

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**FORM 8-A**

**FOR REGISTRATION OF CERTAIN CLASSES OF SECURITIES  
PURSUANT TO SECTION 12(b) OR (g) OF THE  
SECURITIES EXCHANGE ACT OF 1934**

**Onconova Therapeutics, Inc.**

(Exact name of registrant as specified in its charter)

**Delaware**

(State of incorporation or organization)

**22-3627252**

(I.R.S. Employer Identification No.)

**375 Pheasant Run**

**Newtown, PA**

(Address of principal executive offices)

**18940**

(Zip Code)

Securities to be registered pursuant to Section 12(b) of the Act:

Title of each class  
to be so registered

**Warrants to purchase common stock**

Name of each exchange on which  
each class is to be registered

**The Nasdaq Stock Market LLC**

If this form relates to the registration of a class of securities pursuant to Section 12(b) of the Exchange Act and is effective pursuant to General Instruction A. (c), check the following box. ☒ x

If this form relates to the registration of a class of securities pursuant to Section 12(g) of the Exchange Act and is effective pursuant to General Instruction A. (d), check the following box. ☐ o

Securities Act registration statement file number to which this form relates: **333-211769**

Securities to be registered pursuant to Section 12(g) of the Act: **None.**

**INFORMATION REQUIRED IN REGISTRATION STATEMENT**

**Item 1. Description of Registrant's Securities to be Registered.**

A description of the warrants to purchase common stock (the "Warrants") of Onconova Therapeutics, Inc. (the "Company") to be registered hereunder is contained in the section entitled "Description of Securities — Warrants — Tradable Warrants Included in Units Issuable in the Rights Offering" in the Company's prospectus filed with the Securities and Exchange Commission on July 8, 2016 pursuant to Rule 424(b) of the Securities Act of 1933, as amended, as supplemented by prospectus supplement no. 1 dated July 22, 2016, relating to the Registration Statement on Form S-1 (File No. 333-211769), and such description is incorporated herein by reference.

**Item 2. Exhibits.**

Exhibit Number	Exhibit Description
3.1	Tenth Amended and Restated Certificate of Incorporation of Onconova Therapeutics, Inc. <i>(Incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on July 25, 2013).</i>
3.2	Amended and Restated Bylaws of Onconova Therapeutics, Inc. <i>(Incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on July 25, 2013).</i>
3.3	Certificate of Amendment to Tenth Amended and Restated Certificate of Incorporation of Onconova Therapeutics, Inc. <i>(Incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on May 31, 2016).</i>
4.1	Form of Certificate of Common Stock <i>(Incorporated by reference to Exhibit 4.1 to Pre-Effective Amendment No. 1 the Company's Registration Statement (No. 333-189358) on Form S-1 filed on July 11, 2013.)</i>
4.2	Eighth Amended and Restated Stockholders' Agreement, effective as of July 27, 2012, by and among Onconova Therapeutics, Inc. and certain stockholders named therein <i>(Incorporated by reference to Exhibit 4.2 to Pre-Effective Amendment No. 1 to the Company's Registration Statement (No. 333-189358) on Form S-1 filed on July 11, 2013).</i>
4.3	Amendment No. 1 to Eighth Amended and Restated Stockholders' Agreement, effective as of July 9, 2013 <i>(Incorporated by reference to Exhibit 4.3 to Pre-Effective Amendment No. 1 the Company's Registration Statement (No. 333-189358) on Form S-1 filed on July 11, 2013).</i>
4.6	Form of Warrant Certificate for Warrants underlying Units <i>(Incorporated by reference to Exhibit 4.6 to Pre-Effective Amendment No.3 to the Company's Registration Statement (No. 333-211769) on Form S-1 filed on July 1, 2016).</i>

**SIGNATURE**

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereto duly authorized.

**ONCONOVA THERAPEUTICS, INC.**

Date: July 26, 2016

By:	<u>/s/ Ramesh Kumar, Ph.D.</u>
Name:	Ramesh Kumar, Ph.D.
Title:	President and Chief Executive