

OvaScience, Inc.
Form 10-Q
August 10, 2015
Table of Contents

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q
(Mark One)

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

For the quarterly period ended June 30, 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: 001-35890

OVASCIENCE, INC.

(Exact name of registrant as specified in its charter)

Delaware	45-1472564
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
215 First Street, Suite 240	
Cambridge, Massachusetts	02142
(Address of principal executive offices)	(Zip Code)

617-500-2802
(Registrant's telephone number, including area code)

(Former name, former address and former fiscal year, if changed since last report)

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 ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate website, 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 ☒ No ☐

Edgar Filing: OvaScience, Inc. - Form 10-Q

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. (Check one):

Large accelerated filer ☐

Accelerated filer ☒

Non-accelerated filer ☐

Smaller reporting company ☐

(Do not check if a 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 ☒

As of August 6, 2015, there were 27,266,850 shares of the registrant’s Common Stock, par value \$0.001 per share, outstanding.

Table of Contents

OVASCIENCE, INC.

Quarterly Report on Form 10-Q

For the Quarterly Period Ended June 30, 2015

INDEX

	Page
<u>Part I. Financial Information</u>	
<u>Item 1. Financial Statements (Unaudited)</u>	<u>3</u>
<u>Condensed Consolidated Balance Sheets</u>	<u>3</u>
<u>Condensed Consolidated Statements of Operations and Comprehensive Loss</u>	<u>4</u>
<u>Condensed Consolidated Statements of Cash Flows</u>	<u>5</u>
<u>Notes to Unaudited, Condensed Consolidated Financial Statements</u>	<u>6</u>
<u>Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	<u>13</u>
<u>Item 3. Quantitative and Qualitative Disclosures About Market Risk</u>	<u>21</u>
<u>Item 4. Controls and Procedures</u>	<u>21</u>
<u>Part II. Other Information</u>	
<u>Item 1. Legal Proceedings</u>	<u>21</u>
<u>Item 1A. Risk Factors</u>	<u>22</u>
<u>Item 2. Unregistered Sales of Equity Securities and Use of Proceeds</u>	<u>22</u>
<u>Item 6. Exhibits</u>	<u>22</u>
<u>Signatures</u>	
<u>Exhibit Index</u>	

Table of Contents

Part I. Financial Information

Item 1. Financial Statements

OvaScience, Inc.

Condensed Consolidated Balance Sheets

(Unaudited)

(In thousands, except share and per share data)

	As of June 30, 2015	As of December 31, 2014
Assets		
Current assets:		
Cash and cash equivalents	\$70,238	\$6,414
Short-term investments	85,381	53,817
Prepaid expenses and other current assets	3,434	1,647
Restricted cash	109	—
Total current assets	159,162	61,878
Property and equipment, net	4,208	3,367
Investment in joint venture	557	—
Restricted cash	527	197
Other long-term assets	—	130
Total assets	\$164,454	\$65,572
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	\$2,987	\$2,520
Accrued expenses and other current liabilities	4,611	7,654
Total current liabilities	7,598	10,174
Other non-current liabilities	149	73
Total liabilities	7,747	10,247
Stockholders' equity:		
Preferred stock, \$0.001 par value; 5,000,000 shares authorized, no shares issued and outstanding	—	—
Common stock, \$0.001 par value; 100,000,000 shares authorized; 27,263,100 and 24,413,666 shares issued at June 30, 2015 and December 31, 2014, respectively; 27,263,100 and 24,084,637 shares outstanding at June 30, 2015 and December 31, 2014, respectively	27	24
Additional paid-in capital	286,168	150,025
Accumulated other comprehensive loss	(94	) (26
Accumulated deficit	(129,394	) (94,698
Total stockholders' equity	156,707	55,325
Total liabilities and stockholders' equity	\$164,454	\$65,572

See accompanying notes.

Table of Contents

OvaScience, Inc.

Condensed Consolidated Statements of Operations and Comprehensive Loss

(Unaudited)

(In thousands, except per share data)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2015	2014	2015	2014
Revenues	\$30	\$—	\$45	\$—
Costs and expenses:				
Costs of revenues	116	—	151	—
Research and development	4,021	4,534	9,768	9,186
Selling, general and administrative	13,067	5,061	24,113	8,059
Total costs and expenses	17,204	9,595	34,032	17,245
Loss from operations	(17,174)	(9,595)	(33,987)	(17,245)
Interest income (expense), net	101	(27)	145	(84)
Other (expense) income, net	(28)	24	6	14
Loss from equity method investment	(389)	(295)	(860)	(392)
Net loss	\$(17,490)	\$(9,893)	\$(34,696)	\$(17,707)
Net loss per share—basic and diluted	\$(0.64)	\$(0.42)	\$(1.29)	\$(0.83)
Weighted average number of shares used in net loss per share—basic and diluted	27,198	23,546	26,894	21,392
Net loss	\$(17,490)	\$(9,893)	\$(34,696)	\$(17,707)
Other comprehensive loss:				
Unrealized (losses) gains on available-for-sale securities	(93)	5	(68)	(8)
Comprehensive loss	\$(17,583)	\$(9,888)	\$(34,764)	\$(17,715)

See accompanying notes.

Table of Contents

OvaScience, Inc.
Condensed Consolidated Statements of Cash Flows
(Unaudited)
(In thousands)

	Six Months Ended June 30,	
	2015	2014
Cash flows from operating activities:		
Net loss	\$(34,696	) \$(17,707)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	410	148
Amortization of premium on debt securities	440	385
Stock-based compensation expense	10,718	3,082
Net loss on equity method investment	860	392
Changes in operating assets and liabilities:		
Prepaid expenses and other assets	(1,787	) (597)
Accounts payable	388	1,234
Accrued expenses and other non-current liabilities	(2,778	) 1,534
Net cash used in operating activities	(26,445	) (11,529)
Cash flows from investing activities:		
Investment in joint venture	(1,500	) (1,500)
Purchases of property, plant and equipment	(1,148	) (1,157)
Maturities of short-term investments	33,729	14,320
Sales of short-term investments	3,117	4,415
Purchases of short-term investments	(68,918	) (57,604)
Increase in restricted cash	(439	) (109)
Net cash used in investing activities	(35,159	) (41,635)
Cash flows from financing activities:		
Net proceeds from the issuance of common stock	124,063	51,639
Issuances of common stock under benefit plans, net of withholding taxes paid	1,365	—
Net cash provided by financing activities	125,428	51,639
Net increase (decrease) in cash and cash equivalents	63,824	(1,525)
Cash and cash equivalents at beginning of period	6,414	18,078
Cash and cash equivalents at end of period	\$70,238	\$16,553

See accompanying notes.

Table of Contents

OvaScience, Inc.

Notes to Unaudited, Condensed Consolidated Financial Statements

1. Organization and basis of presentation

OvaScience, Inc., incorporated on April 5, 2011 as a Delaware corporation, is a global fertility company developing proprietary potential treatments for female infertility based on recent scientific discoveries about the existence of egg precursor cells. As used in these condensed consolidated financial statements, the terms “OvaScience,” “the Company,” “we,” “us,” and “our” refer to the business of OvaScience, Inc. and its wholly owned subsidiaries. Our operations to date have been limited to organizing and staffing our company, business planning, raising capital, acquiring and developing our technology, identifying potential fertility treatments, developing the AUGMENTSM treatment, launching the AUGMENT treatment in select international in vitro fertilization (IVF) clinics, researching and developing the OvaPrimeSM treatment and the OvaTureSM treatment, and determining the regulatory and development path for our fertility treatments. We have commenced our planned principal operations but have not generated any significant revenues to date.

We are subject to a number of risks similar to other life science companies, including, but not limited to, the need to obtain adequate additional funding, possible failure to provide our treatments to IVF clinics to gain clinical experience in select countries outside of the United States, the need to obtain marketing approval for certain of our treatments, competitors developing new technological innovations, the need to successfully commercialize and gain market acceptance of our treatments and protection of proprietary technology. If we do not successfully commercialize our treatments, we will be unable to generate treatment revenue or achieve profitability. As of June 30, 2015 we had an accumulated deficit of approximately \$129.4 million.

Liquidity

We have incurred annual net operating losses in each year since our inception. We have generated limited treatment revenues related to our primary business purpose and have financed our operations primarily through private placements of our preferred stock and public sales of our common stock. We have launched one fertility treatment, the AUGMENT treatment, in select international IVF clinics and have two potential treatments in development. We have devoted substantially all of our financial resources and efforts to the launch of the AUGMENT treatment, raising capital and research and development. We expect to continue to incur significant expenses and operating losses for at least the next several years.

2. Basis of presentation and significant accounting policies

Unaudited interim financial data

The accompanying unaudited condensed consolidated balance sheet as of June 30, 2015, the statements of operations and comprehensive loss for the three and six months ended June 30, 2015 and 2014, and the statements of cash flows for the six months ended June 30, 2015 and 2014, and the related interim information contained within the notes to the financial statements, have been prepared in accordance with the rules and regulations of the Securities and Exchange Commission for interim financial information. Accordingly, they do not include all of the information and the notes required by U.S. generally accepted accounting principles for complete financial statements. In the opinion of management, the unaudited interim financial statements reflect all adjustments, consisting of normal and recurring adjustments, necessary for the fair presentation of our financial position at June 30, 2015, results of our operations for the three and six months ended June 30, 2015 and 2014 and our cash flows for the six months ended June 30, 2015 and 2014. The results for the three and six months ended June 30, 2015 are not necessarily indicative of future results.

Principles of consolidation

These condensed consolidated financial statements include the accounts of OvaScience and the accounts of our wholly-owned subsidiaries. All intercompany transactions have been eliminated in consolidation.

Use of estimates

These condensed consolidated financial statements are presented in conformity with U.S. generally accepted accounting principles, which require management to make estimates and assumptions that affect the amounts reported in the condensed consolidated financial statements and accompanying notes. Actual results could differ from such estimates.

Table of Contents

Selling, general and administrative costs

We expense selling, general and administrative costs as incurred. Selling, general and administrative costs consist of ongoing costs to run our daily operations and internal costs to support the international launch of the the AUGMENTSM treatment.

Net loss per share

Basic and diluted net loss per common share is calculated by dividing net loss by the weighted average number of shares outstanding during the period. Potentially dilutive shares, including outstanding stock options and unvested restricted stock, are only included in the calculation of diluted net loss per share when their effect is dilutive.

The amounts in the table below were excluded from the calculation of diluted net loss per share, prior to the use of the treasury stock method, due to their anti-dilutive effect (in thousands):

	As of June 30,	
	2015	2014
Outstanding stock options and restricted stock units	4,856	2,913
Unvested Founders' stock	—	658
Total	4,856	3,571

Summary of significant accounting policies

Our other significant accounting policies are described in Note 2, "Summary of Significant Accounting Policies," in our Annual Report on Form 10-K for the year ended December 31, 2014.

3. OvaXon joint venture

In December 2013, we entered into a joint venture with Intrexon Corporation ("Intrexon") to leverage Intrexon's synthetic biology technology platform and OvaScience's technology relating to egg precursor, or EggPCSM, cells to focus on developing significant improvements in human and animal health. We and Intrexon formed OvaXon, LLC ("OvaXon") to conduct the joint venture. Each party contributed \$1.5 million of cash to OvaXon, each has a 50% equity interest and research and development costs and profits will be split accordingly. Each party will also have 50% control over OvaXon and any disputes between us and Intrexon will be resolved through arbitration, if necessary.

We have recorded losses from equity method investments related to OvaXon of \$0.4 million and \$0.9 million for the three and six months ended June 30, 2015, respectively. We have recorded losses from equity method investments related to OvaXon of \$0.3 million and \$0.4 million for the three and six months ended June 30, 2014, respectively. Each party contributed an additional \$1.5 million during the six months ended June 30, 2015.

We consider OvaXon a variable interest entity. OvaXon does not have a primary beneficiary as both we and Intrexon have equal ability to direct the activities of OvaXon through membership in a Joint Steering Committee and an Intellectual Property Committee and 50% voting rights. OvaXon has been accounted for under the equity method and is not consolidated. This analysis and conclusion will be updated annually to reflect any changes in ownership or control over OvaXon.

4. Fair value

The fair value of our financial assets and liabilities reflects our estimate of amounts that we would have received in connection with the sale of such assets or paid in connection with the transfer of such liabilities in an orderly transaction between market participants at the measurement date. In connection with measuring the fair value of our assets and liabilities, we seek to maximize the use of observable inputs (market data obtained from independent sources) and to minimize the use of unobservable inputs (our assumptions about how market participants would price assets and liabilities). We use the following fair value hierarchy to classify assets and liabilities based on the observable inputs and unobservable inputs we used to value our assets and liabilities:

- Level 1—quoted prices (unadjusted) in active markets for identical assets or liabilities.

Table of Contents

Level 2—quoted prices for similar assets and liabilities in active markets or inputs that are observable for the asset or liability, either directly or indirectly through market corroboration, for substantially the full term of the financial instrument.

Level 3—unobservable inputs based on our assumptions used to measure assets and liabilities at fair value.

For fixed income securities, we reference pricing data supplied by our custodial agent and nationally known pricing vendors, using a variety of daily data sources, largely readily-available market data and broker quotes. The prices provided by third-party pricing services are validated by reviewing their pricing methods and obtaining market values from other pricing sources. After completing these validation procedures, we did not adjust or override any fair value measurements provided by the pricing services as of June 30, 2015 or December 31, 2014.

We review investments for other-than-temporary impairment whenever the fair value of an investment is less than the amortized cost and evidence indicates that an investment's carrying amount is not recoverable within a reasonable period of time. To determine whether an impairment is other-than-temporary, we consider the intent to sell, or whether it is more likely than not that we will be required to sell the investment before recovery of the investment's amortized cost basis. Evidence considered in this assessment includes reasons for the impairment, compliance with our investment policy, the severity and the duration of the impairment and changes in value subsequent to period end. As of June 30, 2015 and December 31, 2014, there were no investments with a fair value that was significantly lower than the amortized cost basis. At June 30, 2015 we held two securities from one issuer that have had unrealized losses for longer than 12 months. The unrealized losses related to these two investments are immaterial at June 30, 2015 and we believe that we will receive our full principal investment when these securities mature on October 1, 2015.

The following tables provide our assets and liabilities that are measured at fair value on a recurring basis as of June 30, 2015 and December 31, 2014 (in thousands):

Description	Balance as of June 30, 2015	Level 1	Level 2	Level 3
Assets:				
Cash and money market funds	\$70,238	\$70,238	\$—	\$—
Corporate debt securities (including commercial paper)	85,381	—	85,381	—
Total assets	\$155,619	\$70,238	\$85,381	\$—
Description	Balance as of December 31, 2014	Level 1	Level 2	Level 3
Assets:				
Cash and money market funds	\$6,414	\$6,414	\$—	\$—
Corporate debt securities (including commercial paper)	53,817	—	53,817	—
Total assets	\$60,231	\$6,414	\$53,817	\$—

Cash and cash equivalents, prepaid expenses, accounts payable and accrued expenses are carried at amounts that approximate fair value due to their short-term maturities.

5. Cash, cash equivalents and short-term investments

The following tables summarize our cash, cash equivalents and short-term investments at June 30, 2015 and December 31, 2014 (in thousands):

Table of Contents

June 30, 2015	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Cash and money market funds	\$ 70,238	\$ —	\$ —	\$70,238
Corporate debt securities	0	0	0	0
Due in one year or less	53,473	6	(30	) 53,449
Due in two years of less	32,001	1	(70	) 31,932
Total	\$ 155,712	\$ 7	\$ (100	) \$155,619
Reported as:				
Cash and cash equivalents	\$ 70,238	\$ —	\$ —	\$70,238
Short-term investments	85,474	7	(100	) 85,381
Total	\$ 155,712	\$ 7	\$ (100	) \$155,619
December 31, 2014	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Cash and money market funds	\$ 6,414	\$ —	\$ —	\$6,414
Corporate debt securities	0	0	0	0
Due in one year or less	53,843	2	(28	) 53,817
Total	\$ 60,257	\$ 2	\$ (28	) \$60,231
Reported as:				
Cash and cash equivalents	\$ 6,414	\$ —	\$ —	\$6,414
Short-term investments	53,843	2	(28	) 53,817
Total	\$ 60,257	\$ 2	\$ (28	) \$60,231

At June 30, 2015 and December 31, 2014 we held 30 and 32 debt securities that had been in an unrealized loss position for less than 12 months, respectively. At June 30, 2015 we also held two securities from one issuer that have had unrealized losses for longer than 12 months. The unrealized losses related to these two investments are immaterial at June 30, 2015 and we believe that we will receive our full principal investment when these securities mature on October 1, 2015.

At June 30, 2015 and December 31, 2014 the aggregate fair value of the securities in an unrealized loss position for less than 12 months was \$60.2 million and \$44.2 million, respectively. At June 30, 2015 the aggregate fair value of the securities in an unrealized loss position for longer than 12 months was \$2.2 million. We evaluated our securities for other-than-temporary impairments based on quantitative and qualitative factors, and we considered the decline in market value for the 32 debt securities as of June 30, 2015 to be primarily attributable to current economic and market conditions. We will likely not be required to sell these securities, and we do not intend to sell these securities before the recovery of their amortized cost bases, which recovery is expected within the next 12 months. Based on our analysis, we do not consider these investments to be other-than-temporarily impaired as of June 30, 2015.

As of June 30, 2015, we held \$15.1 million in financial institution debt securities and other corporate debt securities located in Canada, the United Kingdom and Australia. As of December 31, 2014, we held \$7.5 million in financial institution debt securities and other corporate debt securities located in Canada, the United Kingdom, and France. Based on our analysis, we do not consider these investments to be other-than-temporarily impaired as of June 30, 2015.

We had immaterial realized gains and no realized losses or other-than-temporary impairments on our short-term investments for the three and six months ended June 30, 2015. We had no realized gains or losses or other-than-temporary impairments on our short-term investments for the three months ended June 30, 2014 and immaterial realized gains and no losses or other-than-temporary impairments on our short-term investments for the six months ended June 30, 2014.

6. Property and equipment

Property and equipment and related accumulated depreciation are as follows (in thousands):

9

Table of Contents

	As of June 30, 2015	As of December 31, 2014
Laboratory equipment	\$5,231	\$ 4,093
Furniture	208	207
Computer equipment	18	7
Leasehold improvements	307	198
Total property and equipment, gross	5,764	4,505
Less: accumulated depreciation	(1,556	) (1,138
Total property and equipment, net	\$4,208	\$ 3,367

We recorded depreciation and amortization expense of \$0.2 million and \$0.4 million for the three and six months ended June 30, 2015, respectively. We recorded depreciation and amortization expense of \$0.1 million and \$0.1 million for the three and six months ended June 30, 2014, respectively.

7. Common stock

In January 2015, we issued and sold in an underwritten public offering an aggregate of 2,645,000 shares of our common stock at \$50 per share, which included 345,000 shares that represented the full exercise of an option to purchase additional shares granted to the underwriters in connection with the offering. The shares included in this offering were registered under the Securities Act of 1933, as amended, or the Securities Act, pursuant to a registration statement on Form S-3 (File No. 333-200040) that the Securities and Exchange Commission declared effective on November 21, 2014. The offering resulted in \$124.1 million of net proceeds, after deducting underwriting discounts and commissions and other offering expenses payable by us.

In March 2014, we issued and sold in a public offering an aggregate of 5,518,630 shares of our common stock at \$10.00 per share, which included 518,630 shares that represented the partial exercise of an overallotment option granted to the underwriters in connection with the offering. The shares included in this offering were registered under the Securities Act of 1933, as amended, pursuant to a registration statement Form S-3 (File No. 333-190939) that the Securities and Exchange Commission declared effective on September 10, 2013. The offering resulted in \$51.7 million of net proceeds, after deducting underwriting discounts and commissions and other offering expenses payable by us.

8. Stock-based compensation

Founders' stock

A summary of our Founders' stock activity and related information is as follows:

	Shares
Unvested at December 31, 2014	329,021
Granted	—
Vested	(164,515)
Unvested at March 31, 2015	164,506
Granted	—
Vested	(164,506)
Unvested at June 30, 2015	—

We record stock-based compensation expense for the common stock subject to repurchase based on the grant date intrinsic value for employees and the vesting date intrinsic value for non-employees. All of the restricted shares were

issued at fair value.

Stock options

A summary of our stock option activity and related information is as follows:

10

Table of Contents

	Shares	Weighted average exercise price per share	Weighted Average Remaining contractual Term (years)	Aggregate intrinsic value (in thousands)
Outstanding at December 31, 2014	3,628,628	\$ 16.01	9.11	\$ 102,355
Granted	1,425,600	37.93		
Exercised	(194,555)	) 8.03		
Forfeited / Cancelled	(34,676)	) 14.65		
Outstanding at June 30, 2015	4,824,997	22.82	9.01	45,638
Exercisable at June 30, 2015	926,523	9.14	7.95	18,399
Vested and expected to vest at June 30, 2015	4,121,955	22.38	8.97	40,507

The total intrinsic value (the amount by which the fair market value exceeded the exercise price) of stock options exercised was \$1.6 million and \$6.5 million for the three and six months ended June 30, 2015, respectively. The total intrinsic value of stock options exercised was \$0.6 million and \$1.6 million for the three and six months ended June 30, 2014, respectively.

The fair value of each stock-based option award is estimated on the grant date using the Black-Scholes option pricing model using the following assumptions:

	Three months ended June 30,		Six months ended June 30,	
	2015	2014	2015	2014
Risk-free interest rate	1.6% - 2.3%	1.8% - 2.0%	1.6% - 2.3%	1.6% - 2.0%
Dividend yield	—	—	—	—
Volatility	73%	76% - 84%	73% - 75%	76% - 84%
Expected term (years)	5.3 - 9.9	5.3 - 6.1	5.3 - 9.9	5.3 - 6.1

As of June 30, 2015, we had approximately \$50.9 million of total unrecognized compensation cost, net of estimated forfeitures, related to unvested stock options, which we expect to recognize over a weighted-average period of 3.2 years.

During the three and six months ended June 30, 2015, we granted options to purchase 1,006,100 and 1,425,600 shares of our common stock at weighted average grant date fair values of \$23.73 and \$24.00 per share, respectively, and with weighted average exercise prices of \$36.19 and \$37.93 per share, respectively. During the three and six months ended June 30, 2014, we granted options to purchase 800,500 and 1,177,598 shares of our common stock at weighted average grant date fair values of \$6.06 and \$6.36 per share, respectively, and with weighted average exercise prices of \$8.43 and \$8.96 per share, respectively.

Restricted stock units

We granted restricted stock units (“RSUs”) to our Chief Executive Officer in December 2014 and 2012. The RSUs issued at each date included a service-based award that vests evenly over eight quarters and a performance-based award that vests in two one-year tranches upon the achievement of certain performance conditions for the respective year, as determined by our board of directors. The grant date fair value of the service-based awards is based on the closing price of our common stock on the award date and the stock-based compensation expense for these service-based awards are recognized on a straight-line basis over the vesting period. The grant date fair value of the performance-based awards is based on the closing price of our common stock on the date that the performance criteria is established for each tranche and communicated to our Chief Executive Officer and the stock-based compensation

for these performance-based awards is recognized over the requisite service period.

The following table summarizes the December 9, 2014 award.

11

Table of Contents

Award Type	Number of RSUs Granted	Grant Date Fair Value	RSUs Vested as of June 30, 2015
Service-based	30,902	\$32.36	7,725
Performance-based - Year 1	11,588	\$43.47	—
Performance-based - Year 2	11,588	\$—	—

The number of RSUs granted for the 2014 performance award is reflective of the maximum number of RSUs that can be earned, if the board of directors determines the performance criteria were achieved at 150%. On March 29, 2015 our board of directors established the 2015 performance criteria for the first tranche of the performance-based award and communicated the performance criteria to our Chief Executive Officer. The grant date stock price of these performance-based RSUs was \$43.47 per share. As of June 30, 2015, we have determined that certain of the performance criteria are probable of achievement and we are recognizing the related expense for these awards over the requisite service period.

The following table summarizes the December 5, 2012 award.

Award Type	Number of RSUs Granted	Grant Date Fair Value	RSUs Vested as of June 30, 2015
Service-based	128,205	\$7.80	128,205
Performance-based - Year 1	32,052	\$10.00	19,230
Performance-based - Year 2	32,051	\$8.75	32,051

The number of RSUs granted for the 2012 performance award is reflective of the maximum number of RSUs that can be earned, if the board of directors determined the performance criteria were achieved at 100%. On March 20, 2013 our board of directors established the 2013 performance criteria for the first tranche of the performance-based award and communicated the performance criteria to our Chief Executive Officer. In December 2013, certain of the performance criteria were met resulting in a partial vesting of the first tranche award. On February 7, 2014 our board of directors established the 2014 performance criteria for the second tranche of the performance-based award and communicated the performance criteria to our Chief Executive Officer. In December 2014 our board of directors determined that all of the performance criteria had been met resulting in the full vesting of the second tranche award.

The following expense has been recorded for the RSUs.

	Expense Recorded in Three Months Ended June 30, 2015 (in 000s)		Expense Recorded in Six Months Ended June 30, 2015 (in 000s)	
		2014		2014
December 9, 2014				
Service-based	\$120	\$—	\$240	\$—
Performance-based	\$111	\$—	\$113	\$—
	\$231	\$—	\$353	\$—
December 5, 2012				
Service-based	\$—	\$120	\$—	\$239
Performance-based	\$—	\$78	\$—	\$123
	\$—	\$198	\$—	\$362

As of June 30, 2015, we had approximately \$1.0 million of total unrecognized compensation cost related to the 2014 awards, net of estimated forfeitures, related to unvested restricted stock units, which we expect to recognize over a weighted-average period of 1.3 years.

9. Commitments and Contingencies

In May 2015, we entered into a lease agreement for approximately 25,200 square feet of office and laboratory space in a building in Waltham, MA. The term of the lease commenced on June 1, 2015 and extends through November 2020, with an optional additional five year term extension. Future non-cancelable minimum annual lease payments under the lease are

12

Table of Contents

expected to be approximately \$0.1 million remaining in 2015, \$0.9 million in 2016 and 2017, \$1.0 million in each of 2018 and 2019, and \$0.9 million in 2020. We have provided a security deposit in the form of a letter of credit in the amount of \$0.4 million. The letter of credit is cash collateralized, which has been recorded as long-term restricted cash on the condensed consolidated balance sheet.

In connection with this lease, the landlord is providing a tenant improvement allowance of up to \$1.2 million for the costs associated with the construction of tenant improvements for the leased facility. We will account for the allowance incurred as a lease incentive, which will be recorded as a reduction to rent expense over the lease term.

As a result, we will be terminating our existing Cambridge, MA leases in 2015.

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

This Quarterly Report on Form 10-Q contains forward-looking statements that involve risks and uncertainties. The statements contained in this Quarterly Report on Form 10-Q that are not purely historical are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Without limiting the foregoing, the words "may," "shall," "will," "should," "could," "expects," "plans," "intends," "anticipates," "believes," "estimates," "predicts," "potential," "continue," "target," "goal", "seek", "likely," "hope" and expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these words. All forward-looking statements included in this Quarterly Report on Form 10-Q are based on information available to us up to, and including, the date of this document, and we expressly disclaim any obligation to update any such forward-looking statements to reflect events or circumstances that arise after the date hereof. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of certain important factors, including those set forth in this Item 2 — "Management's Discussion and Analysis of Financial Condition and Results of Operations," as well as under the heading "Risk Factors" contained in Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2014 and elsewhere in this Quarterly Report on Form 10-Q. You should carefully review those factors and also carefully review the risks outlined in other documents that we file from time to time with the Securities and Exchange Commission, or SEC.

Overview

OvaScience is a global fertility company focused on the discovery, development, and commercialization of new treatment options. The current standard of treatment for infertility is in vitro fertilization, or IVF, but it fails approximately 70% of the time. More women around the world are waiting to start families. However, fertility decreases with age. A major cause of infertility, especially in older women, is poor egg health, which is linked to a reduction in the number of functioning mitochondria. Additionally, approximately 25-30% of women who undergo IVF cannot make eggs and some women are unwilling or unable to undergo the hormone stimulation needed to undergo IVF, such as women who have been diagnosed with cancer. Accordingly, women throughout the world are increasingly seeking new treatment options for infertility.

Our patented technology is based on egg precursor, or EggPCSM, cells, which are immature egg cells found in the protective outer lining of a woman's own ovaries. These immature egg cells have the ability to grow into fresh, young, healthy eggs. The discovery of EggPC cells countered a long-held medical belief that women are born with a set number of eggs, thereby enabling new fertility treatment options.

Our portfolio of fertility treatment options uses proprietary methods to identify and isolate EggPC cells from a woman's ovarian tissue. By applying our EggPC technology platform in unique ways, we are developing and commercializing new fertility treatment options that are designed to improve egg health and revolutionize IVF.

Our first treatment, the AUGMENTSM treatment, is specifically designed to improve egg health by supplementing a mitochondrial deficiency and may, in turn, improve IVF success rates. The AUGMENT treatment complements the existing standard of practice for an IVF cycle. With the AUGMENT treatment, energy-producing mitochondria from a woman's own EggPC cells are added to the woman's mature eggs during the IVF process to supplement the existing mitochondria. The early data presented by our partner clinics has been very encouraging. The AUGMENT treatment has been launched in select international IVF clinics, and will be available through an initial preceptorship program with the IVI Group in Spain. The AUGMENT preceptorship program is designed to obtain patient experience and training before making it commercially available. The IVI Group is the largest IVF clinic network in the world with 38 clinics spanning 9 countries. In addition, we will also begin offering the AUGMENT treatment through a partnership with Growing Generations Panama. Growing Generations Panama is an established international subsidiary of leading fertility services provider, Growing Generations, and serves fertility patients in the greater Latin America region and beyond.

Table of Contents

We anticipate that we will introduce the AUGMENT treatment into new international regions in 2015. The AUGMENT treatment is not available in the United States.

The OvaPrimeSM treatment is a potential fertility treatment that could enable a woman to increase her egg reserve. The OvaPrime treatment is designed to replenish a woman's egg reserve by positioning a patient's EggPC cells from the protective ovarian lining back into the patient's own ovaries where they may mature into fertilizable eggs during the IVF process. We reported large animal proof-of-concept studies in 2014 and plan to optimize the process and introduce the OvaPrime treatment to patients in at least one international region outside of the United States by the end of 2015.

The OvaTureSM treatment is a potential next-generation IVF treatment that could help a woman produce healthy, young, fertilizable eggs without the need for hormone injections. The OvaTure treatment seeks to mature a woman's own EggPC cells into eggs outside her body. This potential treatment may be an option for women with compromised eggs, who are unable to make eggs, or who may be unwilling or unable to undergo hormone hyperstimulation, such as women diagnosed with cancer. We established human preclinical proof-of-concept in 2014 by demonstrating that human EggPC cells can be matured into eggs outside of the body, and we plan to optimize the process and define the development pathway for the OvaTure treatment in 2015.

We believe our EggPC technology has the potential to make significant advances in the field of fertility because it is designed to address poor egg health and embryo quality due to age and other causes. We believe our EggPC technology could improve IVF by:

Increasing live birth rates and reducing the number of IVF cycles. By improving egg health, we believe we may increase the percentage of live births and reduce the number of IVF cycles required.

Reducing the incidence of multiple births. By generating higher quality eggs, we believe our EggPC technology may allow for the transfer of fewer embryos per IVF cycle and, as a result, lower the incidence of multiple births and the associated complications.

Lowering the overall cost of the IVF process. If we reduce the number of IVF cycles required for a live birth and the incidence of multiple births, we believe our fertility treatment options may also lower the overall costs associated with the IVF process.

Replenishing the ovary for women who make too few or no eggs. Our OvaPrime treatment is designed to replenish a woman's egg reserve by transferring a patient's EggPC cells from the protective ovarian lining back into the patient's own ovaries where they may mature into fertilizable eggs during the IVF process.

Reducing the need for hormonal hyperstimulation. We are designing our OvaTure treatment to mature EggPC cells into fertilizable eggs in vitro, or outside the body. If successful, the OvaTure treatment could reduce, or possibly eliminate, the need for hormonal hyperstimulation for the maturation of multiple oocytes prior to egg retrieval in the IVF process.

Developing new treatments for diseases. OvaXonSM is a joint venture with Intrexon Corporation, or Intrexon, which is focused on developing significant improvements in human and animal health using our EggPC cell technology and Intrexon's synthetic biology and high throughput platform for applications.

The AUGMENT Treatment

We have launched the AUGMENT treatment in select international IVF clinics and we anticipate that we will introduce the AUGMENT treatment into new international regions in 2015. The AUGMENT treatment is not available in the United States.

An AUGMENT treatment cycle begins upon our receipt of the patient's ovarian tissue after biopsy, which is obtained through a biopsy performed by the patient's doctor prior to hormone stimulation. Our proprietary process identifies and isolates the patient's own EggPC cells, and then the patient's own mitochondria from these EggPC cells are isolated. The patient's own mitochondria are then injected into her egg at the time of intracytoplasmic sperm injection, or ICSI. We expect to receive payment before processing tissue and defer revenue until we deliver the mitochondria to the clinic, which is timed with the patient's standard IVF cycle and can stretch from 30-120 days or more. Within certain of our programs revenue recognition may be further deferred.

Table of Contents

Positive patient experiences with the AUGMENT treatment were presented in June 2015 at a scientific symposium during the European Society of Human Reproduction and Embryology (ESHRE) annual meeting. All the clinics offering the AUGMENT treatment at that time reported improved pregnancy rates in patients with poor egg health and embryo quality and who had undergone multiple prior IVF cycles. In addition, each of the clinics have since reported healthy births with the AUGMENT treatment. The ESHRE presentation included summary information of AUGMENT patient experience that was previously reported during the 21st COGI (Controversies in Obstetrics, Gynecology & Infertility) Congress: Innovation in Reproductive Medicine and the Society for Reproductive Investigation (SRI) 62nd Annual Scientific Meeting.

We have established our international headquarters in the United Kingdom to coordinate our international commercial efforts. We recently announced that we are expanding the availability of the AUGMENT treatment to two new regions. We continue to target major international regions for the AUGMENT treatment that combine elements of the following key criteria:

- Key opinion leaders
- High volume IVF clinics
- High quality IVF labs
- Out-of-pocket pay and high average cost per cycle
- Potential for reimbursement by healthcare providers
- Donor egg restrictions

In August 2015, a national healthcare insurance provider determined to reimburse citizens and expatriates that are covered by the provider within the UAE who receive the AUGMENT treatment for any of the following indications:

- women 37 years of age or older;
- women with poor egg quality;
- women with a history of poor embryo quality;
- women who have experienced repeated implantation failures or miscarriages;
- women with low anti-müllerian hormone (or AMH) levels;
- women who are poor responders; or
- women whose partners have severe male factor infertility.

These indications include first line treatment of women 37 years of age and older. In addition, these indications include first line treatment of patients with poor egg health and other indications of poor prognosis, not just women who have failed IVF in the past, as well as treatment of women with partners who have severe male factor infertility. We expect there will continue to be patients that pay out of pocket at private facilities even in regions where reimbursement is available.

We continue to explore the optimal business model for the AUGMENT treatment based on our initial commercial experience. We plan to:

- pursue broader indications, including first line treatment for various egg health and male factor indications;
- pursue reimbursement for the AUGMENT treatment in regions where traditional IVF is covered, while continuing to focus on out-of-pocket pay opportunities;
- review the optimal manufacturing model(s) in certain regions, while continuing to utilize onsite manufacturing, to handle demand resulting from reimbursement, expanded indications, ongoing publication of patient experience and broad geographic expansion; and
- continue to optimize commercial operations and logistics.

We continue to expect to achieve our goal of 1,000 AUGMENT treatment cycles in 2015. Our ability to achieve this goal will depend on continued use of the AUGMENT treatment in our partner clinics in new and existing regions, significant uptake in the UAE as a result of the reimbursement by a national healthcare provider, and other programs that include driving first line use of the AUGMENT treatment.

Other Recent Developments

On April 29, 2015, our Board of Directors appointed John Sexton, Ph.D., the President of New York University (NYU), to our Board to serve as a Class II Director with a term expiring at the 2017 annual meeting of stockholders. On June 4, 2015, our Board of Directors appointed John P. Howe, III, M.D., former President and Chief Executive Officer of Project HOPE, to serve as a Class I Director with a term expiring at the 2016 annual meeting of stockholders.

Table of Contents

Critical Accounting Policies and Significant Judgments and Estimates

The discussion and analysis of our financial condition and results of operations is based on our condensed consolidated financial statements, which have been prepared in accordance with U.S. generally accepted accounting principles. The preparation of our condensed consolidated financial statements requires us to make judgments, estimates and assumptions that affect the amounts reported in the condensed consolidated financial statements and accompanying notes. We evaluate our estimates, on an ongoing basis, including those related to accrued expenses and assumptions in the valuation of stock-based compensation. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable in the circumstances. Actual results could differ from those estimates.

Refer to Part II, Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations” of our Annual Report on Form 10-K for the year ended December 31, 2014 for a discussion of our critical accounting policies and estimates.

There were no significant changes to our critical accounting policies and estimates in the six months ended June 30, 2015.

We have irrevocably elected not to follow the extended transition period available to emerging growth companies provided for in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards.

Results of Operations

The following table summarizes our results of operations for the three and six months ended June 30, 2015 and 2014, together with the change in these items in thousands of dollars and as a percentage:

	Three Months Ended,		2015 / 2014		Six Months Ended		2015 / 2014			
	June 30,	2014	Comparison		June 30,	2014	Comparison			
	2015		\$	%	2015		\$	%		
Revenues	\$ 30	\$—	\$ 30	100	% \$ 45	\$—	\$ 45	100	%	
Costs of revenues	116	—	116	100	% 151	—	151	100	%	
Research and development expenses	4,021	4,534	(513	) (11	)% 9,768	9,186	582	6	%	
Selling, general and administrative expenses	13,067	5,061	8,006	158	% 24,113	8,059	16,054	199	%	
Interest income (expense), net	101	(27	) 128	(474	)% 145	(84	) 229	(273)%	
Other income (expense), net	(28	) 24	(52	) (217	)% 6	14	(8	) (57)%	
Loss from equity method investment	389	295	94	32	% 860	392	468	119	%	
Net Loss	\$ 17,490	\$ 9,893	\$ 7,597	77	% \$ 34,696	\$ 17,707	\$ 16,989	96	%	

Revenues

We commenced our first commercial AUGMENT treatment in December 2014 and have recorded \$30,000 and \$45,000 of treatment revenues in the three and six months ended June 30, 2015. During the three and six months ended June 30, 2015, we continued to transition certain of our partner clinics to commercial centers and, as anticipated, began performing limited commercial AUGMENT treatment cycles, for which we received cash and expect to recognize the associated revenue over the coming quarters. The AUGMENT treatment cycle begins upon

our receipt of the patient's tissue after biopsy. We expect to receive payment before processing tissue and defer treatment revenues until we deliver the mitochondria to the clinic. Based on our experiences to date, the period from receipt of the patient's tissue to recording revenue is expected to range between 30 and 120 days, the typical timeframe required to perform an IVF cycle. Within certain of our programs revenue recognition may be further deferred. We did not have significant revenue or deferred revenue in the first half of 2015. We expect a significant increase in treatments in the second half of 2015, and we expect that a majority of this increase will be recorded as revenue or deferred revenue in the fourth quarter. Our ability to generate revenue in the near-term will depend on the number of patient treatments in our partner clinics in new and existing regions, including treatments from reimbursement and other initiatives.

Table of Contents

Costs of Revenues

Costs of revenues for the three and six months ending June 30, 2015 were \$0.1 million and \$0.2 million, respectively. To provide our AUGMENT treatment we establish laboratories and hire scientific personnel to process the patient tissue. Therefore, we expect the cost of processing an AUGMENT treatment to decline as these fixed costs will be allocated over a larger number of treatments as we continue our commercial launch. Our costs of revenues include the cost of processing patient tissue that corresponds to treatment revenues for the reporting period. We recorded revenues related to the AUGMENT treatment and corresponding costs of revenues during the three and six months ending June 30, 2015. We did not have costs of revenues in the three or six months ending June 30, 2014.

Research and Development Expense

The \$0.5 million, or 11%, decrease in our research and development expense for the three months ended June 30, 2015 as compared to the three months ended June 30, 2014 was primarily attributable to:

- A decrease of \$0.6 million related to the stock-based compensation expense recorded in the prior year for Founders' stock, which was fully expensed in the first quarter of 2015 and will not recur.

The \$0.6 million, or 6%, increase in our research and development expense for the six months ended June 30, 2015 as compared to the six months ended June 30, 2014 was primarily attributable to:

- An increase of \$1.9 million in stock-based compensation expense driven by \$1.1 million of additional expense for Founders' stock requiring mark-to-market accounting treatment, which became fully vested and expensed in March 2015, and \$0.8 million related to the hiring of additional personnel.

- A decrease of \$0.8 million in license fees, resulting from a decrease of \$1.0 million for the milestone that became due upon completion of our public offering in the first quarter of 2014, which was offset by \$0.2 million for a milestone incurred as a result of our first commercial AUGMENT treatment in the first quarter of 2015.

- A decrease of \$0.5 million in employee salaries and compensation as certain costs have transitioned to selling, general and administrative expense with the commercial launch of the AUGMENT treatment.

- A decrease of \$0.3 million related to various legal, travel and laboratory expenses as we transitioned our first fertility treatment to commercial from research and development during the second half of 2014.

We expect research and development expense to increase if our programs successfully advance. We do not believe that the historical costs are indicative of the future costs associated with these programs nor do they represent what any other future treatment program we initiate may cost. Due to the variability in the length of time and scope of activities necessary to develop a fertility treatment and uncertainties related to cost estimates and our ability to commercialize and/or obtain marketing approval for our treatments, accurate and meaningful estimates of the total costs required to bring our treatments to market are not available.

Additionally, because of the risks inherent in discovery and development, we cannot reasonably estimate or know:

- The nature, timing and estimated costs of the efforts necessary to complete the development of our programs;
- The anticipated completion dates of these programs; or
- The period in which material net cash inflows are expected to commence, if at all, from the programs described above and any potential future treatments.

Selling, General and Administrative Expense

Selling, general and administrative costs consist of ongoing costs to run our operations and continue to support the expanding international availability of the AUGMENT treatment. The \$8.0 million, or 158%, increase in selling, general and administrative expense for the three months ended June 30, 2015 as compared to the three months ended June 30, 2014 was primarily due to:

- An increase of \$4.2 million for employee compensation and related benefits, including stock-based compensation expense driven by the hiring of additional personnel.

- An increase of \$3.1 million to support our international growth and continued commercial development of the AUGMENT treatment including increases of \$1.9 million in consulting, legal and marketing expenses, \$0.7 million in specific AUGMENT commercialization costs, and \$0.5 million in travel costs.

Table of Contents

▲An increase of \$0.4 million in facilities expenses.

▲An increase of \$0.3 million in certain financial management, tax and other expenses.

The \$16.1 million, or 199%, increase in selling, general and administrative expense for the six months ended June 30, 2015 as compared to the six months ended June 30, 2014 was primarily due to:

▲An increase of \$8.7 million for employee compensation and related benefits, including stock-based compensation expense driven by the hiring of additional personnel and \$1.0 million of forfeitures in the prior year that did not recur. An increase of \$6.2 million to support our international growth and continued commercial development of the AUGMENT treatment including increases of \$3.2 million in consulting, legal and marketing expenses, \$1.6 million in specific AUGMENT commercialization costs, and \$1.4 million in travel costs.

▲An increase of \$0.6 million in facilities expenses.

▲An increase of \$0.6 million in certain financial management, tax and other expenses.

Interest Income (Expense), Net

Interest income, net was \$0.1 million for the three months ended June 30, 2015 which included \$0.1 million of interest income related to short-term investments. For the three months ended June 30, 2014, interest expense, net included \$0.3 million of interest income offset by \$0.3 million of short term investment amortization and interest expense incurred to record the final installment payment due to Intrexon at fair value.

Interest income, net was \$0.1 million for the six months ended June 30, 2015 which included \$0.1 million of interest income related to short-term investments. Interest expense, net was \$0.1 million for the six months ended June 30, 2014 which included \$0.5 million of interest income offset by \$0.6 million of short term investment amortization and interest expense incurred to record the final installment payment due to Intrexon at fair value.

Loss from Equity Method Investment

Loss from equity method investment was \$0.4 million and \$0.9 million for the three and six months ended June 30, 2015, respectively. Loss from equity method investment was \$0.3 million and \$0.4 million for the three and six months ended June 30, 2014, respectively. These losses resulted from our OvaXon joint venture established in December 2013.

Liquidity and Capital Resources

Sources of Liquidity

We have generated limited AUGMENT treatment revenue to date. We have relied on the proceeds from sales of equity securities to fund our operations. Our short-term investments primarily trade in liquid markets, and the average days to maturity of our portfolio as of June 30, 2015 is less than twelve months. Because our fertility treatments are in various stages of development and the outcome of these efforts is uncertain, we cannot estimate the actual amounts necessary to successfully complete the development and commercialization of our treatments or whether or when we may achieve profitability.

Our significant capital resources are as follows (in thousands):

	June 30, 2015	December 31, 2014
Cash, cash equivalents and short-term investments	\$155,619	\$60,231

Working capital	151,564	51,704
-----------------	---------	--------

18

Table of Contents

	Six Months Ended June 30,	
	2015	2014
Cash (used in) provided by:		
Operating activities	(26,445	) (11,529)
Investing activities	(35,159	) (41,635)
Capital expenditures (included in investing activities above)	(1,148	) (1,157)
Financing activities	125,428	51,639

Cash Flows

Cash used in operating activities in both of the periods presented was primarily driven by our net loss. Cash flows from operations can vary significantly due to various factors, including changes in the net loss and the timing of disbursements made for accounts payable and accruals.

Cash used in investing activities for the six months ended June 30, 2015 included purchases of \$68.9 million of short-term investments, a \$1.5 million investment in a joint venture and capital expenditures of \$1.1 million, which were offset by \$33.7 million of proceeds from maturities of short-term investments, \$3.1 million in sales of short-term investments and a \$0.4 million increase in restricted cash. Capital expenditures in the six months ended June 30, 2015 primarily consisted of laboratory equipment.

Cash used in investing activities for the six months ended June 30, 2014 included purchases of \$57.6 million of short-term investments, a \$1.5 million investment in a joint venture and capital expenditures of \$1.2 million, which were offset by proceeds from maturities of short-term investments of \$14.3 million and \$4.4 million in sales of short-term investments. Capital expenditures in the six months ended June 30, 2014 primarily consisted of manufacturing equipment.

Net cash provided by financing activities for the six months ended June 30, 2015 was primarily the result of an underwritten public offering of an aggregate of 2,645,000 shares of common stock at a price per share of \$50.00 resulting in net proceeds of \$124.1 million. Stock option exercises and issuances of common stock resulted in net proceeds of \$1.4 million.

Net cash provided by financing activities for the six months ended June 30, 2014 was primarily the result of an underwritten public offering of an aggregate of 5,518,630 shares of common stock at a price per share of \$10.00 resulting in net proceeds of \$51.7 million.

We may need substantial additional funds to support our planned operations and commercialization strategy. We expect our existing cash, cash equivalents and short-term investments of \$155.6 million at June 30, 2015 will enable us to fund our current operating plan at least into 2017. We have based this estimate on assumptions that may prove to be wrong, and we could use our available capital resources sooner than we currently expect. Because of the numerous risks and uncertainties associated with the development and commercialization of our treatments, and the extent to which we may enter into collaborations with third parties for development and commercialization of our treatments, we are unable to estimate the amounts of increased capital outlays and operating expenses associated with completing the development of our current treatments in development. Our future capital requirements will depend on many factors, including:

- our success in expanding to new partner clinics in other major regions of the world, transitioning partner clinics to commercial centers and significantly increasing the number of patients receiving the AUGMENT treatment;
- our success in optimizing and introducing the OvaPrime treatment to international IVF clinics;

the costs associated with the expansion of foreign operations and building out our international commercial infrastructure, including establishing and staffing an international headquarters and other international subsidiaries;

the costs associated with establishing a domestic and international sales, marketing, manufacturing and distribution infrastructure to commercialize the AUGMENT treatment and any potential fertility treatment we successfully develop;

Table of Contents

- the pricing of the AUGMENT treatment and resulting revenues, as well as any future revenues we receive from our potential fertility treatments;
- the costs of continuing the optimization of the OvaTure treatment and our success in defining a development pathway;
- the costs of any clinical trials of potential fertility treatments;
- the costs involved in collaborating with Intrexon through the OvaXon joint venture to develop significant improvements in human and animal health;
- following any applicable regulatory process in the United States and abroad, including the premarketing and marketing approval requirements, to which any of our potential fertility treatments may be subject;
- following any regulatory or institutional review board review of our potential fertility treatments that are subject to such review;
- preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending intellectual property-related claims;
- establishing collaborations and partnerships on favorable terms, if at all; and
- developing, acquiring or in-licensing other potential fertility treatments and technologies.

Until such time, if ever, as we can generate sufficient revenues from the AUGMENT treatment or our potential fertility treatments to become profitable, we expect to finance our cash needs through a combination of equity offerings, debt financings, collaborations, strategic alliances and licensing arrangements. We do not have any committed external source of funds. In addition, we may elect to raise additional funds even before we need them if the conditions for raising capital are favorable. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interest of our stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of common stockholders. 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 collaborations, strategic alliances or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or treatments or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings when needed, we may be required to delay, limit, reduce or terminate our fertility treatment development or future commercialization efforts or grant rights to develop and market treatments that we would otherwise prefer to develop and market ourselves.

Off-Balance Sheet Arrangements

We did not have during the periods presented, and we do not currently have, any off-balance sheet arrangements, as defined under SEC rules.

Contractual Obligations

There have been no material changes to our contractual obligations set forth under the heading “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Contractual Obligations” in our Annual Report on Form 10-K for the year ended December 31, 2014, except for commitments resulting from our lease

agreement as follows:

In May 2015, we entered into a lease agreement for approximately 25,200 square feet of office and laboratory space in a building in Waltham, MA. The term of the lease commenced on June 1, 2015 and extends through November 2020, with an optional additional five year term extension. Future non-cancelable minimum annual lease payments under the lease are expected to be approximately \$0.1 million remaining in 2015, \$0.9 million in 2016 and 2017, \$1.0 million in each of 2018 and 2019, and \$0.9 million in 2020. We have provided a security deposit in the form of a letter of credit in the amount of \$0.4 million. The letter of credit is cash collateralized, which has been recorded as long-term restricted cash on the condensed consolidated balance sheet.

As a result, we will be terminating our existing Cambridge, MA leases in 2015.

Table of Contents

Recently Adopted Accounting Standards

There are no recently issued accounting standards that have a material impact on us for the periods presented.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Our interest income is sensitive to changes in the general level of U.S. interest rates, particularly since a significant portion of our investments are in money market funds and corporate obligations. We do not enter into investments for trading or speculative purposes. We maintain our cash, cash equivalents and short-term investments with a high quality, accredited financial institution. Our marketable securities are subject to interest rate risk and will fall in value if market interest rates increase.

A hypothetical 100 basis point increase in interest rates would result in an approximately \$0.7 million decrease in the fair value of our investments as of June 30, 2015, as compared to an approximately \$0.2 million decrease as of December 31, 2014. We have the ability to hold our fixed income investments until maturity and, therefore, we do not expect our operating results or cash flows to be affected to any significant degree by the effect of a change in market interest rates on our investments.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures. Our management, with the participation of our principal executive officer and principal financial officer, evaluated the effectiveness of our disclosure controls and procedures as of June 30, 2015. The term “disclosure controls and procedures,” as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company’s management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of June 30, 2015, our principal executive officer and principal financial officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Controls. No change in our internal control over financial reporting occurred during the fiscal quarter ended June 30, 2015 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Part II. Other Information

Item 1. Legal Proceedings

On September 16, 2013, a purported shareholder class action, styled Meriam Ratner v. OvaScience, Inc., et al., was filed in the United States District Court for the District of Massachusetts, naming us and certain of our officers as defendants. The lawsuit alleges that we made material misrepresentations and/or omissions of material fact relating to the qualification of AUGMENT as a 361 HCT/P in our public disclosures during the period from February 25, 2013 through September 10, 2013, in violation of Sections 10(b) and 20(a) of the Securities Exchange Act of 1934, as

amended, and Rule 10b-5 promulgated thereunder. On February 2, 2014, we and certain of our officers, as defendants, filed a motion to dismiss with the District Court. On February 3, 2014, plaintiff Meriam Ratner voluntarily dismissed the suit without prejudice.

On June 6, 2014, this purported shareholder class action was re-filed by the plaintiff in the United States District Court for the District of Massachusetts, naming us and certain of our officers as defendants. The lawsuit includes the same allegations as were included in the action filed on September 16, 2013. The plaintiff filed an amended complaint on October 31, 2014. As amended, the complaint seeks certification of a class of purchasers of our stock during the period February 25, 2013 through September 10, 2013. The plaintiff seeks unspecified monetary damages on behalf of the putative class and an award of costs and expenses, including attorney's fees. On December 16, 2014, we moved to dismiss the complaint. The court has not yet ruled on that motion. We believe that this action is without merit and intend to defend it vigorously. At this time, no assessment can be made as to the likely outcome of this lawsuit or whether the outcome will be material to us.

Table of Contents

We are not party to any other litigation in any court and management is not aware of any contemplated proceeding by any governmental authority against the Company.

Item 1A. Risk Factors

You should carefully review and consider the information regarding certain factors that could materially affect our business, financial condition or future results set forth under Item 1A. (Risk Factors) in our Annual Report on Form 10-K for the fiscal year ended December 31, 2014. There have been no material changes from the factors disclosed in our 2014 Annual Report on Form 10-K, although we may disclose changes to such factors or disclose additional factors from time to time in our future filings with the Securities and Exchange Commission.

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

On June 4, 2015, the Company issued option grants to Ravi Mehrotra, Ph.D., its Chief Corporate Development Officer, and John Eisel, its Executive Vice President of Global Site Operations, as new hire inducement grants pursuant to NASDAQ Listing Rule 5635(c)(4) and Section 4(a)(2) of the Securities Act. Dr. Mehrotra's option grant is for the purchase of an aggregate of 311,800 shares of Common Stock at a price per share of \$36.19 subject to his continued employment with the Company. Mr. Eisel's option grant is for the purchase of an aggregate of 350,000 shares of Common Stock at a price per share of \$36.19 subject to his continued employment with the Company.

Item 6. Exhibits

The exhibits filed as part of this Quarterly Report on Form 10-Q are set forth in the Exhibit Index and such Exhibit Index is incorporated herein by reference.

Table of Contents

Signatures

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

OVASCIENCE, INC.

By: /s/ Michelle Dipp, M.D., Ph.D.

Name: Michelle Dipp, M.D., Ph.D.

Date: August 10, 2015

Title: Chief Executive Officer (Principal Executive Officer)

By: /s/ Jeffrey Young

Name: Jeffrey Young

Date: August 10, 2015

Title: Chief Financial Officer (Principal Accounting and Financial Officer)

Table of Contents

Exhibit Index

Exhibit	Description
10.1	Lease Agreement, dated May 22, 2015, by and between Nine Fourth Avenue LLC and the Registrant.
31.1	Certification of Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 by Principal Executive Officer.
31.2	Certification of Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 by Principal Financial Officer.
32.1	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, by Principal Executive Officer.
32.2	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, by Principal Financial Officer.
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Presentation Linkbase Document