

**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:

<small>Title of each class to be so registered</small>	<small>Name of each exchange on which each class is to be registered</small>
<b>Common Stock, par value \$0.01 per share</b>	<b>The NASDAQ Stock Market LLC</b>

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), please check the following box.  o

Securities Act registration statement file number to which this form relates: **333-189358**

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.**

Onconova Therapeutics, Inc. (the "Registrant") hereby incorporates by reference its description of its common stock, par value \$0.01 per share, to be registered hereunder contained under the heading "Description of Capital Stock" in the Registrant's Registration Statement on Form S-1 (File No. 333-189358), as originally filed with the Securities and Exchange Commission (the "Commission") on June 14, 2013, as subsequently amended (the "Registration Statement"), and in the prospectus included in the Registration Statement to be filed separately by the Registrant with the Commission pursuant to Rule 424(b) under the Securities Act of 1933, as amended, which prospectus shall be deemed to be incorporated by reference herein.

**Item 2. Exhibits.**

In accordance with the "Instructions as to Exhibits" with respect to Form 8-A, no exhibits are required to be filed as part of this registration statement because no other securities of the Registrant are registered on The NASDAQ Stock Market LLC and the securities registered hereby are not being registered pursuant to Section 12(g) of the Securities Exchange Act of 1934, as amended.

**SIGNATURE**

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

Date: July 23, 2013

**ONCONOVA THERAPEUTICS, INC.**

By: /s/ Ramesh Kumar. Ph.D.  
Ramesh Kumar, Ph.D.  
President and Chief Executive Officer