



DIVISION OF
CORPORATION FINANCE

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

December 6, 2012

Via E-mail

Paul J. Hastings
President & Chief Executive Officer
OncoMed Pharmaceuticals, Inc.
800 Chesapeake Drive
Redwood City, CA 94063

**Re: OncoMed Pharmaceuticals, Inc.
Amendment No. 5 to Registration Statement on Form S-1
Filed December 3, 2012
File No. 333-181331**

Dear Mr. Hastings:

We have reviewed your amended registration statement filed December 3, 2012 and your response letter dated November 30, 2012, and have the following comment.

Please respond to this letter by amending your registration statement and providing the requested information.

After reviewing any amendment to your registration statement and the information you provide in response to our comment, we may have additional comments.

General

1. The financial statements are stale. Please update your financial statements to reflect the period ended September 30, 2012. Refer to Rule 3-12 of Regulation S-X.

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 refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow

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adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Tabatha Akins, Staff Accountant, at (202) 551-3658 or Lisa Vanjoske, Senior Staff Accountant, at (202) 551-3614 if you have questions regarding comments on the financial statements and related matters. Please contact Karen Ubell, Staff Attorney, at (202) 551-3873, Jennifer Riegel, Special Counsel, at (202) 551-3575 or me at (202) 551-3715 with any other questions.

Sincerely,

/s/ Jennifer Riegel for

Jeffrey P. Riedler
Assistant Director

cc: Via E-mail
Mark V. Roeder, Esq.
Latham & Watkins LLP
140 Scott Drive
Menlo Park, CA 94025