



DIVISION OF  
CORPORATION FINANCE

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

July 22, 2013

Via E-mail

Ramesh Kumar, Ph.D.  
President and Chief Executive Officer  
Onconova Therapeutics, Inc.  
375 Pheasant Run  
Newtown, PA 18940

**Re: Onconova Therapeutics, Inc.  
Amendment No. 2 to Registration Statement on Form S-1  
Filed July 18, 2013  
File No. 333-189358**

Dear Dr. Kumar:

We have reviewed your amended registration statement and correspondence dated July 17, 2013 and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by providing the requested information and amending your registration statement. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing the information you provide in response to these comments and your amended registration statement, we may have additional comments.

Exhibit 5.1

1. We note counsel's opinion that the securities will be validly issued, fully paid and non-assessable is subject to the assumption that the Tenth Amended and Restated Certificate of Incorporation will be filed with the Secretary of State of the State of Delaware. Please either file a revised legal opinion to remove this assumption or confirm that an appropriately unqualified opinion will be filed by post-effective amendment no later than the closing date of the offering. See Sections II.B.2.f. and II.B.3.a. of Staff Legal Bulletin No. 19.
2. Please also provide a revised legal opinion to modify the statement regarding "the legal power and authority of all persons signing on behalf of parties to all

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documents,” to limit this qualification to persons signing on behalf of parties other than the registrant.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Act of 1933 and all applicable Securities Act rules require. Since the company and its management are in possession of all facts relating to a company’s disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Please contact Austin Stephenson at (202) 551-3192, Dan Greenspan at (202) 551-3623, or me at (202) 551-3715 with any questions.

Sincerely,

/s/ Daniel Greenspan for

Jeffrey P. Riedler  
Assistant Director

cc: Via E-mail  
David S. Rosenthal, Esq.  
Dechert LLP