

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

**STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP**

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

<b>1. Name and Address of Reporting Person*</b> <u>ALDRICH RICHARD</u> _____ (Last) (First) (Middle) <u>C/O OVASCIENCE, INC.</u> <u>9 FOURTH AVE.</u> _____ (Street) <u>WALTHAM MA 02451</u> _____ (City) (State) (Zip)	<b>2. Issuer Name and Ticker or Trading Symbol</b> <u>OvaScience, Inc. [ OVAS ]</u>	<b>5. Relationship of Reporting Person(s) to Issuer</b> (Check all applicable) <input checked="" type="checkbox"/> Director 10% Owner Officer (give title below) Other (specify below)
	<b>3. Date of Earliest Transaction (Month/Day/Year)</b> <u>09/28/2018</u>	
<b>4. If Amendment, Date of Original Filed (Month/Day/Year)</b>		

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

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	09/28/2018		A <sup>(1)</sup>		14,558	A	\$0.00 <sup>(1)</sup>	81,220	D	
Common Stock								330,000	I	By Little Eagles, LLC <sup>(2)</sup>
Common Stock								668,192	I	By Richard H. Aldrich 2005 Revocable Trust <sup>(3)</sup>
Common Stock								962,056	I	By Longwood Fund III LP <sup>(4)</sup>

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

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

**Explanation of Responses:**

- The shares reported on this Form 4 were issued to the Reporting Person, who elected to take shares in lieu of \$10,625 of cash compensation for services as a director and committee member, pursuant to the Issuer's non-employee director compensation plan.
- The owners of Little Eagles, LLC are Richard H. Aldrich Irrevocable Trust of 2011 and trusts established for the benefit of Mr. Aldrich's minor children. The trustees of Richard H. Aldrich Irrevocable Trust of 2011 are Mr. Aldrich's spouse, Nichole A. Aldrich, and Mr. Aldrich's brother, Caleb F. Aldrich. The beneficiaries of Richard H. Aldrich Irrevocable Trust of 2011 are Mr. Aldrich's minor children. Mr. Aldrich disclaims beneficial ownership of such shares except to the extent of any pecuniary interest therein.
- The trustee of the Richard H. Aldrich 2005 Revocable Trust is the Reporting Person and he exercises sole voting and investment power over the shares of record held by the trust.
- The securities in this line are held directly by Longwood Fund III LP. Longwood Fund III GP, LLC is the general partner of Longwood Fund III LP. Voting and investment power with respect to the shares held by Longwood Fund III LP are vested in Richard Aldrich and Christoph Westphal, M.D., Ph.D. (collectively, the "Managers"), the managers of Longwood Fund III GP, LLC. Each of the Managers disclaims beneficial ownership of the shares held by Longwood Fund III LP, except to the extent of their respective pecuniary interest therein, and the inclusion of these shares in the report shall not be deemed an admission of beneficial ownership of the shares for the purposes of Section 16 or for any other purpose.

/s/ William C. Hicks,  
Attorney-in-Fact

10/02/2018

\*\* Signature of Reporting Person      Date

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

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

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

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

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