

OvaScience, Inc.
Form 10-Q
November 09, 2018
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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q
(Mark
One)

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

For the quarterly period ended September 30, 2018

OR
^o 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 (I.R.S. Employer
incorporation or organization) Identification No.)

9 4th Avenue

Waltham, Massachusetts 02451
(Address of principal executive offices) (Zip Code)

617-500-2802

(Registrant's telephone number, including area code)

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 every Interactive Data File required to be submitted 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 such files). Yes ☒ No ☐

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

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Large accelerated filer ☐ Accelerated filer ☒
Non-accelerated filer ☐ Smaller reporting company ☒
Emerging Growth 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 November 6, 2018, there were 35,826,429 shares of the registrant's Common Stock, par value \$0.001 per share, outstanding.

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OVASCIENCE, INC.

Quarterly Report on Form 10-Q

For the Quarterly Period Ended September 30, 2018

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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 September 30, 2018	As of December 31, 2017
Assets		
Current assets:		
Cash and cash equivalents	\$ 31,917	\$ 15,703
Short-term investments	14,433	51,500
Short-term restricted cash	789	—
Prepaid expenses and other current assets	1,847	1,578
Total current assets	48,986	68,781
Property and equipment, net	108	3,113
Investment in joint venture	140	146
Long-term restricted cash	—	789
Other long-term assets	—	24
Total assets	\$ 49,234	\$ 72,853
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	\$ 604	\$ 2,242
Accrued expenses and other current liabilities	3,277	5,562
Total current liabilities	3,881	7,804
Other non-current liabilities	442	751
Total liabilities	4,323	8,555
Commitments and contingencies (Note 10)		
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; 35,826,429 and 35,725,230 shares issued and outstanding at September 30, 2018 and December 31, 2017, respectively	36	36
Additional paid-in capital	367,110	365,769
Accumulated other comprehensive loss	(3	) (27
Accumulated deficit	(322,232	) (301,480
Total stockholders' equity	44,911	64,298
Total liabilities and stockholders' equity	\$ 49,234	\$ 72,853

See accompanying notes.

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OvaScience, Inc.

Condensed Consolidated Statements of Operations and Comprehensive Loss

(Unaudited)

(In thousands, except per share data)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Revenues	\$55	\$56	\$203	\$204
Costs and expenses:				
Costs of revenues	44	29	210	572
Research and development	1,680	4,016	6,695	14,777
Selling, general and administrative	4,176	5,056	11,045	22,935
Restructuring	53	361	3,637	3,842
Total costs and expenses	5,953	9,462	21,587	42,126
Loss from operations	(5,898)	(9,406)	(21,384)	(41,922)
Interest income, net	228	193	643	560
Other income (expense), net	(7)	(3)	(5)	(37)
Loss from equity method investment	(2)	(140)	(6)	(1,015)
Loss before income taxes	(5,679)	(9,356)	(20,752)	(42,414)
Income tax expense	—	11	—	33
Net loss	\$(5,679)	\$(9,367)	\$(20,752)	\$(42,447)
Net loss per share—basic and diluted	\$(0.16)	\$(0.26)	\$(0.58)	\$(1.19)
Weighted average number of shares used in net loss per share—basic and diluted	35,790	35,687	35,759	35,664
Net loss	\$(5,679)	\$(9,367)	\$(20,752)	\$(42,447)
Other comprehensive loss:				
Unrealized gains on available-for-sale securities	5	27	24	38
Comprehensive loss	\$(5,674)	\$(9,340)	\$(20,728)	\$(42,409)

See accompanying notes.

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OvaScience, Inc.

Condensed Consolidated Statements of Cash Flows

(Unaudited)

(In thousands)

	Nine Months Ended September 30,	
	2018	2017
Cash flows from operating activities:		
Net loss	\$(20,752) (42,447)	
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	633	1,311
Impairment of property and equipment related to restructuring	2,203	250
Gain on sale of property, plant and equipment	(66)	—
Amortization of (discount) premium on debt securities	(176)	101
Stock-based compensation expense	1,259	6,377
Issuance of common stock for director fees	82	102
Net loss on equity method investment	6	1,015
Changes in operating assets and liabilities:		
Prepaid expenses and other assets	(473)	635
Other assets	24	—
Accounts payable	(1,638)	517
Accrued expenses, deferred rent and other non-current liabilities	(2,594)	(5,440)
Net cash used in operating activities	(21,492)	(37,579)
Cash flows from investing activities:		
Investment in joint venture	—	(550)
Purchases of plant and equipment	—	(112)
Maturities of short-term investments	70,759	67,839
Proceeds from sale of property, plant and equipment	438	—
Purchases of short-term investments	(33,491)	(48,403)
Net cash provided by investing activities	37,706	18,774
Cash flows from financing activities:		
Net cash provided by financing activities	—	—
Net increase (decrease) in cash, cash equivalents and restricted cash	16,214	(18,805)
Cash, cash equivalents and restricted cash at beginning of period	16,492	44,369
Cash, cash equivalents and restricted cash at end of period	\$32,706	\$25,564

The following table provides a reconciliation of cash, cash equivalents and restricted cash to amounts reported within the condensed consolidated balance sheets.

	As of September 30, 2018	As of September 30, 2017
Cash and cash equivalents	\$ 31,917	\$ 24,775
Restricted cash	789	789
Total cash, cash equivalents and restricted cash	\$ 32,706	\$ 25,564

See accompanying notes.

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OvaScience, Inc.

Notes to Unaudited, Condensed Consolidated Financial Statements

1. Organization

OvaScience, Inc., incorporated on April 5, 2011 as a Delaware corporation, is a company focused on the discovery and development of new treatment options for women and families struggling with infertility. As used in these consolidated financial statements, the terms “OvaScience,” “the Company,” “we,” “us,” and “our” refer to the business of OvaScience, Inc. and its wholly owned subsidiaries. To date OvaScience has been leveraging the breakthrough discovery of egg precursor, or EggPCSM, cells to transform the treatment landscape for women's fertility. OvaScience's operations to date have been limited to organizing and staffing the company, business planning, raising capital, acquiring and developing our technology, identifying potential fertility treatments, developing the OvaPrimeSM treatment, the OvaTureSM treatment and the AUGMENTSM treatment, introducing AUGMENT in select international in vitro fertilization ("IVF") clinics and determining the regulatory and development path for OvaScience's fertility treatments. OvaScience has generated limited revenues to date, and does not anticipate significant revenues in the near term. In June 2017, OvaScience announced that it would continue to focus on advancing OvaPrime in clinical development and OvaTure in preclinical development and would discontinue ongoing efforts related to the AUGMENT treatment outside of North America. To better align its organization with these strategic priorities, OvaScience restructured its workforce and reduced its workforce by approximately 50%. On January 3, 2018, OvaScience announced a further restructuring of its organization and a workforce reduction of approximately 50%. On May 3, 2018, OvaScience announced that its Board of Directors had approved a corporate restructuring plan furthering its on-going efforts to effectively align its resources. On August 9, 2018, OvaScience announced that it had entered into a definitive agreement with Millendo Therapeutics, Inc. ("Millendo") under which Millendo will merge with OvaScience in an all-stock transaction. A wholly owned subsidiary of OvaScience will merge with and into Millendo, with Millendo surviving as a wholly owned subsidiary of OvaScience (the "Merger"). OvaScience and Millendo believe that the Merger, if finalized, will result in a specialty biopharmaceutical company focused on developing novel treatments for orphan endocrine diseases where current therapies do not exist or are insufficient. The transaction has been approved by the Boards of Directors of both companies. The Merger is expected to close in the fourth quarter of 2018, subject to the approval of OvaScience shareholders at a special shareholder meeting to be held on December 4, 2018, as well as other customary conditions.

We are currently subject to a number of risks similar to other life science companies, including, but not limited to, risks associated with clinical and preclinical development, the need to develop and obtain marketing approval for certain of our fertility treatments, competitors developing new technological innovations, the need to successfully commercialize and gain market acceptance of our fertility treatments and protection of proprietary technology, and the outcome of our exploration of strategic alternatives. If we do not successfully develop and commercialize any of our fertility treatments, we will be unable to generate treatment revenue or achieve profitability. As of September 30, 2018, we had an accumulated deficit of approximately \$322.2 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, which was subsequently converted to common stock, and public sales of our common stock and interest income earned on cash, cash equivalents, and short-term investments balances.

We have devoted substantially all of our financial resources and efforts to the research and development of our OvaPrime and OvaTure fertility treatments and the introduction of AUGMENT in select international IVF clinics. We expect to continue to incur operating losses for the next several years.

We believe that our cash, cash equivalents and short-term investments of \$46.4 million at September 30, 2018, will be sufficient to fund our current operating plan for at least the next 12 months from the date of filing this Form 10-Q.

There can be no assurances, however, that the current operating plan will be achieved or that additional funding, if needed, will be available on terms acceptable to us, or at all.

2. Basis of presentation and significant accounting policies

Basis of presentation

The accompanying interim unaudited condensed consolidated financial statements have been prepared by us in accordance with accounting principles generally accepted in the United States of America ("US GAAP"). These condensed

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

Certain information and footnote disclosures normally included in our annual financial statements have been omitted. In the opinion of management, the unaudited interim financial statements reflect all adjustments, which with the exception of restructuring accruals described in Note 9, consisted of normal and recurring adjustments, necessary for the fair presentation of our financial position at September 30, 2018, results of our operations for the three and nine months ended September 30, 2018 and 2017 and cash flows for the nine months ended September 30, 2018 and 2017. The results for the three and nine months ended September 30, 2018 are not necessarily indicative of future results. These condensed consolidated financial statements should be read in conjunction with the audited financial statements for the year ended December 31, 2017, which are contained in our Annual Report on Form 10-K for the year ended December 31, 2017 ("2017 Annual Report on Form 10-K") that was filed with the Securities and Exchange Commission ("SEC") on March 15, 2018.

Use of estimates and summary of significant accounting policies

These condensed consolidated financial statements are presented in conformity with US GAAP, which requires 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 those estimates.

Our significant accounting policies are described in Note 2, "Summary of Significant Accounting Policies," in our 2017 Annual Report on Form 10-K.

Net loss per share

Basic and diluted net loss per common share are 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 units, 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 due to their anti-dilutive effect (in thousands):

	As of	
	September	
	30,	
	2018	2017
Outstanding stock options and restricted stock units	5,160	6,468

Collaborations

In December 2013, we entered into a collaboration agreement, the OvaTure Collaboration, with Intrexon Corporation, or Intrexon, governing the use of Intrexon's synthetic biology technology platform for the accelerated development of our OvaTure platform. The OvaTure Collaboration provided that Intrexon would deliver laboratory and animal data to support the successful filing of an IND for OvaTure.

We participated as an equal member on the Joint Steering Committee, or JSC and Intellectual Property Committee, or IPC. The JSC agreed upon the services and the activities to be included in the work plan, and the IPC had authority over intellectual property matters. We had the tie-breaking vote if there were any disputes with the JSC.

On February 1, 2018, we provided Intrexon with written notice of termination of the OvaTure Collaboration. We believed that we could continue the development of OvaTure by building out our internal capabilities and expertise under the leadership of Dr. James Lillie, our Chief Scientific Officer, and engaging with contract research organizations that have specific, complementary capabilities to our own.

Recent accounting pronouncements

In August 2018, the Financial Accounting Standards Board ("FASB") issued ASU No. 2018-13, Fair Value Measurement (Topic 820): Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement. ASU 2018-13 eliminates, adds and modifies certain disclosure requirements for fair value measurements as part of its disclosure framework project. This update is effective for annual and interim periods beginning after December 15, 2019 with early adoption permitted. We are currently assessing the impact ASU 2018-13 will have on our consolidated financial statements and footnote disclosures thereto.

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In June 2018, the FASB issued ASU No. 2018-07, Compensation—Stock Compensation (Topic 718): Improvements to Non-employee Share-Based Payment Accounting. ASU 2018-07 is intended to reduce the cost and complexity and to improve financial reporting for non-employee share-based payments. The ASU expands the scope of Topic 718, Compensation-Stock Compensation (which currently only includes share-based payments to employees), to include share-based payments issued to non-employees for goods or services. Consequently, the accounting for share-based payments to non-employees and employees will be substantially aligned. This update is effective for annual and interim periods beginning after December 15, 2018 with early adoption permitted. Upon transition, entities will remeasure unsettled liability-classified awards and any unmeasured equity-classified awards for non-employees at fair value as of the adoption date. A cumulative-effect adjustment to retained earnings will be required as of the beginning of the fiscal year of adoption. We are currently assessing the impact ASU 2018-07 will have on our consolidated financial statements and footnote disclosures thereto.

In November 2016, the FASB issued ASU No. 2016-18, Statement of Cash Flows (Topic 230) - Restricted Cash. ASU 2016-18 requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. This update is effective for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years using a retrospective transition method to each period presented. The Company adopted this standard as of January 1, 2018 on a retrospective basis, which resulted in the recast of the prior reporting period in the statement of cash flows. For the nine months ended September 30, 2018 and 2017, \$0.8 million and \$0.8 million, respectively, of restricted cash is included in the total of cash and restricted cash balance at the end of period. A reconciliation of cash and restricted cash from our condensed consolidated statement of cash flows to the amounts reported within our condensed consolidated balance sheet is also included in a table below our condensed consolidated statement of cash flows.

In August 2016, the FASB issued ASU No. 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments. ASU 2016-15 requires changes in the presentation of debt prepayment or debt extinguishment costs, contingent consideration payments made after a business combination, proceeds from the settlement of insurance claims, proceeds from the settlement of corporate-owned life insurance policies and distributions received from equity method investees. This update is effective for annual and interim periods beginning after December 15, 2017 using a retrospective transition method to each period presented. We adopted this standard as of January 1, 2018 with no material impact on our consolidated financial statements.

In June 2016, the FASB issued ASU No. 2016-13, Measurement of Credit Losses on Financial Instruments, which amends the impairment model by requiring entities to use a forward-looking approach based on expected losses rather than incurred losses to estimate credit losses on certain types of financial instruments. This may result in the earlier recognition of allowances for losses. The guidance is effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years, with early adoption permitted. We are currently assessing the impact ASU 2016-13 will have on our consolidated financial statements and footnote disclosures thereto.

In February 2016, the FASB issued ASU No. 2016-02, Leases, which is intended to increase transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet and disclosing key information about leasing arrangements. Under ASU 2016-02, a lessee will be required to recognize assets and liabilities for both operating and financing leases with lease terms of more than 12 months. The amendment is effective for annual periods beginning after December 15, 2018, and interim periods within those annual periods.

Early adoption is permitted. In July 2018, the FASB issued ASU 2018-11, Leases, to address two requirements of ASU 2016-02. ASU 2018-11 allows entities to recognize a cumulative-effect adjustment from the application of ASU 2016-02 to the opening balance of retained earnings in the period of adoption. In addition, ASU 2018-11 provides lessors with a practical expedient to not separate non-lease components from the associated lease component if certain conditions are met. We are currently assessing the impact ASU 2016-02 will have on our consolidated financial statements and footnote disclosures thereto.

ASU 2014-09, Revenue from Contracts with Customers, amends the guidance for accounting for revenue from contracts with customers. ASU 2014-09 supersedes the revenue recognition requirements in ASC Topic 605, Revenue Recognition, and creates a new Topic 606, Revenue from Contracts with Customers. This guidance was effective for the Company on January 1, 2018. Two adoption methods are permitted: retrospectively to all prior reporting periods

presented, with certain practical expedients permitted; or retrospectively with the cumulative effect of initially adopting the ASU 2014-09 recognized at the date of initial application. We adopted ASU 2014-09 effective January 1, 2018 and elected to adopt ASU 2014-09 using the modified retrospective approach and applied the standard only to contracts that had not yet been completed as of January 1, 2018. The impact under this methodology to our previously reported revenues is insignificant in the periods reported, and therefore the Company did not record a cumulative catch-up to deferred revenue and accumulated deficit upon adoption of the new standard on January 1, 2018.

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3. OvaXon joint venture

In December 2013, we entered into a joint venture with Intrexon to leverage Intrexon's synthetic biology technology platform and our technology relating to EggPC 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 party has a 50% equity interest and all 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.

Starting in August 2017, Intrexon continued bovine EggPC work for us under the OvaTure Collaboration rather than under the OvaXon joint venture (the "August 2017 Amendment"). We are in discussions with Intrexon regarding the future of the OvaXon joint venture.

OvaXon no longer qualifies as a variable interest entity as a result of the August 2017 Amendment, and our future losses associated with OvaXon are now limited. We and Intrexon have equal ability to direct the activities of OvaXon through JSC and IPC membership and 50% voting rights and therefore ability to exert significant influence over OvaXon. As we have the ability to exert significant influence over OvaXon, in accordance with ASC 323, Equity Method and Joint Ventures, we will continue to account for OvaXon under the equity method and not consolidate its financial results with ours.

We recorded losses from equity method investments related to OvaXon of a de minimis amount for the three and nine months ended September 30, 2018, respectively. We recorded losses from equity method investments related to OvaXon of \$0.1 million and \$1.0 million for the three and nine months ended September 30, 2017, respectively. As of September 30, 2018 and December 31, 2017, our investment in OvaXon was approximately \$0.1 million.

4. Fair value

The fair value of our financial assets reflects our estimate of amounts that we would have received in connection with the sale of such asset in an orderly transaction between market participants at the measurement date. In connection with measuring the fair value of our assets, 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 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.

Level 2—quoted prices for similar assets in active markets or inputs that are observable for the asset, 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 at fair value.

The following tables summarize our assets that are measured at fair value as of September 30, 2018 and December 31, 2017 (in thousands):

Description	Balance as of September 30, 2018	Level 1	Level 2	Level 3
Assets:				
Cash and money market funds	\$ 31,917	\$31,917	\$—	\$ —
Corporate debt securities (including commercial paper)	8,968	—	8,968	—
U.S. government securities	5,465	—	5,465	—
Total	\$ 46,350	\$31,917	\$14,433	\$ —
	Balance as of			
Description	December 31, 2017	Level 1	Level 2	Level 3
Assets:				
Cash and money market funds	\$ 15,703	\$15,703	\$—	\$ —
Corporate debt securities (including commercial paper)	35,531	—	35,531	—
U.S. government securities	15,969	—	15,969	—

Total	\$ 67,203	\$ 15,703	\$ 51,500	\$ —
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5. Cash, cash equivalents and short-term investments

The following tables summarize our cash, cash equivalents and short-term investments as of September 30, 2018 and December 31, 2017 (in thousands):

September 30, 2018	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Cash and money market funds	\$ 31,917	\$ —	\$ —	\$ 31,917
Corporate debt				
Due in one year or less	8,969	—	(1)	8,968
U.S. government securities				
Due in one year or less	5,467	—	(2)	5,465
Total	\$ 46,353	\$ —	\$ (3)	\$ 46,350
Reported as:				
Cash and cash equivalents	\$ 31,917	\$ —	\$ —	\$ 31,917
Short-term investments	14,436	—	(3)	14,433
Total	\$ 46,353	\$ —	\$ (3)	\$ 46,350
December 31, 2017	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Cash and money market funds	\$ 15,703	\$ —	\$ —	\$ 15,703
Corporate debt				
Due in one year or less	38,053	—	(21)	38,032
U.S. government securities				
Due in one year or less	13,474	—	(6)	13,468
Total	\$ 67,230	\$ —	\$ (27)	\$ 67,203
Reported as:				
Cash and cash equivalents	\$ 15,703	\$ —	\$ —	\$ 15,703
Short-term investments	51,527	—	(27)	51,500
Total	\$ 67,230	\$ —	\$ (27)	\$ 67,203

At September 30, 2018 and December 31, 2017, we held four and ten debt securities that had been in an unrealized loss position for less than 12 months, respectively. At September 30, 2018 and December 31, 2017, the aggregate fair value of the securities in an unrealized loss position for less than 12 months was \$8.6 million and \$22.9 million, respectively. At September 30, 2018, we did not hold any investments that have been in a continuous unrealized loss position for 12 months or longer.

We evaluate our securities for other-than-temporary impairments based on quantitative and qualitative factors, and we considered the decline in market value for the four debt securities in an unrealized loss position as of September 30, 2018, to be primarily attributable to the then current economic and market conditions. We will likely not be required to sell these securities, and 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 September 30, 2018.

As of September 30, 2018, we held \$4.5 million in financial institution debt securities and other corporate debt securities located in Canada, Netherlands and Norway. As of December 31, 2017, we held \$12.0 million in financial institution debt securities and other corporate debt securities located in Australia, Luxembourg, Japan, Norway and Sweden.

We had no realized gains or losses on our short-term investments for the three and nine months ended September 30, 2018 and 2017.

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6. Property and equipment

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

	As of September 30, 2018	As of December 31, 2017
Laboratory equipment	\$ 1,247	\$ 3,480
Furniture	230	371
Computer equipment	13	208
Leasehold improvements	288	2,754
Total property and equipment, gross	1,778	6,813
Less: accumulated depreciation and amortization	(1,670)	(3,700)
Total property and equipment, net	\$ 108	\$ 3,113

We recorded depreciation and amortization expense of \$0.1 million and \$0.6 million for the three and nine months ended September 30, 2018, respectively. We recorded depreciation and amortization expense of \$0.4 million and \$1.3 million for the three and nine months ended September 30, 2017, respectively.

In December 2016, we initiated a corporate restructuring and in January 2017, we commenced a search to find a buyer for certain excess fixed assets, primarily comprised of laboratory equipment. As of January 31, 2017, we met the criteria to classify such assets as held-for-sale and estimated the fair value less costs to sell these assets at \$0.5 million. In June 2017, we initiated the first part of our plan to sell a portion of the fixed assets classified as held-for-sale, consisting primarily of fixed assets located domestically. In July 2017, we completed the sale of these assets with a carrying value of \$0.2 million and received net proceeds of \$0.3 million. We recorded a gain on the sale of these excess assets of \$0.1 million.

In February 2018, we completed the sale of the remaining \$0.3 million of assets, primarily those located internationally and received net proceeds of \$0.2 million. We recorded an immaterial loss on the sale of these assets, which is included in loss from continuing operations in our condensed consolidated statement of operations and comprehensive loss for the nine months ending September 30, 2018.

In May 2018, we initiated a corporate restructuring and concluded a portion of the carrying value of our assets was not recoverable. For the nine months ended September 30, 2018, we recorded an impairment charge of \$2.2 million, which is included within our condensed consolidated statements of operations and comprehensive loss. We determined the fair value of these assets subject to impairment based on expected future cash flows using Level 2 inputs under ASC 820.

In May 2018, we commenced a search to find a buyer for certain excess fixed assets, primarily comprised of laboratory equipment. As of June 30, 2018, we met the criteria to classify such assets as held-for-sale and estimated the fair value less costs to sell these assets at \$0.1 million. In July 2018 and August 2018, we completed the sale of these assets and received net proceeds of \$0.2 million. We recorded a gain on the sale of these excess assets of \$0.1 million.

In September 2018, we completed the sale of a number of our excess fixed assets, primarily comprised of laboratory equipment. As of September 30, 2018, title of these assets transferred to the respective buyers, and we recorded a receivable related to the net proceeds of \$0.2 million. We recorded an immaterial gain on the sale of these assets.

7. Accrued expenses and other current liabilities

Accrued expenses and other current liabilities consist of the following as of September 30, 2018 and December 31, 2017 (in thousands):

	As of September 30, 2018	As of December 31, 2017
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Compensation and related benefits, including severance	\$ 1,447	\$ 2,215
Development, site costs and contract manufacturing	—	519
Legal, audit and tax services	422	1,542
Consulting	142	160
Deferred rent	353	334
Other accrued expenses and other current liabilities	913	792
	\$ 3,277	\$ 5,562

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Other accrued expenses consist of accrued costs related to travel, lab supplies and other miscellaneous costs.

8. Stock-based compensation

Stock options

A summary of our stock option activity and related information as of September 30, 2018 is as follows:

	Shares	Weighted average exercise price per share	Weighted average remaining contractual term (years)	Aggregate intrinsic value (in thousands)
Outstanding at December 31, 2017	5,745,815	\$ 7.28	8.32	\$ 43
Granted	1,251,877	0.96		
Forfeited/Canceled	(1,837,518)	5.87		
Outstanding at September 30, 2018	5,160,174	6.23	7.80	1
Exercisable at September 30, 2018	2,577,812	10.61	6.76	1

No stock options were exercised during the three and nine months ended September 30, 2018 or September 30, 2017.

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

	Three months ended September 30, 2018		Nine months ended September 30, 2017	
Risk-free interest rate	2.7%	1.9%	2.7%	1.3% - 2.2%
Dividend yield	—	—	—	—
Volatility	83%	92%	83% - 85%	89% - 109%
Expected term (years)	5.3	6.1	5.3 - 6.1	2.0 - 6.9

As of September 30, 2018, we had approximately \$2.5 million of total unrecognized compensation cost, related to unvested stock options, which we expect to recognize over a weighted-average period of 2.7 years.

During the three and nine months ended September 30, 2018, we granted options to purchase 72,000 and 1,251,877 shares of our common stock to employees at a weighted average grant date fair value of \$0.65 and \$0.70 per share, respectively, and with a weighted average exercise price of \$0.95 and \$0.96 per share, respectively. During the three and nine months ended September 30, 2017, we granted options to purchase 192,500 and 4,207,856 shares of our common stock at weighted average grant date fair values of \$1.05 and \$1.14 per share, respectively, and with weighted average exercise prices of \$1.40 and \$1.51 per share, respectively.

We did not grant any options to purchase common stock to non-employees for the nine months ended September 30, 2018. We granted 150,000 options to purchase common stock with a weighted average exercise price of \$1.60 per share to non-employees for the nine months ended September 30, 2017. Stock-based awards issued to non-employees are revalued at each reporting date until vested.

9. Restructuring

In December 2016, we initiated a reduction in workforce of approximately 30% in connection with our change in corporate strategy. As of December 31, 2017, we had recognized all restructuring charges related to our December 2016 restructuring activities, approximately \$6.9 million comprised of \$2.4 million recorded as one-time termination benefits, \$1.7 million as a benefit under an ongoing benefit plan, \$2.0 million of fixed asset impairment charges and \$0.9 million of other restructuring related charges including legal fees and contract cancellation fees.

On June 21, 2017, we initiated a reduction in workforce of approximately 50% in connection with our decision to focus on the development and advancing of OvaPrime and OvaTure and to no longer offer the AUGMENT treatment on a commercial basis outside of North America. As of December 31, 2017, we had recognized all restructuring charges related to our June 2017 restructuring activities, approximately \$2.3 million comprised of \$1.7 million recorded as one-time termination

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benefits, \$0.3 million as a benefit under an ongoing benefit plan, \$0.2 million of fixed asset impairment charges and \$0.1 million of other restructuring related charges including legal fees.

In January 2018, we initiated a reduction in workforce of approximately 50% in connection with a decision to streamline our operations and reduce our cost structure. In May 2018, we initiated a further reduction in workforce of approximately 50% in connection with our on-going efforts to effectively align Company resources. During the nine months ended September 30, 2018, we recognized restructuring charges of \$3.6 million, primarily comprised of \$1.4 million of one-time termination benefits attributable to our January 2018 and May 2018 restructuring activities and \$2.2 million of asset impairment charges attributable to our May 2018 restructuring activities. As of September 30, 2018, we have recognized substantially all restructuring charges related to our January 2018 and May 2018 restructuring activities. Our restructuring charges for the three and nine months ended September 30, 2018, are included in our condensed consolidated statements of operations and comprehensive loss. For the three months ended September 30, 2017, we recognized restructuring charges of \$0.4 million primarily comprised of \$0.4 million of one-time termination benefits. For the nine months ended September 30, 2017, we recognized restructuring charges of \$3.8 million, including \$2.7 million of one-time termination benefits, \$0.3 million recorded for benefits under an ongoing benefit plan, \$0.6 million of legal and other fees and \$0.3 million of fixed asset impairment charges. Our restructuring charges for the three and nine months ended September 30, 2017, are included in our condensed consolidated statements of operations and comprehensive loss.

For the nine months ended September 30, 2018, we made cash payments of \$1.8 million primarily related to severance benefits and other restructuring costs, primarily related to our January 2018 and May 2018 restructuring activities. For the nine months ended September 30, 2017, we made cash payments of \$5.7 million primarily related to severance benefits and other restructuring costs, of which \$4.5 million and \$1.2 million relate to our December 2016 and June 2017 restructuring activities, respectively.

As of September 30, 2018, our restructuring accrual was less than \$0.1 million and was recorded in accrued expenses and other current liabilities in our condensed consolidated balance sheet. Since the execution of our restructuring activities, we have incurred a total of \$12.9 million of restructuring charges, of which \$6.9 million relates to our December 2016 restructuring activities, \$2.3 million relates to our June 2017 restructuring activities, \$0.8 million relates to our January 2018 restructuring activities and \$2.9 million relates to our May 2018 restructuring activities. The following table outlines our restructuring activities for the nine months ended September 30, 2018 (in thousands):

Accrued restructuring balance as of December 31, 2017	\$403
Plus:	
Severance	1,377
Other	109
Less:	
Payments	(1,842)
Accrued restructuring balance as of September 30, 2018	\$47

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10. Commitments and contingencies

On October 9, 2015, a purported class action lawsuit was filed in the Suffolk County Superior Court in the Commonwealth of Massachusetts (Carlson v. OvaScience, Inc. (In re OvaScience, Inc. Stockholder Litigation), No. 15-3087-BLS2 (Mass. Sup. Ct.)) against us, certain of our officers and directors and certain of the underwriters from our January 2015 follow-on public offering of our common stock. The plaintiffs purported to represent those persons who purchased shares of our common stock pursuant or traceable to our January 2015 follow-on public offering. The plaintiffs alleged, among other things, that the Company made false and misleading statements and failed to disclose material information in the Company's January 2015 Registration Statement and incorporated offering materials. Plaintiffs alleged violations of Sections 11, 12 and 15 of the Securities Act of 1933, as amended, and sought, among other relief, unspecified compensatory damages, rescission, pre-and post-judgment interest and fees, costs and disbursements. On February 26, 2016, a second putative class action suit was filed in the Suffolk County Superior Court in the Commonwealth of Massachusetts (Castellanos v. OvaScience, Inc., et al., No. 16-0645-BLS (Mass. Sup. Ct.)) against the Company, several of our officers and directors and certain of the underwriters from the January 2015 follow-on public offering of the Company's common stock. The complaint is substantially similar to the complaint filed in October 2015. The two actions subsequently were consolidated and plaintiffs filed a First Amended Class Action Complaint on June 17, 2016. In October 2016, the Superior Court granted the motion to intervene of an additional plaintiff, Westmoreland County Employee Retirement System ("Westmoreland"). On November 7, 2017, the Superior Court denied the plaintiffs' motion for class certification. On August 14, 2017, the defendants filed their motion for summary judgment against plaintiffs Heather Carlson, Cesar Castellanos, Philipp Hofmann, and Carlos Rivas, which the plaintiffs opposed. On November 21, 2017, the Superior Court allowed the defendants' motion for summary judgment, and the claims asserted by plaintiffs Heather Carlson, Cesar Castellanos, Philipp Hofmann, and Carlos Rivas in the consolidated actions were dismissed, leaving Westmoreland as the sole remaining plaintiff. On November 22, 2017, Westmoreland filed a putative class action complaint in the U.S. District Court for the District of Massachusetts against the same defendants alleging the same claims as were alleged in the state court case (Westmoreland County Employee Retirement System v. OvaScience, Inc., et al., No. 1:17-cv-12312-IT (D. Mass.)) (the "Westmoreland Federal Action"). On January 22, 2018, Westmoreland filed a motion to voluntarily dismiss the Superior Court action without prejudice. The defendants opposed that motion. Oral argument on Westmoreland's motion for voluntary dismissal was held on April 3, 2018. On April 5, 2018, the Superior Court allowed Westmoreland's motion for voluntary dismissal without prejudice. The Superior Court entered final judgment on April 18, 2018, dismissing Westmoreland's claims without prejudice and dismissing the claims of plaintiffs Heather Carlson, Cesar Castellanos, Philipp Hofmann, and Carlos Rivas with prejudice. In the Westmoreland Federal Action, on August 24, 2018, Westmoreland filed a stipulation and proposed order, signed by counsel for all parties, voluntarily dismissing that action without prejudice (the "Westmoreland Stipulation"). Pursuant to the Westmoreland Stipulation, Westmoreland agreed that it will not re-file or reassert its claims arising under the Securities Act that were alleged in its complaint in the Westmoreland Federal Action and will pursue damages, if any, only as a member of the putative class in the Dahhan Action (described below). On August 28, 2018, the court in the Westmoreland Federal Action entered an order approving the Westmoreland Stipulation. Accordingly, the Westmoreland Federal Action has been dismissed.

On November 9, 2016, a purported shareholder derivative action was filed in the Business Litigation Session of the Suffolk County Superior Court in the Commonwealth of Massachusetts (Cima v. Dipp, et al., No. 16-3443-BLS1 (Mass. Sup. Ct.)) against certain present and former officers and directors of the Company and the Company as a nominal defendant alleging breaches of fiduciary duty, unjust enrichment, abuse of control, gross mismanagement and corporate waste for purported actions related to the Company's January 2015 follow-on public offering. On February 22, 2017, the court approved the parties' joint stipulation to stay all proceedings in the action until further notice. Following a status conference in December 2017, the stay was lifted. On January 23, 2018, at the parties' request, the court entered a second order staying all proceedings in the action until further order of the court. We believe that the complaint is without merit and intend to defend against the litigation. There can be no assurance, however, that we will be successful. A resolution of this lawsuit adverse to OvaScience or the other defendants could have a material effect on OvaScience's consolidated financial position and results of operations in the period in which the lawsuit is

resolved. At present, we are unable to estimate potential losses, if any, related to the lawsuit.

On March 24, 2017, a purported shareholder class action lawsuit was filed in the U.S. District Court for the District of Massachusetts (Dahhan v. OvaScience, Inc., et al., No.1:17-cv-10511-IT(D. Mass.)) against the Company and certain of our former officers alleging violations of Sections 10(b) and 20(a) of the Securities Exchange Act of 1934 (the “Dahhan Action”). On July 5, 2017, the Court entered an order approving the appointment of Freedman Family Investments LLC as lead plaintiff, the firm of Robins Geller Rudman & Dowd LLP as lead counsel, and the Law Office of Alan L. Kovacs as local counsel. Plaintiff filed an amended complaint on August 25, 2017. The defendants filed a motion to dismiss the amended complaint, which the Court denied on July 31, 2018. On August 14, 2018, we answered the amended complaint. We believe that the amended complaint is without merit and intend to defend against the litigation. There can be no assurance, however, that we will be successful. A resolution of this lawsuit adverse to the Company or the other defendants could have a material effect on

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our consolidated financial position and results of operations in the period in which the lawsuit is resolved. At present, we are unable to estimate potential losses, if any, related to the lawsuit.

On June 30, 2017, a purported shareholder derivative complaint was filed in the U.S. District Court for the District of Delaware (Fulton v. Dipp, et al., No. 1:17-cv-00869-RDM (D. Del.)) against certain of the Company's present and former directors and the Company as a nominal defendant, alleging breach of fiduciary duties, waste of corporate assets, unjust enrichment, and violations of Section 14(a) of the Securities Exchange Act of 1934, alleging that compensation awarded to the director defendants was excessive. The parties reached a settlement of the action whereby the Company agreed to seek shareholder approval for certain changes to non-employee director compensation. The Company also agreed to pay \$300,000 in attorney's fees to plaintiff's counsel, which has been paid as of September 30, 2018. Following a hearing held on August 30, 2018, the Court issued an order approving the settlement, and the case is now closed.

On July 27, 2017, a purported shareholder derivative complaint was filed in the U.S. District Court for the District of Massachusetts (Chiu v. Dipp, et al., No. 1:17-cv-11382-IT (D. Mass.)) against certain of the Company's present and former directors and the Company as a nominal defendant, alleging breach of fiduciary duty, unjust enrichment and violations of Section 14(a) of the Securities Exchange Act of 1934 alleging that compensation awarded to the director defendants was excessive and seeking redress for purported actions related to the Company's January 2015 follow-on public offering and other public statements. On September 26, 2017, the plaintiff filed an amended complaint which eliminated all claims regarding allegedly excessive director pay and additionally alleged claims of abuse of control and corporate waste. On October 27, 2017, the defendants filed a motion to dismiss the amended complaint. The court heard oral argument on the motion to dismiss on April 5, 2018. On April 13, 2018, the court granted the defendants' motion to dismiss the amended complaint for failure to state a claim for relief under Section 14(a). The court also dismissed the plaintiffs' pendent state law claims without prejudice, based on lack of subject matter jurisdiction. On April 25, 2018, the plaintiffs moved for leave to amend the complaint, and to stay this case pending the outcome of the Dahhan Action and the now-dismissed Westmoreland Federal Action. The defendants do not believe that the proposed amended complaint cures the defects in the current complaint, but informed plaintiffs' counsel that, in the interest of judicial economy, the defendants would not oppose the proposed amendment if the court would consider staying the case pending the resolution of the Westmoreland Federal Action (now dismissed) and the pending Dahhan Action. On April 27, 2018, the court granted the plaintiffs' motion for leave to amend the complaint and for a stay. On April 30, 2018, the plaintiffs filed their second amended complaint. On May 23, 2018, the Court entered an order staying this case pending the resolution of the Dahhan Action and the (now dismissed) Westmoreland Federal Action. We believe that the complaint is without merit and intend to defend against the litigation. There can be no assurance, however, that we will be successful. A resolution of this lawsuit adverse to the Company or the other defendants could have a material effect on our consolidated financial position and results of operations in the period in which the lawsuit is resolved. At present, we are unable to estimate potential losses, if any, related to the lawsuit.

On October 16, 2018, a Company stockholder filed a complaint in the U.S. District Court for the District of Delaware (Cunningham v. Kroeger, et al., No. 1:18-cv-01595-CFC (D. Del.)) against the Company, its chief executive officer and the members of the Company's Board of Directors, alleging violations of Section 14(a) of the Securities Exchange Act of 1934 and Rule 14a-9 promulgated thereunder, and as against the individual defendants, alleging violations of Section 20(a) of the Securities Exchange Act of 1934. The plaintiff alleges that the defendants made materially misleading disclosures in a Form S-4 Registration Statement filed with the SEC on September 26, 2018 in connection with Company's proposed merger with Millendo Therapeutics, Inc. ("Millendo"), by allegedly omitting material information concerning the sale process. The plaintiff seeks declaratory and injunctive relief to enjoin the proposed merger with Millendo, rescissory damages against the individual defendants, including pre-judgment and post-judgment interest, costs, and attorneys' fees. We believe that the complaint is without merit and intend to defend against the litigation. There can be no assurance, however, that we will be successful. At present, we are unable to estimate potential losses, if any, related to the lawsuit.

On November 6, 2018, a purported class action complaint was filed in the U.S. District Court for the District of Massachusetts (Adlard v. OvaScience, Inc., et al., No. 1:18-cv-12332-WGY (D. Mass.)) against the Company, its

chief executive officer and the members of the Company's Board of Directors, alleging violations of Section 14(a) of the Securities Exchange Act of 1934 and Rule 14a-9 promulgated thereunder, and as against the individual defendants, alleging violations of Section 20(a) of the Securities Exchange Act of 1934. The plaintiff alleges that the Company's Definitive Proxy Statement on Schedule 14A filed on November 6, 2018 omitted or misrepresented material information regarding the Company's proposed merger with Millendo, including information regarding financial projections for Millendo, the background process leading up to the proposed transaction, and potential conflicts of interest. The plaintiff seeks injunctive relief to enjoin the proposed merger with Millendo, declaratory relief, rescissory damages in the event that the merger with Millendo is consummated, costs, and attorneys' fees. We believe that the complaint is without merit and intend to defend against the litigation. There can be no assurance, however, that we will be successful. At present, we are unable to estimate potential losses, if any, related to the lawsuit.

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We are not party to any other material litigation in any court.

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11. Subsequent Events

The special meeting of stockholders to vote on the proposed transaction with Millendo and related matters has been scheduled for December 4, 2018, pursuant to a notice of special meeting dated November 5, 2018.

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, 2017 and in Part II, Item 1A "Risk Factors" of this Quarterly Report.

Overview

OvaScience, Inc., incorporated on April 5, 2011 as a Delaware corporation, is a company focused on the discovery and development of new treatment options for women and families struggling with infertility. As used in this Quarterly Report, the terms "OvaScience," "the Company," "we," "us," and "our" refer to the business of OvaScience, Inc. and its wholly owned subsidiaries. To date OvaScience has been leveraging the breakthrough discovery of egg precursor, or EggPCSM, cells to transform the treatment landscape for women's fertility. OvaScience's operations to date have been limited to organizing and staffing the company, business planning, raising capital, acquiring and developing our technology, identifying potential fertility treatments, developing the OvaPrimeSM treatment, the OvaTureSM treatment and the AUGMENTSM treatment, introducing AUGMENT in select international in vitro fertilization ("IVF") clinics and determining the regulatory and development path for OvaScience's fertility treatments. OvaScience has generated limited revenues to date, and does not anticipate significant revenues in the near term. In June 2017, OvaScience announced that it would continue to focus on advancing OvaPrime in clinical development and OvaTure in preclinical development and would discontinue ongoing efforts related to the AUGMENT treatment outside of North America. To better align its organization with these strategic priorities, OvaScience restructured its workforce and reduced its workforce by approximately 50%. On January 3, 2018, OvaScience announced a further restructuring of its organization and a workforce reduction of approximately 50%. On May 3, 2018, OvaScience announced that its Board of Directors had approved a corporate restructuring plan furthering its on-going efforts to effectively align its resources. On August 9, 2018, OvaScience announced that it had entered into a definitive agreement with Millendo Therapeutics, Inc. ("Millendo") under which Millendo will merge with OvaScience in an all-stock transaction. A wholly owned subsidiary of OvaScience will merge with and into Millendo, with Millendo surviving as a wholly owned subsidiary of OvaScience (the "Merger"). OvaScience and Millendo believe that the Merger will result in a specialty biopharmaceutical company focused on developing novel treatments for orphan endocrine diseases where current therapies do not exist or are insufficient. The transaction has been approved by the Boards of Directors of both companies. The Merger is expected to close in the fourth quarter of 2018, subject to the approval of OvaScience shareholders at a special shareholder meeting to be held on December 4, 2018, as well as other customary conditions.

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, 2017 for a discussion of our critical accounting policies and estimates.

There were no significant changes to our critical accounting policies and estimates in the nine months ended September 30, 2018.

Results of Operations

The following table summarizes our results of operations for the three and nine months ended September 30, 2018 and 2017, together with the changes from period to period (in thousands of dollars except for percentages):

	Three Months Ended		2018/ 2017 Comparison		Nine Months Ended		2018 / 2017 Comparison	
	September 30, 2018	2017	Increase / (Decrease) \$	%	September 30, 2018	2017	Increase / (Decrease) \$	%
Revenues	\$ 55	\$ 56	\$ (1	) (2)%	\$ 203	\$ 204	\$ (1) — %
Costs of revenues	44	29	15	52 %	210	572	(362	) (63)%
Research and development expenses	1,680	4,016	(2,336	) (58)%	6,695	14,777	(8,082	) (55)%
Selling, general and administrative expenses	4,176	5,056	(880	) (17)%	11,045	22,935	(11,890	) (52)%
Restructuring	53	361	(308	) (85)%	3,637	3,842	(205	) (5)%
Interest income, net	228	193	35	18 %	643	560	83	15 %
Other income (expense), net	(7	) (3	) 4	133 %	(5	) (37	) (32	) (86)%
Loss from equity method investment	2	140	(138	) (99)%	6	1,015	(1,009	) (99)%
Income tax expense	—	11	(11	) (100)%	—	33	(33	) (100)%
Net loss	\$ 5,679	\$ 9,367	\$ (3,688	) (39)%	\$ 20,752	\$ 42,447	\$ (21,695	) (51)%

Revenues

Revenues for the three and nine months ended September 30, 2018 were \$55.0 thousand and \$203.0 thousand, respectively as compared to \$56.0 thousand and \$204.0 thousand for the three and nine months ended September 30, 2017, respectively. We do not anticipate significant revenue from our programs in the near term.

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Cost of Revenues

Costs of revenues for the three and nine months ended September 30, 2018 were \$44.0 thousand and \$0.2 million, respectively, compared to \$29.0 thousand and \$0.6 million for the three and nine months ended September 30, 2017, respectively. The decrease in costs of revenues for the nine months ended September 30, 2018 is attributable to the decrease in the number of biopsies performed primarily as a result of our shift in corporate priorities related to AUGMENT resulting from our restructuring activities and the related pricing programs offered, as well as a decrease in compensation costs resulting from our restructuring activities. Our costs of revenues include the cost of processing patient tissue that corresponds to treatment revenues for the reporting period. Given our shift in corporate priorities and focus on research and development, we expect cost of revenues to continue to decrease in the future.

Research and Development Expense

The \$2.3 million, or 58%, decrease in our research and development expense for the three months ended September 30, 2018 as compared to the three months ended September 30, 2017, from \$4.0 million to \$1.7 million was primarily attributable to:

- a \$1.3 million decrease in employee compensation, including stock-based compensation, as a result of our corporate restructuring activities;
- a \$0.1 million decrease in travel, facilities and other costs primarily attributable to the decrease in our headcount as result of our corporate restructuring initiatives; and
- a \$0.9 million decrease in marketing, professional and commercial related costs primarily attributable to our shift in corporate strategy to focus on research and development activities.

The \$8.1 million, or 55%, decrease in our research and development expense for the nine months ended September 30, 2018 as compared to the nine months ended September 30, 2017, from \$14.8 million to \$6.7 million was primarily attributable to:

- a \$4.9 million decrease in employee compensation, including stock-based compensation, as a result of our corporate restructuring activities;
- a \$1.7 million decrease in travel, facilities and other costs primarily attributable to the decrease in our headcount as result of our corporate restructuring initiatives; and
- a \$1.5 million decrease in research and consulting costs primarily attributable to the decrease in our headcount and our corporate restructuring activities.

Our research and development expense would increase if our programs were to successfully advance towards commercialization. We do not believe that our 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 fertility treatments, accurate and meaningful estimates of the total costs required to bring our fertility treatments to market are not available.

Additionally, because of the risks inherent in drug 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 treatments;
- the anticipated completion dates of our treatment development efforts, if any; or
- the period in which material net cash in-flows are expected to commence, if at all, from our current treatments and any potential future treatments.

Selling, General and Administrative Expense

The \$0.9 million, or 17%, decrease in selling, general and administrative expense for the three months ended September 30, 2018 as compared to the three months ended September 30, 2017, from \$5.1 million to \$4.2 million was primarily attributable to:

- a \$1.1 million decrease in employee compensation, including stock-based compensation, a result of our corporate restructuring activities;

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- a \$0.3 million decrease in marketing and commercial related activities primarily attributable to our shift in corporate strategy to focus on research and development activities; and

- a \$0.5 million increase in legal and professional costs primarily attributable to the settlement of ongoing litigation. The \$11.9 million, or 52%, decrease in selling, general and administrative expense for the nine months ended September 30, 2018 as compared to the nine months ended September 30, 2017, from \$22.9 million to \$11.0 million was primarily attributable to:

- a \$8.7 million decrease in employee compensation, including stock-based compensation, a result of our corporate restructuring activities;

- a \$1.2 million decrease in marketing and commercial related activities primarily attributable to our shift in corporate strategy to focus on research and development activities; and

- a \$2.0 million decrease in travel, facilities and other costs primarily attributable to the decrease in our headcount as result of our corporate restructuring initiatives.

We expect selling, general and administrative expense to continue to decrease as a result of the corporate restructuring announcements in December 2016, June 2017, January 2018 and May 2018. We do not believe that our historical costs of supporting AUGMENT represent what any other future commercial treatment program we initiate may cost to support and do not anticipate substantial costs associated with supporting AUGMENT.

Restructuring Expense

Restructuring expenses were \$0.0 million and \$3.6 million for the three and nine months ended September 30, 2018, respectively. During the nine months ended September 30, 2018, we recognized restructuring charges of \$3.6 million, primarily comprised of \$1.4 million of one-time termination benefits attributable to our January 2018 and May 2018 restructuring activities and \$2.2 million of asset impairment charges attributable to our May 2018 restructuring activities.

Restructuring expenses were \$0.4 million and \$3.8 million for the three and nine months ended September 30, 2017. For the three months ended September 30, 2017, we recognized restructuring charges of \$0.4 million relating to one-time termination benefits. For the nine months ended September 30, 2017, we recognized restructuring charges of \$3.8 million, including \$2.7 million of one-time termination benefits, \$0.3 million recorded of benefits under an ongoing benefit plan, \$0.3 million of fixed asset impairment charges and \$0.6 million of other restructuring related costs primarily consisting of legal fees.

Interest Income, Net

Interest income, net was \$0.2 million for the three months ended September 30, 2018 and 2017, which for both periods was comprised of \$0.2 million of interest income related to short-term investments.

Interest income, net was \$0.6 million for the nine months ended September 30, 2018 and 2017, which for both periods was comprised of \$0.6 million of interest income related to short-term investments.

Loss from Equity Method Investment

Loss from equity method investment from our OvaXon joint venture was de minimis for the three and nine months ended September 30, 2018. Loss from equity method investment from this joint venture was \$0.1 million and \$1.0 million for the three and nine months ended September 30, 2017.

Income Tax Expense

Income tax expense was immaterial for the three and nine months ended September 30, 2018 and September 30, 2017. Income tax expense primarily consists of taxes incurred in the state and foreign jurisdictions in which we operate.

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Liquidity and Capital Resources

Sources of Liquidity

We have generated limited AUGMENT treatment revenue to date and do not anticipate any significant revenues in the near-term. 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 September 30, 2018 are less than 12 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 fertility treatments, or whether or when we may achieve profitability. Our significant capital resources are as follows (in thousands):

	September 30, 2018	December 31, 2017
Cash, cash equivalents and short-term investments	\$ 46,350	\$ 67,203
Working capital	45,105	60,977
	Nine Months Ended September 30,	
	2018	2017
Cash (used in) provided by:		
Operating activities	\$(21,492)	\$(37,579)
Investing activities	37,706	18,774
Capital expenditures (included in investing activities above)	—	(112)
Financing activities	—	—

Cash Flows

Cash used in operating activities in both of the periods presented was primarily driven by our net loss. Cash flows used in 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 provided by investing activities for the nine months ended September 30, 2018 included \$70.8 million of proceeds from maturities of short-term investments and \$0.4 million of proceeds from the sale of property, plant and equipment, which were offset by purchases of \$33.5 million of short-term investments.

Cash provided by investing activities for the nine months ended September 30, 2017 included purchases of \$48.4 million of short-term investments and capital expenditures of \$0.1 million, which were offset by \$67.8 million of proceeds from maturities of short-term investments. Capital expenditures in the nine months ended September 30, 2017 primarily consisted of laboratory equipment.

Net cash provided by financing activities for both the nine months ended September 30, 2018 and September 30, 2017 was zero.

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We will need substantial additional funds to support our planned operations. We expect that our existing cash, cash equivalents and short-term investments of \$46.4 million at September 30, 2018 will enable us to fund our current operating plan for at least the next 12 months. 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 fertility treatments, and the extent to which we may enter into collaborations with third parties for development and commercialization of our fertility 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:

- the costs associated with clinical studies and trials;
- the costs involved in collaborating with our academic and commercial partners, and any contract research organizations;
- 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;
- developing, acquiring or in-licensing other potential fertility treatments and technologies; and
- the timing for completion of our transaction with Millendo.

Until such time, if ever, as we can generate sufficient revenues from our 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, 2017.

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Recent Accounting Pronouncements

In August 2018, the Financial Accounting Standards Board ("FASB") issued ASU No. 2018-13, Fair Value Measurement (Topic 820): Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement. ASU 2018-13 eliminates, adds and modifies certain disclosure requirements for fair value measurements as part of its disclosure framework project. This update is effective for annual and interim periods beginning after December 15, 2019 with early adoption permitted. We are currently assessing the impact ASU 2018-13 will have on our consolidated financial statements and footnote disclosures thereto.

In June 2018, the Financial Accounting Standards Board ("FASB") issued ASU No. 2018-07, Compensation—Stock Compensation (Topic 718): Improvements to Non-employee Share-Based Payment Accounting. ASU 2018-07 is intended to reduce the cost and complexity and to improve financial reporting for non-employee share-based payments. The ASU expands the scope of Topic 718, Compensation-Stock Compensation (which currently only includes share-based payments to employees), to include share-based payments issued to non-employees for goods or services. Consequently, the accounting for share-based payments to non-employees and employees will be substantially aligned. This update is effective for annual and interim periods beginning after December 15, 2018 with early adoption permitted. Upon transition, entities will remeasure unsettled liability-classified awards and any unmeasured equity-classified awards for non-employees at fair value as of the adoption date. A cumulative-effect adjustment to retained earnings will be required as of the beginning of the fiscal year of adoption. We are currently assessing the impact ASU 2016-13 will have on our consolidated financial statements and footnote disclosures thereto.

In November 2016, the FASB issued ASU No. 2016-18, Statement of Cash Flows (Topic 230) - Restricted Cash. ASU 2016-18 requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. This update is effective for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years using a retrospective transition method to each period presented. The Company adopted this standard as of January 1, 2018 on a retrospective basis, which resulted in the recast of the prior reporting period in the statement of cash flows. For the nine months ended September 30, 2018 and 2017, \$0.8 million and \$0.8 million, respectively, of restricted cash is included in the total of cash and restricted cash balance at the end of period. A reconciliation of cash and restricted cash from our condensed consolidated statement of cash flows to the amounts reported within our condensed consolidated balance sheet is also included in a table below our condensed consolidated statement of cash flows.

In August 2016, the FASB issued ASU No. 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments. ASU 2016-15 requires changes in the presentation of debt prepayment or debt extinguishment costs, contingent consideration payments made after a business combination, proceeds from the settlement of insurance claims, proceeds from the settlement of corporate-owned life insurance policies and distributions received from equity method investees. This update is effective for annual and interim periods beginning after December 15, 2017 using a retrospective transition method to each period presented. We adopted this standard as of January 1, 2018 with no material impact on our consolidated financial statements.

In June 2016, the FASB issued ASU No. 2016-13, Measurement of Credit Losses on Financial Instruments, which amends the impairment model by requiring entities to use a forward-looking approach based on expected losses rather than incurred losses to estimate credit losses on certain types of financial instruments. This may result in the earlier recognition of allowances for losses. The guidance is effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years, with early adoption permitted. We are currently assessing the impact ASU 2016-13 will have on our consolidated financial statements and footnote disclosures thereto.

In February 2016, the FASB issued ASU No. 2016-02, Leases, which is intended to increase transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet and disclosing key information about leasing arrangements. Under ASU 2016-02, a lessee will be required to recognize assets and liabilities for both operating and financing leases with lease terms of more than 12 months. The amendment is effective for annual periods beginning after December 15, 2018, and interim periods within those annual periods. Early adoption is permitted. In July 2018, the FASB issued ASU 2018-11, Leases, to address two requirements of ASU 2016-02. ASU 2018-11 allows entities to recognize a cumulative-effect adjustment from the application of ASU

2016-02 to the opening balance of retained earnings in the period of adoption. In addition, ASU 2018-11 provides lessors with a practical expedient to not separate non-lease components from the associated lease component if certain conditions are met. We are currently assessing the impact ASU 2016-02 will have on our consolidated financial statements and footnote disclosures thereto.

ASU 2014-09, Revenue from Contracts with Customers, amends the guidance for accounting for revenue from contracts with customers. ASU 2014-09 supersedes the revenue recognition requirements in ASC Topic 605, Revenue Recognition, and creates a new Topic 606, Revenue from Contracts with Customers. This guidance was effective for the

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Company on January 1, 2018. Two adoption methods are permitted: retrospectively to all prior reporting periods presented, with certain practical expedients permitted; or retrospectively with the cumulative effect of initially adopting the ASU 2014-09 recognized at the date of initial application. We adopted ASU 2014-09 effective January 1, 2018 and elected to adopt ASU 2014-09 using the modified retrospective approach and applied the standard only to contracts that had not yet been completed as of January 1, 2018. The impact under this methodology to our previously reported revenues is insignificant in the periods reported, and therefore the Company did not record a cumulative catch-up to deferred revenue and accumulated deficit upon adoption of the new standard on January 1, 2018.

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 \$0.1 million and \$0.1 million decrease in the fair value of our investments as of September 30, 2018 and December 31, 2017, respectively. 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 September 30, 2018. 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 September 30, 2018, 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 September 30, 2018 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 October 9, 2015, a purported class action lawsuit was filed in the Suffolk County Superior Court in the Commonwealth of Massachusetts (Carlson v. OvaScience, Inc. (In re OvaScience, Inc. Stockholder Litigation), No. 15-3087-BLS2 (Mass. Sup. Ct.)) against the Company, certain of the Company’s officers and directors and certain of the underwriters from the Company’s January 2015 follow-on public offering of the Company’s common stock. The plaintiffs purported to represent those persons who purchased shares of the Company’s common stock pursuant or traceable to the Company’s January 2015 follow-on public offering. The plaintiffs alleged, among other things, that the Company made false and misleading statements and failed to disclose material information in the Company’s January 2015 Registration Statement and incorporated offering materials. Plaintiffs alleged violations of Sections 11, 12 and 15 of the Securities Act of 1933, as amended, and sought, among other relief, unspecified compensatory

damages, rescission, pre-and post-judgment interest and fees, costs and disbursements. On February 26, 2016, a second putative class action suit was filed in the Suffolk County Superior Court in the Commonwealth of Massachusetts (Castellanos v. OvaScience, Inc., et al., No. 16-0645-BLS (Mass. Sup. Ct.)) against the Company, several of the Company's officers and directors and certain of the underwriters from the Company's January 2015 follow-on public offering of the Company's common stock. The complaint is substantially similar to the complaint filed in October 2015. The two actions subsequently were consolidated

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and plaintiffs filed a First Amended Class Action Complaint on June 17, 2016. In October 2016, the Superior Court granted the motion to intervene of an additional plaintiff, Westmoreland County Employee Retirement System (“Westmoreland”). On November 7, 2017, the Superior Court denied the plaintiffs’ motion for class certification. On August 14, 2017, the defendants filed their motion for summary judgment against plaintiffs Heather Carlson, Cesar Castellanos, Philipp Hofmann, and Carlos Rivas, which the plaintiffs opposed. On November 21, 2017, the Superior Court allowed the defendants’ motion for summary judgment, and the claims asserted by plaintiffs Heather Carlson, Cesar Castellanos, Philipp Hofmann, and Carlos Rivas in the consolidated actions were dismissed, leaving Westmoreland as the sole remaining plaintiff. On November 22, 2017, Westmoreland filed a putative class action complaint in the U.S. District Court for the District of Massachusetts against the same defendants alleging the same claims as were alleged in the state court case (Westmoreland County Employee Retirement System v. OvaScience, Inc., et al., No. 1:17-cv-12312-IT (D. Mass.)) (the “Westmoreland Federal Action”). On January 22, 2018, Westmoreland filed a motion to voluntarily dismiss the Superior Court action without prejudice. The defendants opposed that motion. Oral argument on Westmoreland’s motion for voluntary dismissal was held on April 3, 2018. On April 5, 2018, the Superior Court allowed Westmoreland’s motion for voluntary dismissal without prejudice. The Superior Court entered final judgment on April 18, 2018, dismissing Westmoreland’s claims without prejudice and dismissing the claims of plaintiffs Heather Carlson, Cesar Castellanos, Philipp Hofmann, and Carlos Rivas with prejudice. In the Westmoreland Federal Action, on August 24, 2018, Westmoreland filed a stipulation and proposed order, signed by counsel for all parties, voluntarily dismissing that action without prejudice (the “Westmoreland Stipulation”). Pursuant to the Westmoreland Stipulation, Westmoreland agreed that it will not re-file or reassert its claims arising under the Securities Act that were alleged in its complaint in the Westmoreland Federal Action and will pursue damages, if any, only as a member of the putative class in the Dahhan Action (described below). On August 28, 2018, the court in the Westmoreland Federal Action entered an order approving the Westmoreland Stipulation. Accordingly, the Westmoreland Federal Action has been dismissed.

On November 9, 2016, a purported shareholder derivative action was filed in the Business Litigation Session of the Suffolk County Superior Court in the Commonwealth of Massachusetts (Cima v. Dipp, et al., No. 16-3443-BLS1 (Mass. Sup. Ct.)) against certain present and former officers and directors of the Company and the Company as a nominal defendant alleging breaches of fiduciary duty, unjust enrichment, abuse of control, gross mismanagement and corporate waste for purported actions related to the Company’s January 2015 follow-on public offering. On February 22, 2017, the court approved the parties’ joint stipulation to stay all proceedings in the action until further notice. Following a status conference in December 2017, the stay was lifted. On January 23, 2018, at the parties’ request, the court entered a second order staying all proceedings in the action until further order of the court. The Company believes that the complaint is without merit and intends to defend against the litigation. There can be no assurance, however, that the Company will be successful. A resolution of this lawsuit adverse to the Company or the other defendants could have a material effect on our consolidated financial position and results of operations in the period in which the lawsuit is resolved. At present, we are unable to estimate potential losses, if any, related to the lawsuit.

On March 24, 2017, a purported shareholder class action lawsuit was filed in the U.S. District Court for the District of Massachusetts (Dahhan v. OvaScience, Inc., et al., No. 1:17-cv-10511-IT (D. Mass.)) against the Company and certain of our former officers alleging violations of Sections 10(b) and 20(a) of the Securities Exchange Act of 1934 (the “Dahhan Action”). On July 5, 2017, the Court entered an order approving the appointment of Freedman Family Investments, LLC as lead plaintiff, the firm of Robins Geller Rudman & Dowd LLP as lead counsel and the Law Office of Alan L. Kovacs as local counsel. Plaintiff filed an amended complaint on August 25, 2017. The defendants filed a motion to dismiss the amended complaint, which the Court denied on July 31, 2018. On August 14, 2018, the Company answered the amended complaint. We believe that the amended complaint is without merit and intend to defend against the litigation. There can be no assurance, however, that we will be successful. A resolution of this lawsuit adverse to the Company or the other defendants could have a material effect on our consolidated financial position and results of operations in the period in which the lawsuit is resolved. At present, we are unable to estimate potential losses, if any, related to the lawsuit.

On June 30, 2017, a purported shareholder derivative complaint was filed in the U.S. District Court for the District of Delaware (Fulton v. Dipp, et al., No. 1:17-cv-00869-RDM (D. Del.)) against certain of the Company's present and

former directors and the Company as a nominal defendant alleging breach of fiduciary duties, waste of corporate assets, unjust enrichment and violations of Section 14(a) of the Securities Exchange Act of 1934 alleging that compensation awarded to the director defendants was excessive. The parties reached a settlement of the action whereby the Company agreed to seek shareholder approval for certain changes to non-employee director compensation. The Company also agreed to pay \$300,000 in attorney's fees to plaintiff's counsel. Following a hearing held on August 30, 2018, the Court issued an order approving the settlement, and the case is now closed.

On July 27, 2017, a purported shareholder derivative complaint was filed in the U.S. District Court for the District of Massachusetts (Chiu v. Dipp, et al., No. 1:17-cv-11382-IT (D. Mass.)) against certain of the Company's present and former directors and the Company as a nominal defendant alleging breach of fiduciary duty, unjust enrichment and violations of Section 14(a) of the Securities Exchange Act of 1934 alleging that compensation awarded to the director defendants was excessive and seeking redress for purported actions related to the Company's January 2015 follow-on public offering and other public statements. On

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September 26, 2017, the plaintiff filed an amended complaint which eliminated all claims regarding allegedly excessive director pay and additionally alleged claims of abuse of control and corporate waste. On October 27, 2017, the defendants filed a motion to dismiss the amended complaint. The court heard oral argument on the motion to dismiss on April 5, 2018. On April 13, 2018, the court granted the defendants' motion to dismiss the amended complaint for failure to state a claim for relief under Section 14(a). The court also dismissed the plaintiffs' pendent state law claims without prejudice, based on lack of subject matter jurisdiction. On April 25, 2018, the plaintiffs moved for leave to amend the complaint, and to stay this case pending the outcome of the Dahhan Action and the now-dismissed Westmoreland Federal Action. The defendants do not believe that the proposed amended complaint cures the defects in the current complaint, but informed plaintiffs' counsel that, in the interest of judicial economy, the defendants would not oppose the proposed amendment if the court would consider staying the case pending the resolution of the Westmoreland Federal Action (now dismissed) and the pending Dahhan Action. On April 27, 2018, the court granted the plaintiffs' motion for leave to amend the complaint and for a stay. On April 30, 2018, the plaintiffs filed their second amended complaint. On May 23, 2018, the Court entered an order staying this case pending the resolution of the Dahhan Action and the (now dismissed) Westmoreland Federal Action. We believe that the complaint is without merit and intend to defend against the litigation. There can be no assurance, however, that we will be successful. A resolution of this lawsuit adverse to the Company or the other defendants could have a material effect on our consolidated financial position and results of operations in the period in which the lawsuit is resolved. At present, we are unable to estimate potential losses, if any, related to the lawsuit.

On October 16, 2018, a Company stockholder filed a complaint in the U.S. District Court for the District of Delaware (Cunningham v. Kroeger, et al., No. 1:18-cv-01595-CFC (D. Del.)) against the Company, its chief executive officer and the members of the Company's Board of Directors, alleging violations of Section 14(a) of the Securities Exchange Act of 1934 and Rule 14a-9 promulgated thereunder, and as against the individual defendants, alleging violations of Section 20(a) of the Securities Exchange Act of 1934. The plaintiff alleges that the defendants made materially misleading disclosures in a Form S-4 Registration Statement filed with the SEC on September 26, 2018 in connection with Company's proposed merger with Millendo Therapeutics, Inc. ("Millendo"), by allegedly omitting material information concerning the sale process. The plaintiff seeks declaratory and injunctive relief to enjoin the proposed merger with Millendo, rescissory damages against the individual defendants, including pre-judgment and post-judgment interest, costs and attorneys' fees. We believe that the complaint is without merit and intend to defend against the litigation. There can be no assurance, however, that we will be successful. At present, we are unable to estimate potential losses, if any, related to the lawsuit.

On November 6, 2018, a purported class action complaint was filed in the U.S. District Court for the District of Massachusetts (Adlard v. OvaScience, Inc., et al., No. 1:18-cv-12332-WGY (D. Mass.)) against the Company, its chief executive officer and the members of the Company's Board of Directors, alleging violations of Section 14(a) of the Securities Exchange Act of 1934 and Rule 14a-9 promulgated thereunder, and as against the individual defendants, alleging violations of Section 20(a) of the Securities Exchange Act of 1934. The plaintiff alleges that the Company's Definitive Proxy Statement on Schedule 14A filed on November 6, 2018 omitted or misrepresented material information regarding the Company's proposed merger with Millendo, including information regarding financial projections for Millendo, the background process leading up to the proposed transaction, and potential conflicts of interest. The plaintiff seeks injunctive relief to enjoin the proposed merger with Millendo, declaratory relief, rescissory damages in the event that the merger with Millendo is consummated, costs, and attorneys' fees. We believe that the complaint is without merit and intend to defend against the litigation. There can be no assurance, however, that we will be successful. At present, we are unable to estimate potential losses, if any, related to the lawsuit.

We are not party to any other material litigation in any court.

Item 1A. Risk Factors

In addition to the other information set forth in this report, you should carefully consider the risk factors discussed in Part I, Item 1A "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2017. With the exception of the risk factors below, there have been no material changes in or additions to the risk factors included in our Annual Report on Form 10-K for the year ended December 31, 2017 and our Quarterly Reports on

Form 10-Q for the quarters ended March 31, 2018 and June 30, 2018.

We currently do not meet the continued listing standards of The Nasdaq Capital Market, which require a minimum closing bid price of \$1.00 per share. Our failure to meet Nasdaq's continued listing standards could result in the delisting of our common stock, negatively impact the price of our common stock and negatively impact our ability to raise additional capital.

Our common stock is listed on The Nasdaq Capital Market. Nasdaq provides various continued listing requirements that a company must meet in order for its stock to continue trading on The Nasdaq Capital Market. Among these requirements is the requirement that the Company's stock trades at a minimum closing bid price of \$1.00 per share. Listing Rule 5810(c)(3)

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(A) provides that a failure to meet the minimum bid price requirement exists if the deficiency continues for a period of 30 consecutive business days. Our common stock has recently and consistently traded below \$1.00 per share, including closing bid prices below \$1.00 per share.

On April 27, 2018, we received a deficiency letter from Nasdaq, which indicated that the Company was not in compliance with the minimum bid price requirement set forth in Nasdaq rules for continued listing on The Nasdaq Global Market. Pursuant to Nasdaq Listing Rule 5810(c)(3)(A), we were granted a grace period of 180 calendar days, or until October 24, 2018, to regain compliance with the minimum bid price requirement. During the compliance period, our common stock continued to be listed and traded on The Nasdaq Global Market. Because we were unable to regain compliance with the minimum bid price requirement during the compliance period, we submitted an application to transfer the listing of our common stock to The Nasdaq Capital Market, which, according to Nasdaq listing rules, affords us an additional 180-day compliance period to comply with the minimum bid price requirement. The transfer application also required us to submit a letter stating our intention to effect a reverse stock split during the second compliance period, which we have done. The application to transfer the listing of our common stock was granted on October 29, 2018, effective October 31, 2018. If we fail to regain compliance with the minimum bid price requirement during the second compliance period, our common stock could be subject to delisting. Additionally, if the Company fails to comply with any other continued listing standards of Nasdaq, our common stock will also be subject to delisting. There can be no assurance that we will be able to regain compliance with the minimum bid price requirement or will otherwise be in compliance with other Nasdaq listing criteria.

In the event that our common stock is delisted from The Nasdaq Capital Market, our common stock would be subject to rules that impose additional sales practice requirements on broker-dealers who sell our securities. The additional burdens imposed upon broker-dealers by these requirements could discourage broker-dealers from effecting transactions in our common stock. This would significantly and negatively affect the ability of investors to trade our securities and would significantly and negatively affect the value and liquidity of our common stock. These factors could contribute to lower prices and larger spreads in the bid and ask prices for our common stock. Delisting would prevent us from satisfying a closing condition for the proposed Merger, and, in such event, Millendo may elect not to consummate the proposed Merger.

Item 6. Exhibits

The exhibits filed as part of this Quarterly Report on Form 10-Q are set forth in the following Exhibit Index.

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Exhibit Index

Exhibit Description

2.1	Agreement and Plan of Merger and Reorganization, dated as of August 8, 2018, by and among OvaScience, Merger Sub and Millendo (<u>incorporated by reference from Exhibit 2.1 to the Current Report on Form 8-K filed on August 9, 2018, File No. 00135890</u>).
2.2	<u>First Amendment to Agreement and Plan of Merger and Reorganization, dated as of August 8, 2018, by and among OvaScience, Inc., Merger Sub, Inc. and Millendo Therapeutics, Inc., dated as of September 25, 2018.</u>
2.3	Second Amendment to Agreement and Plan of Merger and Reorganization, dated as of August 8, 2018, by and among OvaScience, Inc., Orion Merger Sub, Inc. and Millendo Therapeutics, Inc., dated as of November 1, 2018 (<u>incorporated by reference from Exhibit 2.1 to the Current Report on Form 8-K filed on November 1, 2018, File No. 00135890</u>).
2.4	Form of OvaScience Voting Agreement, by and between Millendo and certain stockholders of OvaScience (<u>incorporated by reference from Exhibit 2.2 to the Current Report on Form 8-K filed on August 9, 2018, File No. 00135890</u>).
2.5	Form of Millendo Voting Agreement , by and between OvaScience, certain stockholders of Millendo and solely for purposes of Section 1.4 thereof, Millendo (<u>incorporated by reference from Exhibit 2.3 to the Current Report on Form 8-K filed on August 9, 2018, File No. 00135890</u>).
2.6	Form of Lock-Up Agreement, by and between OvaScience, Millendo and certain stockholders of OvaScience and Millendo (<u>incorporated by reference from Exhibit 2.4 to the Current Report on Form 8-K filed on August 9, 2018, File No. 00135890</u>).
3.1	Bylaws of OvaScience, as amended August 8, 2018 (<u>incorporated by reference from Exhibit 3.1 to the Current Report on Form 8-K filed on August 9, 2018, File No. 00135890</u>).
10.1#	Amendment to Retention Agreement between OvaScience and Jonathan Gillis, dated August 8, 2018 (<u>incorporated by reference from Exhibit 10.1 to the Current Report on Form 8-K filed on August 9, 2018, File No. 00135890</u>).
10.2	Stock Purchase Agreement, by and among OvaScience, Inc., the purchasers set forth on Schedule I thereto and Millendo Therapeutics, Inc., dated as of November 1, 2018 (<u>incorporated by reference from Exhibit 10.1 to the Current Report on Form 8-K filed on November 1, 2018, File No. 00135890</u>).
10.3	Registration Rights Agreement, by and among OvaScience, Inc. and the persons listed on Schedule A thereto, dated as of November 1, 2018 (<u>incorporated by reference from Exhibit 10.2 to the Current Report on Form 8-K filed on November 1, 2018, File No. 00135890</u>).

- 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

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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.

OVASCIENCE, INC.

By: /s/ Christopher Kroeger

Name: Christopher Kroeger, M.D., M.B.A.

Date: November 9, 2018 Title: Chief Executive Officer (Principal Executive Officer)

By: /s/ Jonathan Gillis

Name: Jonathan Gillis

Date: November 9, 2018 Title: SVP, Finance (Principal Accounting and Financial Officer)