presents the computation of basic and diluted net income per share for the three months ended March 31, 2015 and 2014:

	Three Months Ended March 31,	
	2015	2014
Historical net income per share:		
Numerator:		
Net income attributable to Intrexon	$27,097	$4,115
Denominator:		
Weighted average shares outstanding, basic	106,103,848	97,325,729
Weighted average effect of dilutive stock options and warrants	2,037,886	2,012,669
Weighted average shares outstanding, diluted	108,141,734	99,338,398
Net income attributable to Intrexon per share, basic	$0.26	$0.04
Net income attributable to Intrexon per share, diluted	$0.25	$0.04

The Company excluded 4,719,991 and 6,197,500 stock options from the computation of diluted weighted average shares outstanding as of March 31, 2015 and 2014, respectively, for the three months then ended as they would have been anti-dilutive.

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19. Subsequent Events

In May 2015, the Company's board of directors approved the distribution to the Company's shareholders of 17,830,305 shares of ZIOPHARM common stock, representing all of the equity interests of ZIOPHARM held by the Company. The distribution shall constitute a dividend to shareholders of record as of June 4, 2015 and is expected to occur prior to the end of the second quarter. In connection with the distribution, pursuant to the terms of the 2013 Plan, the conversion terms of all outstanding options for shares of the Company's stock will be adjusted to reflect the value of the distribution with respect to shares of the Company's common stock.

In April 2015, the Company acquired 100% of Okanagan Specialty Fruits Inc. ("Okanagan"), a company which developed and received regulatory approval for the world's first non-browning apple without the use of any flavor-altering chemical or antioxidant additives, for approximately $10,000 in cash and 707,853 shares of Company common stock. In addition to supporting Okanagan's further commercialization and exploitation of its apple products, the Company expects to utilize its proprietary technologies to assist Okanagan in the development of further novel beneficial plant traits.

In March 2015, the Company signed a worldwide License and Collaboration Agreement ("Merck Agreement") with Ares Trading S.A. ("Ares Trading"), a subsidiary of the biopharmaceutical business of Merck KGaA, and ZIOPHARM through which the parties established a collaboration for the research and development and commercialization of certain products for the prophylactic, therapeutic, palliative or diagnostic use for cancer in humans. The Company expects the Merck Agreement to become effective in the second quarter following regulatory approval. Pursuant to the Merck Agreement, the Company will receive an upfront fee of $115,000, up to $826,000 of potential payments for development and commercial milestones for the first two products, and royalties ranging from the lower-single digits to the lower-double digits of the net sales derived from the sale of products developed under the Merck Agreement. The Company may also receive further cash fees upon certain technical milestones as provided for in the agreement as well as in the event that Ares Trading selects additional targets beyond the initial two targets. In conjunction with the Merck Agreement, the Company and ZIOPHARM amended their existing ECC (Note 5). The amendment modifies the scope of the ECC in connection with the Merck Agreement and provides that the Company will pay to ZIOPHARM 50% of all payments received for upfront fees, milestones and royalties under the Merck Agreement. The amendment also reduces the Company's commitment to purchase $50,000 of ZIOPHARM common stock (Note 17) to $43,500, which commitment has been satisfied as of March 31, 2015.

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Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following "Management's Discussion and Analysis of Financial Condition and Results of Operations" should be read in conjunction with the unaudited financial information and the notes thereto included in this Quarterly Report on Form 10-Q and our Annual Report on Form 10-K.

The following discussion contains forward-looking statements that reflect our plans, estimates and beliefs. Our actual results could differ materially from those discussed in the forward-looking statements and you are cautioned not to place undue reliance on forward-looking statements. Factors that could cause or contribute to these differences include those discussed below and elsewhere in this Quarterly Report on Form 10-Q, particularly in "Special Note Regarding Forward-Looking Statements" and "Risk Factors." The forward-looking statements included in this Quarterly Report on Form 10-Q are made only as of the date hereof.

Overview

We believe we are a leader in the field of synthetic biology, an emerging and rapidly evolving discipline that applies engineering principles to biological systems. Using our suite of proprietary and complementary technologies, we design, build and regulate gene programs, which are DNA sequences that consist of key genetic components. A single gene program or a complex, multi-genic program are fabricated and stored within a DNA vector. Vectors are segments of DNA used as a vehicle to transmit genetic information. DNA vectors can, in turn, be introduced into cells in order to generate a simple or complex cellular system, which are the basic and complex cellular activities that take place within a cell and the interaction of those systems in the greater cellular environment. It is these genetically modified cell systems that can be used to produce proteins, produce small molecules, or serve as cell-based products, which enable the development of new and improved products and manufacturing processes across a variety of end markets, including health, food, energy, environment, and consumer. Our synthetic biology capabilities include the ability to precisely control the amount, location and modification of biological molecules to control the function and output of living cells and optimize for desired results at an industrial scale.

We have devised our business model to bring many different commercial products to market through the formation of exclusive channel collaborations, or ECCs, with collaborators that have expertise within specific industry sectors. Through our ECCs, we provide expertise in the engineering, creation and modification of gene programs and cellular systems, and our collaborators are responsible for providing market and product development expertise, as well as regulatory, sales and marketing capabilities. Generally, our collaborators compensate us through payment of technology access fees, royalties, milestones and reimbursement of certain costs. This business model allows us to leverage our capabilities and capital across a broader landscape of product opportunities and end markets than we would be capable of addressing on our own. Alternatively, where a collaborator wishes to work with us to develop an early-stage program, we may execute a research collaboration pursuant to which we receive reimbursement for our development costs but the exclusive license rights, and related access fee, are deferred until completion of an initial research program.

In March 2015, we signed a worldwide License and Collaboration Agreement, or Merck Agreement, with Ares Trading S.A., or Ares Trading, a subsidiary of the biopharmaceutical business of Merck KGaA, and ZIOPHARM Oncology, Inc., or ZIOPHARM, through which the parties established a collaboration for the research and development and commercialization of certain products for the prophylactic, therapeutic, palliative or diagnostic use for cancer in humans. We expect the Merck Agreement to become effective in the second quarter following regulatory approval. Pursuant to the Merck Agreement, we will receive an upfront fee of $115.0 million, up to $826.0 million of potential payments for development and commercial milestones for the first two products, and royalties ranging from the lower-single digits to the lower-double digits of the net sales derived from the sale of products developed under the Merck Agreement. We may also receive further cash fees upon certain technical milestones as provided for in the agreement as well as in the event that Ares Trading selects additional targets beyond the initial two targets. We will pay ZIOPHARM 50 percent of all payments received for upfront fees, milestones and royalties under the Merck Agreement.

In certain strategic circumstances, we may enter into a joint venture with an ECC collaborator. In that event, we will enter into an ECC with a joint venture entity and may contribute access to our technology, cash or both into the joint venture which we will jointly control with our ECC collaborator. Pursuant to a joint venture agreement, we may be

required to contribute additional capital to the joint venture, and we may be able to receive a higher financial return than we would normally receive from an ECC to the extent that we and our ECC collaborator are successful in developing one or more products. We currently are party to several such joint venture agreements including: S & I Ophthalmic, LLC, or S & I Ophthalmic, which is a joint venture with Caraco Pharmaceutical Laboratories, Ltd., or Sun Pharmaceutical Subsidiary, an indirect subsidiary of Sun Pharmaceutical Industries Ltd., or Sun Pharmaceutical, an international specialty pharmaceutical company focused on chronic diseases; OvaXon, LLC, or OvaXon, which is a joint venture with OvaScience, Inc., or OvaScience, a life sciences company

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focused on the discovery, development and commercialization of new treatments for infertility; and Intrexon Energy Partners, LLC, or Intrexon Energy Partners, a joint venture with a select group of external investors, to optimize and scale-up our gas-to-liquid bioconversion platform for the production of certain fuels and lubricants.

In 2011, we entered into our first collaboration and have added new collaborations since then, either by entering into new agreements or expanding or adding fields to existing ECCs. To date, we have entered into 30 such agreements and expansions with 25 different counterparties, of which 28 remain active. We have 26 active ECCs, including four expansions, and two research collaborations that we anticipate could, if successful, become ECCs. Under the ECCs, we are developing products in the fields of healthcare, food, energy and consumer goods.

Mergers, acquisitions, and technology in-licensing

We may augment our suite of proprietary technologies through mergers or acquisitions of technologies which then become available to new or existing collaborators. Among other things, we seek to ensure that these acquired technologies are complementary to our existing technologies and that these mergers and acquisitions meet our desired return on investment and other economic criteria. In certain cases, such technologies may already be applied in the production of innovative products or services and in these cases, we seek to ensure that the target will achieve the creation of a new market or enable a disruptive position within an existing market for their existing products or services and that there is an opportunity for expansion of that unique position when complemented by our technology.

In April 2015, we acquired 100 percent of Okanagan Specialty Fruits Inc., or Okanagan, a company which developed and received regulatory approval for the world's first non-browning apple without the use of any flavor-altering chemical or antioxidant additives, for $10.0 million in cash and 707,853 shares of our common stock. In addition to supporting Okanagan's further commercialization and exploitation of its apple products, we expect to utilize our proprietary technologies to assist Okanagan in the development of further novel beneficial plant traits. We will begin consolidating Okanagan's results of operations and financial position upon the April 2015 closing date.

In February 2015, we acquired 100 percent of ActoGeniX NV, or ActoGeniX, a European clinical state biopharmaceutical company, for $32.7 million in cash and 965,377 shares of our common stock. ActoGeniX's platform technology complements our broad collection of technologies available for current and future collaborations. We began consolidating ActoGeniX's results of operations and financial position beginning on the February 2015 closing date.

In January 2015, we and ZIOPHARM jointly entered into a license agreement with the University of Texas System Board of Regents on behalf of the University of Texas MD Anderson Cancer Center ("MD Anderson") whereby we received an exclusive license to certain research and development technologies owned and licensed by MD Anderson, including technologies relating to novel chimeric antigen receptor (CAR) T-cell therapies, as well as co-licenses and non-exclusive licenses to certain other related technologies. ZIOPHARM shall receive access to these technologies pursuant to the terms of our ECC with ZIOPHARM. We issued 2,100,085 shares of our common stock valued at $59.6 million to MD Anderson as consideration. Subject to certain exceptions, the license agreement expires on the last to occur of (i) the expiration of all patents licensed thereunder, or (ii) the twentieth anniversary of the date of the license agreement.

In August 2014, we acquired 100 percent of the membership interests of Trans Ova Genetics, L.C., or Trans Ova, a provider of bovine reproductive technologies. Intrexon and Trans Ova intend to build upon Trans Ova's current platform with new capabilities with a goal of achieving higher levels of delivered value to dairy and beef cattle producers. The consideration paid for all the membership interests in Trans Ova consisted of $63.6 million in cash and the issuance of an aggregate of 1,444,388 shares of the Company's common stock. In addition, deferred cash valued at $20.1 million is payable to the former members of Trans Ova in three equal installments upon the first, second, and third anniversaries of the closing date. The agreement also provides for the payment to the former members of Trans Ova of a portion of certain cash proceeds in the event there is an award under certain litigation matters pending as of closing to which Trans Ova is a party. We began consolidating Trans Ova's results of operations and financial position beginning on the August 2014 closing date.

In March 2014, we acquired 100 percent of the outstanding common stock and securities convertible into common stock of Medistem, Inc., or Medistem, an entity engaged in the development of Endometrial Regenerative Cells, or ERCs, which are universal donor adult-derived stem cells. We intend to employ our synthetic biology platforms to

engineer a diverse array of cell-based therapeutic candidates using Medistem's multipotent ERCs. We began consolidating Medistem's results of operations and financial position beginning on the March 2014 closing date.

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Financial overview

We have incurred significant losses since our inception. We anticipate that we may continue to incur significant losses for the foreseeable future, and we may never achieve or maintain profitability. We have never generated any royalty revenues from sales of products by our collaborators and may never be profitable.

We expect our future capital requirements will be substantial, particularly as we continue to develop our business and expand our synthetic biology technology platform. We believe that our existing cash and cash equivalents, short-term and long-term investments, and cash expected to be received through our current collaborators and for sales of products and services provided by our consolidated subsidiaries will enable us to fund our operating expenses and capital expenditure requirements for at least the next 12 months.

Sources of revenue

We derive our revenues through the execution of ECCs for the development and commercialization of products enabled by our technologies. Generally, the terms of our ECCs provide that we receive some or all of the following: (i) technology access fees upon signing; (ii) reimbursements of costs incurred by us for our research and development and/or manufacturing efforts related to the specific application provided for in the ECC; (iii) milestone payments upon the achievement of specified development, regulatory and commercial activities; and (iv) royalties on sales of products arising from the collaboration.

Our technology access fees and milestone payments may be in the form of cash or securities of the collaborator. Our ECCs contain multiple arrangements and we typically defer revenues from the technology access fees and milestone payments received and recognize such revenues in the future over the anticipated performance period. We are also entitled to sublicensing revenues in those situations where our collaborators choose to license our technologies to other parties.

We also generate revenue through sales of advanced reproductive technologies, including bovine embryos derived from our embryo transfer and in vitro fertilization processes and from genetic preservation and sexed semen processes and applications of such processes to other livestock, as well as sales of livestock used in production. Revenue is recognized when (i) persuasive evidence of an arrangement exists, (ii) services have been rendered or delivery has occurred such that risk of loss has passed to the customer, (iii) the price is fixed or determinable, and (iv) collection from the customer is reasonably assured.

In future periods, our revenues will depend on the number of ECCs to which we are party, the advancement and creation of programs within our ECCs and the extent to which our collaborators bring products enabled by our technologies to market. Our revenues will also depend upon our ability to maintain or improve the volume and pricing of our current product and service offerings and to develop new offerings, including those arising from the Okanagan acquisition and those which may incorporate our technologies. Our revenues will also depend upon the ability of AquaBounty to receive regulatory approval and establish successful commercialization of its AquAdvantage® Salmon products. Our future revenues may also include additional revenue streams we may acquire through mergers and acquisitions. In light of our limited operating history and experience in consummating new ECCs and also the limited experience with our consolidated subsidiaries, there can be no assurance as to the timing, magnitude and predictability of revenues to which we might be entitled.

Cost of products and services revenues

Cost of products and services revenues includes primarily labor and related costs, drugs and supplies used primarily in the embryo transfer and in vitro fertilization processes, livestock and feed used in production, and facility charges, including rent and depreciation. Fluctuations in the price of livestock and feed have not had a significant impact on our operating margins and no derivative financial instruments are used to mitigate the price risk.

Research and development expenses

We recognize research and development expenses as they are incurred. Our research and development expenses consist primarily of:

- salaries and benefits, including stock-based compensation expense, for personnel in research and development functions;
- fees paid to consultants and contract research organizations who perform research on our behalf and under our direction;

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- costs related to laboratory supplies used in our research and development efforts;
- costs related to certain in-licensed technology rights;
- depreciation of leasehold improvements and laboratory equipment;
- amortization of patents and related technologies acquired in mergers and acquisitions; and
- rent and utility costs for our research and development facilities.

We have no individually significant research and development projects and our research and development expenses primarily relate to either the costs incurred to expand or otherwise improve our multiple platform technologies or the costs incurred to develop a specific application of our technologies in support of current or prospective collaborators. Research and development expenses typically do not include significant development, including pre-clinical or clinical development, activities since they are the responsibility of our collaborators. Research and development expenses incurred for programs we support pursuant to an ECC agreement are typically reimbursed by the collaborator at cost and all other research and development programs may be terminated or otherwise deferred at our discretion. The amount of our research and development expenses may be impacted by, among other things, the number of ECCs and the number and size of programs we may support on behalf of an ECC.

The table below summarizes our research and development expenses incurred to expand or otherwise improve our multiple platform technologies or the costs incurred to develop a specific application of our technologies in support of current or prospective collaborators for the three months ended March 31, 2015 and 2014. Other research and development expenses for these periods include indirect salaries and overhead expenses that are not allocated to either expanding or improving our multiple platform technologies or specific applications of our technologies in support of current or prospective collaborators.

	Three Months Ended March 31,	
	2015	2014
	(In thousands)	
Expansion or improvement of our platform technologies	$64,512	$3,605
Specific applications of our technologies in support of current and prospective collaborators	8,352	5,246
Other	6,443	3,207
Total research and development expenses	$79,307	$12,058

We expect that our research and development expenses will increase as we continue to enter into ECCs and as we expand our offerings across additional market sectors. We believe these increases will likely include increased costs related to the hiring of additional personnel in research and development functions, increased costs paid to consultants and contract research organizations and increased costs related to laboratory supplies. Research and development expenses may also increase as a result of ongoing research and development operations which we might assume through mergers and acquisitions.

Selling, general and administrative expenses

Selling, general and administrative expenses consist primarily of salaries and related costs, including stock-based compensation expense, for employees in executive, operational, finance, sales and marketing, information technology and legal functions. Other significant selling, general and administrative expenses include rent and utilities, advertising, insurance, legal services and expenses associated with obtaining and maintaining our intellectual property.

We expect that our selling, general and administrative expenses will increase as we continue to operate as a public company. We believe that these increases will likely include costs related to the hiring of additional personnel and increased fees for outside consultants, lawyers and accountants, including costs to comply with corporate governance, internal controls and similar requirements applicable to public companies. Selling, general and administrative expenses may also increase as a result of ongoing operations which we might assume through mergers and acquisitions.

Other income (expense), net

We hold equity securities received and/or purchased from certain collaborators. Other than investments accounted for using the equity method discussed below, we elected the fair value option to account for our equity securities held in these collaborators.

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These equity securities are recorded at fair value at each reporting date. Unrealized appreciation (depreciation) resulting from fair value adjustments are reported as other income (expense) in the consolidated statements of income. As such, we bear the risk that fluctuations in the securities' share prices may significantly impact our results of operations.

Interest income consists of interest earned on our cash and cash equivalents and short-term and long-term investments. Interest expense pertains to deferred consideration payable to the former members of Trans Ova and long term debt.

Equity in net loss of affiliates

Equity in net income or loss of affiliates is our pro-rata share of our equity method investments' operating results, adjusted for accretion of basis difference. We account for investments in Intrexon Energy Partners, S & I Ophthalmic and OvaXon using the equity method of accounting since we have the ability to exercise significant influence, but not control, over the operating activities of these joint ventures.

Results of operations

Comparison of the three months ended March 31, 2015 and the three months ended March 31, 2014

The following table summarizes our results of operations for the three months ended March 31, 2015 and 2014, together with the changes in those items in dollars and as a percentage:

	Three Months Ended March 31,		Dollar Change	Percent Change	
	2015	2014			
	(In thousands)				
Revenues:					
Collaboration revenues	$14,735	$7,837	$6,898	88.0	%
Product revenues	8,933	—	8,933	N/A	
Service revenues	9,957	—	9,957	N/A	
Other revenues	224	17	207	1,217.6	%
Total revenues	33,849	7,854	25,995	331.0	%
Operating expenses					
Cost of products	8,675	33	8,642	26,187.9	%
Cost of services	5,362	—	5,362	N/A	
Research and development	79,307	12,058	67,249	557.7	%
Selling, general and administrative	27,628	13,635	13,993	102.6	%
Total operating expenses	120,972	25,726	95,246	370.2	%
Operating loss	(87,123)	(17,872)	(69,251)	387.5	%
Total other income, net	115,678	21,963	93,715	426.7	%
Equity in loss of affiliates	(1,956)	(536)	(1,420)	264.9	%
Income before income taxes	26,599	3,555	23,044	648.2	%
Income tax expense	(795)	(306)	(489)	159.80	%
Net income	25,804	3,249	22,555	694.2	%
Net loss attributable to noncontrolling interests	1,293	866	427	49.3	%
Net income attributable to Intrexon	$27,097	$4,115	$22,982	558.5	%

Collaboration revenues

The following table shows the collaboration revenue recognized for upfront and milestone payments received from our collaborators and reimbursements received for research and development services provided to our collaborators for the three months ended March 31, 2015 and 2014, together with the changes in those items:

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	Upfront and Milestone Payments			Research and Development Services			Total		
	Three Months Ended March 31,		Dollar Change	Three Months Ended March 31,		Dollar Change	Three Months Ended March 31,		Dollar Change
	2015	2014		2015	2014		2015	2014	
	(In thousands)								
ZIOPHARM Oncology, Inc.	$644	$644	$—	$3,157	$2,036	$1,121	$3,801	$2,680	$1,121
Oragenics, Inc.	262	262	—	8	533	(525)	270	795	(525)
Fibrocell Science, Inc.	448	448	—	1,713	862	851	2,161	1,310	851
Genopaver, LLC	69	69	—	600	421	179	669	490	179
S & I Ophthalmic, LLC	—	—	—	755	879	(124)	755	879	(124)
OvaXon, LLC	—	—	—	644	169	475	644	169	475
Intrexon Energy Partners, LLC	625	—	625	2,185	—	2,185	2,810	—	2,810
Persea Bio, LLC	125	—	125	115	—	115	240	—	240
Other	858	459	399	2,527	1,055	1,472	3,385	1,514	1,871
Total	$3,031	$1,882	$1,149	$11,704	$5,955	$5,749	$14,735	$7,837	$6,898

Collaboration revenues increased $6.9 million due to (i) the recognition of deferred revenue for upfront payments received from collaborations or expansions thereof signed by us between April 1, 2014 and March 31, 2015 and our collaboration with Intrexon Energy Partners, a joint venture in which we own 50 percent, which was signed in March 2014; (ii) recognition of research and development services performed by us pursuant to these new collaborations; and (iii) increased research and development services performed by us for collaborations in effect prior to April 1, 2014 as a result of the progression of current programs and the initiation of new programs with these collaborators, including ZIOPHARM, Fibrocell Science, Inc., and our joint venture with OvaXon.

Product and service revenues and cost of products and services

Product revenue includes $7.5 million from the sale of pregnant cows, live calves and livestock used in production. Service revenue totaling $8.3 million relates to the provision of in vitro fertilization and embryo transfer services performed. Cost of products and services were $13.9 million which primarily consist of employee compensation costs, livestock, feed, drug supplies and facility charges related to the production of such products and services.

Research and development expenses

Research and development expenses were $79.3 million for the three months ended March 31, 2015 compared to $12.1 million for the three months ended March 31, 2014, an increase of $67.2 million, or 558 percent. In January 2015, we issued 2,100,085 shares of our common stock valued at $59.6 million to the University of Texas MD Anderson Cancer Center, or MD Anderson, in exchange for an exclusive license to certain technologies owned by MD Anderson. Salaries, benefits and other personnel costs increased $3.3 million due to (i) increases in research and development headcount to support the new collaborations discussed above and (ii) compensation expenses related to performance and retention incentives for research and development employees. Lab supplies and consultants expenses increased $2.0 million as a result of the increased level of research and development services provided to our collaborators.

Selling, general and administrative expenses

Selling, general and administrative expenses were $27.6 million for the three months ended March 31, 2015 compared to $13.6 million for the three months ended March 31, 2014, an increase of $14.0 million, or 103 percent. Salaries, benefits and other personnel costs increased $7.9 million due to (i) the inclusion of selling, general and administrative employees of companies we have acquired since April 1, 2014, including Trans Ova and ActoGeniX and (ii) compensation expenses related to performance and retention incentives for general and administrative employees. Stock-based compensation expenses for the annual options granted to our non-employee directors, pursuant to our

non-employee director compensation policy, increased $1.2 million due to a higher grant-date fair value in March 2015 compared to March 2014. Legal and professional expenses increased $2.4 million primarily due to costs associated with the acquisitions of ActoGeniX, Okanagan and Exemplar, the license agreement with MD Anderson, the January 2015 public securities offering and other business development activity.

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Total other income, net

Total other income, net, was $115.7 million for the three months ended March 31, 2015 compared to $22.0 million for the three months ended March 31, 2014, an increase of $93.7 million or 427 percent. This increase was primarily related to the increase in fair value of our equity securities portfolio, including our holdings in ZIOPHARM.

Equity in net loss of affiliates

Equity in net loss of affiliates for the three months ended March 31, 2015 and 2014 includes our pro-rata share of the net losses of our investments we account for using the equity method of accounting. The $1.4 million increase in net loss of affiliates is due to a full quarter of net losses incurred by Intrexon Energy Partners in 2015.

Liquidity and capital resources

Sources of liquidity

We have incurred losses from operations since our inception and as of March 31, 2015, we had an accumulated deficit of $431.1 million. From our inception through March 31, 2015, we have funded our operations principally with the proceeds received from the sale of $509.5 million of our preferred stock, net proceeds from our IPO of $168.3 million and net proceeds from our January 2015 public offering of $110.0 million. As of March 31, 2015, we had cash and cash equivalents of $99.0 million and short-term and long-term investments of $91.5 million. Cash in excess of immediate requirements is invested primarily in money market funds, certificates of deposits and U.S. government debt securities in order to maintain liquidity and capital preservation.

Cash flows

The following table sets forth the significant sources and uses of cash for the periods set forth below:

	Three Months Ended March 31,	
	2015	2014
	(In thousands)	
Net cash provided by (used in):		
Operating activities	$(13,041)	$9,479
Investing activities	(26,033)	25,855
Financing activities	110,659	25,214
Effect of exchange rate changes on cash and cash equivalents	(36)	(5)
Net increase in cash and cash equivalents	$71,549	$60,543

Cash flows from operating activities:

Net cash used in operating activities was $13.0 million for the three months ended March 31, 2015 compared to $9.5 million net cash provided by operating activities for the three months ended March 31, 2014. During the three months ended March 31, 2015, we had net income of $25.8 million which includes noncash items of (i) $115.5 million of unrealized appreciation on our equity securities, (ii) $59.6 million of common stock issued to MD Anderson recorded as research and development expense, and (iii) $10.3 million of stock-based compensation expense. After consideration of noncash items, we used $13.0 million of net cash in operating activities. Net cash provided by operating activities during the three months ended March 31, 2014 primarily includes the receipt of a $25.0 million technology access fee from our ECC with Intrexon Energy Partners and our net income of $3.2 million, which includes unrealized appreciation on equity securities of $21.9 million.

Cash flows from investing activities:

Net cash used in investing activities was $26.0 million for the three months ended March 31, 2015 compared to net cash used in investing activities of $25.9 million for the three months ended March 31, 2014. During the three months ended March 31, 2015, we used $29.6 million, net of cash received, for the acquisition of ActoGeniX, $14.9 million for the purchase of equity securities and warrants of two of our collaborators, including $12.6 million of ZIOPHARM equity securities, and $2.7 million for purchases of property, plant and equipment. These cash outflows were offset by $24.0 million of proceeds from the maturity of short-term and long-term investments. During the three months ended March 31, 2014, we received proceeds from the

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maturity of short-term and long-term investments of $35.2 million. These proceeds were offset by cash outflows of $4.9 million for acquisition of Medistem, a $1.5 million capital contribution to OvaXon and $3.0 million in purchases of property and equipment.

Cash flows from financing activities:

Net cash provided by financing activities was $110.7 million for the three months ended March 31, 2015 compared to $25.2 million for the three months ended March 31, 2014. During the three months ended March 31, 2015, we received $110.0 million of net proceeds from our public offering which closed in January 2015. During the three months ended March 31, we received $25.0 million of proceeds from the private placement of our common stock which closed in March 2014.

Future capital requirements

We established our current strategy and business model of commercializing our technologies through collaborators with development expertise in 2010 and we consummated our first ECC in January 2011. We believe that we will continue to consummate ECCs with new companies across our various market sectors, which will result in additional upfront, milestone and cost recovery payments in the future.

We believe that our existing cash and cash equivalents, short-term and long-term investments, and cash expected to be received from our current collaborators and for sales of products and services provided by our consolidated subsidiaries will enable us to fund our operating expenses and capital expenditure requirements for at least the next 12 months.

We have based our estimates on assumptions that may prove to be wrong, and we may use our available capital resources sooner than we currently expect. Our future capital requirements will depend on many factors, including:

- progress in our research and development programs, as well as the magnitude of these programs;
- the timing, receipt and amount of upfront, milestone and other payments, if any, from present and future collaborators, if any;
- the timing, receipt and amount of sales and royalties, if any, from our potential products;
- our ability to maintain or improve the volume and pricing of our current product offerings and to develop new offerings, including those which may incorporate new technologies;
- the timing, receipt and amount of funding under future government contracts, if any;
- our ability to maintain and establish additional collaborative arrangements and/or new business initiatives;
- the timing of regulatory approval of AquaBounty products;
- the resources, time and cost required for the preparation, filing, prosecution, maintenance and enforcement of patent claims;
- strategic mergers and acquisitions, including both the upfront acquisition cost as well as the cost to integrate, maintain, and expand the strategic target; and
- the costs associated with legal activities, including litigation, arising in the course of our business activities and our ability to prevail in any such legal disputes.

Until such time, if ever, as we can generate positive operating cash flows, we may finance our cash needs through a combination of equity offerings, debt financings, government or other third-party funding, strategic alliances and licensing arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interests of our common shareholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our common shareholders. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we raise additional funds through government or other third-party funding, marketing and distribution arrangements or other collaborations, strategic alliances or licensing arrangements with

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third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates or to grant licenses on terms that may not be favorable to us.

Contractual obligations and commitments

The following table summarizes our significant contractual obligations and commercial commitments at March 31, 2015 and the effects such obligations are expected to have on our liquidity and cash flows in future periods:

	Total	Less Than 1 Year (1)	1 - 3 Years	3 - 5 Years	More Than 5 Years
	(In thousands)				
Operating Leases	$14,915	$4,108	$6,140	$2,563	$2,104
Deferred consideration	20,717	7,311	13,406	—	—
Long term debt	7,858	1,426	1,043	689	4,700
	$43,490	$12,845	$20,589	$3,252	$6,804

(1) In April 2015, we acquired 100 percent of Okanagan for approximately $10.0 million in cash and 707,853 shares of our common stock and is excluded from the table above.

In addition to the obligations in the table above, as of March 31, 2015 we also have the significant contractual obligations described below.

We acquired 100 percent of the outstanding capital stock of Immunologix in October 2011. The transaction included a contingent consideration arrangement which may require us to pay the selling shareholders 50 percent, subject to a maximum of $2.0 million, of revenue generated from Immunologix's technology applied towards a specific target as defined in the agreement up to a maximum of $2.0 million. This amount is not included in the table above due to the uncertainty of whether, if ever, we will pay this contingent consideration.

We are also party to in-licensed research and development agreements with various academic and commercial institutions where we could be required to make future payments for annual maintenance fees as well as for milestones and royalties we might receive upon commercial sales of products which incorporate their technologies. These agreements are generally subject to termination by us and therefore no amounts are included in the tables above. At March 31, 2015, we had research and development commitments with third parties totaling $6.8 million that had not yet been incurred.

In January 2009, AquaBounty was awarded a grant to provide funding of a research and development project from the Atlantic Canada Opportunities Agency, a Canadian government agency. The total amount available under the award is USD$2.3 million, which AquaBounty can claim over a five year period. All amounts claimed by AquaBounty must be repaid in the form of a 10 percent royalty on any products commercialized out of this research and development project until fully paid. Because the timing of commercialization is subject to regulatory approval, the timing of repayment is uncertain. As of the acquisition date, AquaBounty had claimed $2.0 million of the available funds and this amount was recorded on our audited consolidated balance sheet at its acquisition date fair value of $1.1 million. The Company accretes the difference of $0.9 million between the face value of amounts drawn and the acquisition date fair value over the expected period of repayment. Since the acquisition date and through March 31, 2015, AquaBounty had made subsequent draws of $0.8 million resulting in total long-term debt of $1.9 million as of March 31, 2015. This amount is not included in the table above due to the uncertainty of the timing of repayment.

In conjunction with the formation of a joint venture with an indirect subsidiary of Sun Pharmaceutical Industries, Ltd. in September 2013, we committed to making future capital contributions to the joint venture, subject to certain conditions and limitations, in order to comply with the obligations of the joint venture. In cases in which the board of managers of the joint venture determines that additional capital contributions are necessary, we have committed to making additional capital contributions subject to certain limitations. These future capital contributions are not included in the table above due to the uncertainty of the timing and amounts of such contributions.

In conjunction with the formation of a joint venture with OvaScience in December 2013, we may make future capital contributions to the joint venture. In cases in which the board of the joint venture determines that additional capital contributions are necessary, we have the option of making additional capital contributions subject to certain limitations. These

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future capital contributions are not included in the table above due to the uncertainty of the timing and amounts of such contributions.

In conjunction with the formation of a joint venture with Intrexon Energy Partners in March 2014, we committed to making future capital contributions to the joint venture in the amount of $25.0 million at the request of the board of managers of Intrexon Energy Partners and subject to certain conditions and limitations. As of March 31, 2015, the Company's remaining commitment was $22.9 million. These future capital contributions are not included in the table above due to the uncertainty of the timing and amounts of such contributions.

In August 2014, we acquired all of the membership interests of Trans Ova and agreed to pay a portion of certain cash proceeds in the event there is an award under certain litigation matters pending as of closing to which Trans Ova is a party. These amounts are not included in the table above due to the uncertainty of whether any amounts may be due.

In conjunction with a prior transaction associated with Trans Ova's subsidiary, ViaGen, in September 2012, the Company may be obligated to make certain future contingent payments to the former equity holders of ViaGen, up to a total of $6.0 million if certain revenue targets, as defined in the share purchase agreement, are met. This amount is not included in the table above due to the uncertainty of when the Company will make any of these future payments, if ever.

In January 2015, we and ZIOPHARM jointly entered into a license agreement with MD Anderson whereby we received an exclusive license to certain technologies owned by MD Anderson. ZIOPHARM shall receive access to these technologies pursuant to the terms of our ECC. We and ZIOPHARM are obligated to reimburse MD Anderson for out of pocket expenses for maintaining patents covering the licensed technologies. These reimbursements are not included in the table above due to the uncertainty of the timing and amounts of such reimbursements.

Net operating losses

As of March 31, 2015, we had net operating loss carryforwards of approximately $281.1 million for U.S. federal income tax purposes available to offset future taxable income and U.S. federal and state research and development tax credits of $6.8 million, prior to consideration of annual limitations that may be imposed under Section 382 of the Internal Revenue Code of 1986, as amended, or Section 382. These carryforwards begin to expire in 2022. Our direct foreign subsidiaries have foreign loss carryforwards of approximately $75.5 million, all of which do not expire.

Our past issuances of stock and mergers and acquisitions have resulted in ownership changes within the meaning of Section 382. As a result, the utilization of portions of our net operating losses may be subject to annual limitations. As of March 31, 2015, approximately $16.4 million of our net operating losses generated prior to 2008 are limited by Section 382 to annual usage limits of approximately $1.5 million. As of March 31, 2015, approximately $19.1 million of net operating losses were inherited via acquisition and are limited based on the value of the target at the time of the transaction. Future changes in stock ownership may also trigger an ownership change and, consequently, a Section 382 limitation.

Off-balance sheet arrangements

We did not have during the periods presented, and we do not currently have, any off-balance sheet arrangements, other than operating leases as mentioned above, as defined under Securities and Exchange Commission, or SEC, rules.

Critical accounting policies and estimates

Our management's discussion and analysis of our financial condition and results of operations is based on our consolidated financial statements, which we have prepared in accordance with generally accepted accounting principles in the United States, or U.S. GAAP. The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, as well as the reported revenues and expenses during the reporting periods. We evaluate these estimates and judgments on an ongoing basis. We base our estimates on historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Our actual results may differ from these estimates under different assumptions or conditions.

There have been no material changes to our critical accounting policies from those described in "Management's discussion and analysis of financial condition and results of operations" included in our Annual report on Form 10-K

for the year ended December 31, 2014.

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Recent accounting pronouncements

For information with respect to recent accounting pronouncements and the impact of these pronouncement on our consolidated financial statements, see Note 2 – "Summary of Significant Accounting Policies" in the notes to the consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

The following sections provide quantitative information on our exposure to interest rate risk, stock price risk, and foreign currency exchange risk. We make use of sensitivity analyses which are inherently limited in estimating actual losses in fair value that can occur from changes in market conditions.

Interest rate risk

We had cash, cash equivalents and short-term and long-term investments of $190.5 million and $143.1 million at March 31, 2015 and December 31, 2014, respectively. Our cash and cash equivalents and short-term and long-term investments consist of cash, money market funds, U.S. government debt securities and certificates of deposit. The primary objective of our investment activities is to preserve principal, maintain liquidity and maximize income without significantly increasing risk. Our investments consist of U.S. government debt securities, commercial paper and certificates of deposit which may be subject to market risk due to changes in prevailing interest rates that may cause the fair values of our investments to fluctuate. We believe that a hypothetical 100 basis point increase in interest rates would not materially affect the fair value of our interest-sensitive financial instruments and any such losses would only be realized if we sold the investments prior to maturity.

Investments in publicly traded companies

We have common stock investments in several publicly traded companies that are subject to market price volatility. We have adopted the fair value method of accounting for these investments, except for our investment in AquaBounty as further described below, and therefore, have recorded them at fair value at the end of each reporting period with the unrealized gain or loss recorded as a separate component of other income (expense), net for the period. As of March 31, 2015 and December 31, 2014 the original aggregate cost basis of these investments was $188.5 million and $173.9 million, respectively, and the market value was $294.9 million and $164.9 million, respectively. The fair value of these investments is subject to fluctuation in the future due to the volatility of the stock market, changes in general economic conditions and changes in the financial conditions of these companies. The fair value of these investments as of March 31, 2015 would be approximately $324.4 million and $235.9 million, respectively, based on a hypothetical 10 percent increase or 20 percent decrease in the value of the investments. The fair value of these investments as of December 31, 2014 would be approximately $181.4 million and $131.9 million, respectively, based on a hypothetical 10 percent increase or 20 percent decrease in the value of the investments.

In November 2012, we acquired 47.56 percent of the outstanding common stock of AquaBounty and we accounted for this investment under the equity method of accounting for the period from acquisition date through March 15, 2013. On March 15, 2013, we acquired 18,714,814 additional shares of AquaBounty common stock for $4.9 million, thereby increasing our aggregate ownership to 53.82 percent upon closing. Accordingly, effective upon closing of the acquisition of the additional shares, we consolidated the assets and operating results of AquaBounty in our consolidated financial statements. On March 20, 2014, we acquired 19,040,366 additional shares of AquaBounty common stock for $10.0 million, thereby increasing our aggregate ownership to 59.85 percent upon closing. The common stock of AquaBounty is traded on the London Stock Exchange and the fair value of our investment in AquaBounty at March 31, 2015 and December 31, 2014 was $19.9 million and $22.8 million, respectively. The fair value of our investment in AquaBounty as of March 31, 2015 would be approximately $21.8 million and $15.9 million, respectively, based on a hypothetical 10 percent increase or 20 percent decrease in the share price of AquaBounty. The fair value of our investment in AquaBounty as of December 31, 2014 would be approximately $25.1 million and $18.2 million, respectively, based on a hypothetical 10 percent increase or 20 percent decrease in the share price of AquaBounty.

Foreign currency exchange risk

Because the common stock of AquaBounty is traded on the London Stock Exchange, the fair value of our holdings is subject to fluctuations in foreign currency rates. In addition, some of our subsidiaries' assets and current expenses are denominated in foreign currencies. We do not hedge our foreign currency exchange rate risk. The effect of a

hypothetical 10 percent change in foreign currency exchange rates applicable to our business would not have a material impact on our consolidated financial statements.

Item 4. Controls and Procedures

Pursuant to Rule 13a-15(b) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), we carried out an evaluation, under supervision and with the participation of our management, including our Chief Executive Officer ("CEO"), who is our principal executive officer, and our Chief Financial Officer ("CFO"), who is our principal financial officer, of the effectiveness of the design and operation of our disclosure controls and procedures (as defined under Rule 13a-15(e) and 15(d)-15(e) under the Exchange Act) as of the end of the period covered by this report. Based upon that evaluation, as of the end of the period covered by this report, our CEO and CFO concluded that our disclosure controls and procedures are effective to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act, is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our CEO and CFO, as appropriate, to allow timely decisions regarding required disclosure.

In August 2014, we completed the acquisition of Trans Ova Genetics, L.C. (Trans Ova). Accordingly, our assessment of internal controls over financial reporting for the year ended December 31, 2014 excluded Trans Ova from the scope of our report. Under guidelines established by the SEC, companies are permitted to exclude acquisitions from their assessment of internal control over financial reporting during the first year of an acquisition while integrating the acquired company. During the integration period management is developing additional controls to ensure the financial information provided by Trans Ova is complete and accurate in all material respects. We expect this effort to be completed during 2015.

There has been no change in our internal control over financial reporting during the quarter ended March 31, 2015, that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

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PART II. OTHER INFORMATION

Item 1. Legal Proceedings

We are involved in litigation or legal matters incidental to our business activities. While the outcome of these matters cannot be predicted with certainty, we are vigorously defending them and do not currently expect that any of them will have a material adverse effect on our business or financial position. However, should one or more of these matters be resolved in a manner adverse to our current expectation, the effect on our results of operations for a particular fiscal reporting period could be material.

Item 1A. Risk Factors

As of the date of this report, there are no material changes to the risk factors previously disclosed in our Annual Report on Form 10-K for the year ended December 31, 2014. In evaluating our risks, readers should carefully consider the risk factors discussed in our Annual Report on Form 10-K for the year ended December 31, 2014, which could materially affect our business, financial condition or operating results, in addition to the other information set forth in this report and in our other filings with the Securities and Exchange Commission.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

(a) Sales of Unregistered Securities

From January 1, 2015 through March 31, 2015, we consummated the following transactions involving the issuance of unregistered securities:

- the issuance of 307,074 unregistered shares of our common stock on February 24, 2015 in connection with our acquisition of all of the remaining equity interests in Exemplar Genetics, LLC, as disclosed in our Annual Report on Form 10-K filed on March 2, 2015;
- the issuance of 965,377 unregistered shares of our common stock on February 24, 2015 in connection with our acquisition of ActoGeniX NV, as disclosed in our Annual Report on Form 10-K filed on March 2, 2015; and
- the issuance of 2,000,185 unregistered shares of our common stock on March 11, 2015 in connection with our license, securities issuance and letter agreements with the University of Texas MD Anderson Cancer Center, as disclosed in our Current Report on Form 8-K filed on January 14, 2015, as amended on January 28, 2015.

(b) Use of Proceeds

On August 7, 2013, our registration statement on Form S-1 (File No. 333-189853) was declared effective by the Securities and Exchange Commission for our initial public offering pursuant to which we sold an aggregate of 11,499,998 shares of our common stock (inclusive of 1,499,999 shares of common stock sold by us pursuant to the full exercise of an overallotment option granted to the underwriters in connection with the offering) at a price to the public of $16.00 per share for aggregate gross offering proceeds of approximately $184.0 million. J.P. Morgan Securities LLC and Barclays Capital Inc. acted as joint book-running managers. On August 13, 2013, we closed the sale of such shares, resulting in net proceeds to us of approximately $168.3 million after deducting underwriting discounts and commissions of approximately $12.9 million and other offering expenses of approximately $2.8 million. No payments were made by us to directors, officers or persons owning ten percent or more of our common stock or to their associates, or to our affiliates. We invested the funds received in cash equivalents and other short-term and long-term investments in accordance with our investment policy. There has been no material change in the planned use of proceeds from our initial public offering as described in our final prospectus, dated August 7, 2013, and filed with the Securities and Exchange Commission on August 8, 2013 pursuant to Rule 424(b).

On January 27, 2015, we closed a public offering of 4,312,500 shares of our common stock (inclusive of 562,500 shares of common stock sold by us pursuant to the full exercise of an option granted to the underwriters in connection with the offering) at a public offering price of $27.00 per share for aggregate gross offering proceeds of approximately $116.4 million. J.P. Morgan Securities LLC and Merrill Lynch, Pierce, Fenner & Smith Incorporate acted as joint book-running managers. Net proceeds to us were approximately $110.0 million after deducting underwriting discounts and commissions of approximately $6.1 million and other offering expenses of approximately $0.3 million. No payments were made by us to directors, officers or persons owning ten percent or more of our common stock or to their associates, or to our affiliates. We invested the funds received in cash equivalents and other short-term and long-term investments in accordance with our investment policy. There

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has been no material change in the planned use of proceeds from this offering as described in our final prospectus, dated January 21, 2015, and filed with the Securities and Exchange Commission on January 22, 2015 pursuant to Rule 424(b).

(c) Issuer Purchases of Equity Securities

Not applicable.

Item 6. Exhibits

Exhibit No.	Description
10.1*	Letter Agreement by and between ZIOPHARM Oncology, Inc., Intrexon Corporation and The University of Texas System Board of Regents on behalf of The University of Texas MD Anderson Cancer Center, dated as of January 9, 2015 (incorporated by reference to Exhibit 10.17 to Intrexon Corporation's Annual Report on Form 10-K for the period ended December 31, 2014, filed on March 2, 2015 with the Securities and Exchange Commission)
10.2*	Securities Issuance Agreement by and among Intrexon Corporation, The University of Texas System Board of Regents on behalf of The University of Texas MD Anderson Cancer Center dated as of January 13, 2015 (incorporated by reference to Exhibit 10.18 to Intrexon Corporation's Annual Report on Form 10-K for the period ended December 31, 2014, filed on March 2, 2015 with the Securities and Exchange Commission)
10.3*	Securities Issuance Agreement by and among Intrexon Corporation, The University of Texas System Board of Regents on behalf of The University of Texas MD Anderson Cancer Center dated as of January 13, 2015 (incorporated by reference to Exhibit 10.19 to Intrexon Corporation's Annual Report on Form 10-K for the period ended December 31, 2014, filed on March 2, 2015 with the Securities and Exchange Commission)
10.4*	Registration Rights Agreement by and among Intrexon Corporation, The University of Texas System Board of Regents on behalf of The University of Texas MD Anderson Cancer Center dated as of January 13, 2015 (incorporated by reference to Exhibit 10.20 to Intrexon Corporation's Annual Report on Form 10-K for the period ended December 31, 2014, filed on March 2, 2015 with the Securities and Exchange Commission)
10.5*#	License Agreement by and among ZIOPHARM Oncology, Inc., Intrexon Corporation and The University of Texas System Board of Regents on behalf of The University of Texas MD Anderson Cancer Center, dated as of January 13, 2015 (incorporated by reference to Exhibit 10.21 to Intrexon Corporation's Annual Report on Form 10-K for the period ended December 31, 2014, filed on March 2, 2015 with the Securities and Exchange Commission)
10.6*##	License and Collaboration Agreement, dated as of March 27, 2015, among Intrexon Corporation, ARES Trading S.A. and ZIOPHARM Oncology, Inc. (incorporated by reference to Exhibit 10.1 to Intrexon Corporation's Current Report on Form 8-K, filed on April 2, 2015 with the Securities and Exchange Commission)
10.7*	Second Amendment to Exclusive Channel Partner Agreement, dated March 27, 2015, between Intrexon Corporation and ZIOPHARM Oncology, Inc. (incorporated by reference to Exhibit 10.2 to Intrexon Corporation's Current Report on Form 8-K, filed on April 2, 2015 with the Securities and Exchange Commission)
31.1	Certification of Randal J. Kirk, Chairman and Chief Executive Officer (Principal Executive Officer) of Intrexon Corporation, pursuant to Rules 13a-14(a) and 15d-14(a) promulgated under the Securities Exchange Act of 1934, as amended, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Rick L. Sterling, Chief Financial Officer (Principal Financial Officer) of Intrexon Corporation, pursuant to Rules 13a-14(a) and 15d-14(a) promulgated under the Securities Exchange Act of 1934, as amended, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1**	

	Certification of Randal J. Kirk, Chairman and Chief Executive Officer (Principal Executive Officer) of Intrexon Corporation, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2**	Certification of Rick L. Sterling, Chief Financial Officer (Principal Financial Officer) of Intrexon Corporation, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
	Interactive Data File (Quarterly Report on Form 10-Q, for the quarterly period ended March 31, 2015, formatted in XBRL (eXtensible Business Reporting Language)).
101.0**	Attached as Exhibit 101.0 to this Quarterly Report on Form 10-Q are the following documents formatted in XBRL: (i) the Consolidated Balance Sheets at March 31, 2015 and December 31, 2014, (ii) the Consolidated Statements of Income for the three months ended March 31, 2015 and 2014, (iii) the Consolidated Statements of Comprehensive Income for the three months ended March 31, 2015 and 2014, (iv) the Consolidated Statements of Shareholders' and Total Equity for the three months ended March 31, 2015, (v) the Consolidated Statements of Cash Flows for the three months ended March 31, 2015 and 2014, and (vi) the Notes to Consolidated Financial Statements.

* Previously filed.

** Furnished herewith.

Portions of the exhibit (indicated by asterisks) have been omitted pursuant to a confidential treatment order granted by the Securities and Exchange Commission.

Portions of the exhibit (indicated by asterisks) have been omitted pursuant to a request for confidential treatment and this exhibit has been submitted separately to the Securities and Exchange Commission.

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 thereunto duly authorized.

Intrexon Corporation
(Registrant)

Date: May 11, 2015

By: /s/ Rick L. Sterling
Rick L. Sterling
Chief Financial Officer
(Principal Financial and Accounting Officer)