



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 4720

April 20, 2016

Ramesh Kumar, Ph.D.
President and Chief Executive Officer
Onconova Therapeutics, Inc.
375 Pheasant Run
Newtown, PA 18954

**Re: Onconova Therapeutics, Inc.
Post-Effective Amendment No. 1 to Form S-1
Filed April 11, 2016
File No. 333-207533**

Dear Dr. Kumar:

We have reviewed your post-effective amendment 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 amending your registration statement and providing the requested information. 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 any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Information Incorporated by Reference, page 1

1. Please incorporate by reference your Current Report on Form 8-K filed on February 17, 2016.
2. Please include your web site address, including the uniform resource locator (URL) where your incorporated reports and other documents may be accessed. Please see Item 12(b)(1)(v) of Form S-1.

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.

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Notwithstanding our comments, before we can declare the amended registration statement effective, the company should provide us with a letter, acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please contact Michael Gershon at (202) 551-6598 or Erin Jaskot at (202) 551-3442 with any questions.

Sincerely,

/s/ Erin K. Jaskot, for

Suzanne Hayes
Assistant Director
Office of Healthcare and Insurance

cc: Donald R. Readlinger, Esq.
Pepper Hamilton LLP