

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

**SCHEDULE 14A**

**Proxy Statement Pursuant to Section 14(a) of  
the Securities Exchange Act of 1934 (Amendment No. )**

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

- Preliminary Proxy Statement
- Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))**
- Definitive Proxy Statement
- Definitive Additional Materials
- Soliciting Material under §240.14a-12

**OVASCIENCE, INC.**

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check the appropriate box):

- No fee required.
- Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.
  - (1) Title of each class of securities to which transaction applies: \_\_\_\_\_
  - (2) Aggregate number of securities to which transaction applies: \_\_\_\_\_
  - (3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined): \_\_\_\_\_
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- Fee paid previously with preliminary materials.
- Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.
  - (1) Amount Previously Paid: \_\_\_\_\_
  - (2) Form, Schedule or Registration Statement No.: \_\_\_\_\_
  - (3) Filing Party: \_\_\_\_\_
  - (4) Date Filed: \_\_\_\_\_

The following disclosures were included in a Current Report on Form 8-K dated November 29, 2018.

On November 5, 2018, OvaScience filed a final proxy statement, prospectus and information statement (the “Definitive Proxy Statement”) with the Securities and Exchange Commission (the “SEC”) with respect to the special meeting of OvaScience’s stockholders scheduled to be held on December 4, 2018 in order to, among other things, obtain the stockholder approvals necessary to complete the planned Merger, pursuant to which, among other matters, and subject to the satisfaction or waiver of the conditions set forth in the Merger Agreement, Merger Sub will merge with and into Millendo, with Millendo continuing as a wholly owned subsidiary of OvaScience and the surviving corporation of the Merger (the “Millendo Transaction”).

With this filing, OvaScience is hereby supplementing its disclosure in the Definitive Proxy Statement in connection with litigation brought by its stockholders, which is described below. Nothing in this Current Report on Form 8-K shall be deemed an admission of the legal necessity or materiality under applicable laws of any of the disclosures set forth herein. OvaScience and the other named defendants believe the claims asserted in the litigation to be without merit, intend to defend against them vigorously, and deny any wrongdoing alleged in the litigation.

#### **Stockholder Litigation**

In connection with the Millendo Transaction, two putative securities class actions have been filed in the U.S. District Court for the Southern District of New York against OvaScience, Christopher Kroeger, Richard Aldrich, Jeffrey D. Capello, Mary Fisher, John Howe, III, Marc Kozin and John Sexton. The complaints are respectively captioned as follows: *Cuenca Aubets v. OvaScience, Inc., et al.*, No. 1:18-cv-10882 (filed November 20, 2018) (“*Cuenca Aubets*”) and *Kim v. OvaScience, Inc., et al.*, No. 1:18-cv-10939 (filed November 21, 2018) (“*Kim*”). The lawsuits allege that the Definitive Proxy Statement made false and misleading statements and omissions in connection with the Millendo Transaction, in violation of the Securities Exchange Act of 1934 and Rule 14a-9 promulgated thereunder. The plaintiffs in *Cuenca Aubets* and in *Kim* each seek to represent a class of all public stockholders of OvaScience. The *Cuenca Aubets* lawsuit seeks, among other things, to enjoin the Millendo Transaction unless OvaScience discloses certain information requested by the plaintiff, unspecified damages, and attorneys’ fees. The *Kim* lawsuit seeks, among other things, preliminary and permanent injunctions of the Millendo Transaction unless

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OvaScience discloses certain information requested by the plaintiff, rescissory damages if the Millendo Transaction is consummated, unspecified damages and attorneys' fees. We refer to these actions as the "Stockholder Litigation."

The Company believes that no supplemental disclosures are required under applicable laws. However, to avoid the risk of the Stockholder Litigation delaying or adversely affecting the closing of the Millendo Transaction and to minimize the expense of defending the Stockholder Litigation, and without admitting any liability or wrongdoing, the Company is making certain disclosures below that supplement and revise those contained in the Definitive Proxy Statement, which we refer to as the "litigation-related supplemental disclosures." The litigation-related supplemental disclosures contained below should be read in conjunction with the Definitive Proxy Statement, which is available on the Internet site maintained by the SEC at <http://www.sec.gov>, along with periodic reports and other information the Company files with the SEC. The Company and the other named defendants deny that they have committed or assisted others in committing any violations of law or breaches of duty to Company stockholders, and expressly maintain that they have complied with their fiduciary and other legal duties and are providing the litigation-related supplemental disclosures below solely to try to eliminate the burden and expense of further litigation, to put the claims that were or could have been asserted to rest, and to avoid any possible delay to the closing of the Millendo Transaction that might arise from further litigation. Nothing in the litigation-related supplemental disclosures shall be deemed an admission of the legal necessity or materiality under applicable laws of any of the litigation-related supplemental disclosures. To the extent that the information set forth herein differs from or updates information contained in the Definitive Proxy Statement, the information set forth herein shall supersede or supplement the information in the Definitive Proxy Statement. References to sections and subsections herein are references to the corresponding sections or subsections in the Definitive Proxy Statement, all page references are to pages in the Definitive Proxy Statement, and terms used herein, unless otherwise defined, have the meanings set forth in the Definitive Proxy Statement.

## **SUPPLEMENT TO DEFINITIVE PROXY STATEMENT**

### **Opinion of the OvaScience Financial Advisor**

In the sections of the Definitive Proxy Statement entitled "Opinion of the OvaScience Financial Advisor as of August 8, 2018 — Analysis of Selected Precedent Transactions as of the Date of the August Opinion — Selected Phase 2 or Phase 3 Orphan Disease Precedent Transactions — August" (on page 150 of the Definitive Proxy Statement; the "August Precedent Transactions Disclosure") and "Opinion of the OvaScience Financial Advisor as of October 26, 2018 - Analysis of Selected Precedent Transactions as of the Date of the October Opinion — Selected Phase 2 or Phase 3 Orphan Disease Precedent Transactions — October" (on page 161 of the Definitive Proxy Statement; the "October Precedent Transactions Disclosure"), there is a discrepancy in the listed enterprise value for one of the eleven referenced precedent transactions. The listed enterprise value for the April 2018 Wilson Therapeutics AB and Alexion Pharmaceuticals, Inc. transaction (the "Wilson — Alexion Transaction") is \$693.5 million in the August Precedent Transactions Disclosure and \$788.4 million in the October Precedent Transactions Disclosure.

The Company and Ladenburg Thalmann have reviewed the reason for this discrepancy, including a review of the methodology used to prepare the analysis underlying the August Opinion and the October Opinion. The source data that were used as the basis for the calculation of the enterprise value associated with the Wilson — Alexion Transaction, which were obtained by Ladenburg Thalmann from a third party service provider, may have changed between August and October due to changes in the exchange rate between the United States dollar and the Swedish krona, which is the currency in which the Wilson — Alexion Transaction was denominated. Regardless, the Company and Ladenburg Thalmann note this discrepancy did not alter the underlying analysis (i.e., the implied total enterprise value range for "Selected Phase 2 or Phase 3 Orphan Disease Precedent Transactions-October" for Millendo as calculated by Ladenburg Thalmann would remain the same if \$693.5 million or \$788.4 million was used for the "Wilson — Alexion Transaction") or change the conclusion of Ladenburg Thalmann as to the fairness, from a financial point of view, of the Exchange Ratio to the OvaScience Stockholders as of the dates of its August Opinion and its October Opinion.

Further, (i) the sixth bullet point under the caption "Opinion of the OvaScience Financial Advisor as of August 8, 2018," (ii) the eighth bullet point under the caption "Opinion of the OvaScience Financial Advisor as of October 26, 2018," (iii) the second sentence under the caption "Discounted Cash Flow Analysis as of the Date of the August

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Opinion,” (iv) the second sentence of the third paragraph on page 153, (v) the second sentence under the caption “Discounted Cash Flow Analysis as of the Date of the October Opinion,” and (vi) the second sentence of the fourth paragraph on page 164 are replaced with the following:

“Ladenburg Thalmann reviewed and analyzed projections as to revenue, costs and expenses for Millendo that management of OvaScience provided to Ladenburg Thalmann for use in its fairness analysis. OvaScience prepared those projections as to revenue, costs, and expenses for Millendo based on OvaScience management’s understanding and analysis of Millendo’s business, operations and prospects, as well as financial information and key assumptions provided by Millendo. The financial projections referred to in the previous sentences, which were the only projections relied upon by Ladenburg Thalmann in connection with the rendering of its August Opinion and its October Opinion, are summarized under “ — Financial Projections”. These projections were based in part on assumptions as to the potential market opportunity for livoletide and nevanimibe, including assumptions relating to the potential size of the patient populations for those product candidates; potential time frames for regulatory approval, both in the United States and internationally; potential pricing and degree of potential market penetration; length of patent protection for Millendo’s intellectual property assets; and working capital adjustments.”

### **Background of the Merger**

In the section of the Definitive Proxy Statement entitled “Background of the Merger,” the Company states that the Second Amendment to the Merger Agreement, or the Second Amendment, was “proposed by Millendo in order to lower Millendo’s valuation from \$191.9 million to \$155.0 million in connection with a new investment of approximately \$20 million to be made into OvaScience shortly after the Closing...and that OvaScience’s valuation would be lowered to \$45.5 million, subject to certain adjustments set forth in the Merger Agreement.” The lowering of Millendo’s valuation from \$191.9 million to \$155.0 million was agreed to by OvaScience and Millendo in order to reflect the pre-money valuation that the investor in the Post-Closing Financing was willing to ascribe to Millendo. The lowering of OvaScience’s valuation from \$47.5 million to \$45.5 million reflected a lower premium for its cash balance which it agreed to in order to show some flexibility in light of Millendo being willing to take a much greater cut to its valuation. The OvaScience Board of Directors believed that these adjustments to the parties’ respective valuations, and the resulting changes to the anticipated Exchange Ratio, together with the additional cash that would be obtained for the operations of the combined company as a result of the Post-Closing Financing, would result in a transaction that was more favorable to the OvaScience Stockholders than the transaction had been prior to the Second Amendment.

### **ADDITIONAL INFORMATION ABOUT THE TRANSACTION AND WHERE TO FIND IT**

In connection with the proposed Millendo Transaction, OvaScience filed the Definitive Proxy Statement with the SEC on November 5, 2018. The Definitive Proxy Statement was first mailed on or about November 5, 2018 to the Company’s stockholders of record as of the close of business on October 26, 2018. Stockholders of OvaScience are urged to read these materials carefully because they contain important information about OvaScience, Millendo, and the proposed Millendo Transaction and related transactions. The Definitive Proxy Statement and any amendments or supplements thereto (when such amendments or supplements become available) and other documents filed by OvaScience with the SEC may be obtained free of charge through the SEC website at [www.sec.gov](http://www.sec.gov). They may also be obtained for free by directing a written request to: OvaScience, Inc., 9 Fourth Avenue, Waltham, MA 02451, Attention: Vice President, Finance.

This communication shall not constitute an offer to sell or the solicitation of an offer to sell or the solicitation of an offer to buy any securities, nor shall there be any sale of securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under or applicable exemption from the securities laws of any such jurisdiction.

### **PARTICIPANTS IN THE SOLICITATION**

OvaScience and Millendo, and each of their respective directors and executive officers and certain of their other members of management and employees, may be deemed to be participants in the solicitation of proxies in connection with the proposed transaction. Information regarding the special interests of OvaScience’s directors and executive officers in the proposed transaction is included in the Definitive Proxy Statement. Additional information

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regarding these persons is included in OvaScience's Annual Report on Form 10-K for the year ended December 31, 2017, filed with the SEC on March 15, 2018, and the proxy statement for OvaScience's 2018 annual meeting of stockholders, filed with the SEC on April 30, 2018. These documents can be obtained free of charge from the sources indicated above.

#### **CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING INFORMATION**

This communication contains forward-looking statements (including within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, and Section 27A of the Securities Act of 1933, as amended) concerning OvaScience, Millendo, the proposed transaction and other matters. These statements may discuss goals, intentions and expectations as to future plans, trends, events, results of operations or financial condition, or otherwise, based on current beliefs of the management of OvaScience, as well as assumptions made by, and information currently available to, management. Forward-looking statements generally include statements that are predictive in nature and depend upon or refer to future events or conditions, and include words such as "may," "will," "should," "would," "expect," "anticipate," "plan," "likely," "believe," "estimate," "project," "intend," and other similar expressions. Statements that are not historical facts are forward-looking statements. Forward-looking statements are based on current beliefs and assumptions that are subject to risks and uncertainties and are not guarantees of future performance. Actual results could differ materially from those contained in any forward-looking statement as a result of various factors, including, without limitation: the risk that the conditions to the closing of the transaction are not satisfied, including the failure to obtain stockholder approval for the transaction in a timely manner or at all; uncertainties as to the timing of the consummation of the transaction and the ability of each of OvaScience and Millendo to consummate the transaction; risks related to the closing of the post-closing financing; risks related to OvaScience's continued listing on the Nasdaq Stock Market until closing of the proposed transaction; risks related to OvaScience's ability to correctly estimate its operating expenses and its expenses associated with the transaction; the ability of OvaScience or Millendo to protect their respective intellectual property rights; competitive responses to the transaction; unexpected costs, charges or expenses resulting from the transaction; potential adverse reactions or changes to business relationships resulting from the announcement or completion of the transaction; and legislative, regulatory, political and economic developments. The foregoing review of important factors that could cause actual events to differ from expectations should not be construed as exhaustive and should be read in conjunction with statements that are included herein and elsewhere, including the risk factors included in OvaScience's most recent Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, the Definitive Proxy Statement, and Current Reports on Form 8-K filed with the SEC. OvaScience can give no assurance that the conditions to the transaction will be satisfied. Except as required by applicable law, OvaScience undertakes no obligation to revise or update any forward-looking statement, or to make any other forward-looking statements, whether as a result of new information, future events or otherwise.

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