

Via Facsimile and U.S. Mail
Mail Stop 4720

March 30, 2010

Robert L. Kirkman, M.D.
Chief Executive Officer
Oncothyreon Inc.
2601 Fourth Avenue, Suite 500
Seattle, Washington 98121

Re: Oncothyreon Inc.
Form 10-K for the Fiscal Year Ended December 31, 2008
Filed March 30, 2009
File Number: 001-33882

Dear Dr. Kirkman:

We have reviewed your filing and your correspondence dated January 21, 2010 and we have the following comments. In our comments, we ask you to provide us with information to better understand your disclosure. The information you provide should show us what the revised disclosure will look like and identify the annual or quarterly filing, as applicable, in which you intend to first include it. If you do not believe that revised disclosure is necessary, explain the reason in your response. After reviewing the information provided, we may raise additional comments and/or request that you amend your filing.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comment or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Annual Report on Form 10-K

License Agreements, page 9

1. Please revise your discussion of the University of Arizona Agreement to describe the royalty payments with respect to sublicense payments with more specificity. For example, "teens," "twenties," or "thirties," rather than "low double digits" or "mid double digits."

Definitive Proxy Statement on Schedule 14A

Compensation Discussion and Analysis, page 17

2. Please discuss the factors the Compensation Committee considered when approving the bonuses paid to Diana Hausman and Scott Peterson, i.e. what led the Committee to conclude that it should opt to pay bonuses as if these Named Executive Officers had performed at the highest possible level, pro-rated for their actual length of service.
3. In an appropriate place in your disclosure, please identify the peer group companies used for comparison purposes when making compensation decisions.

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Please provide us the information requested within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter with your response that keys your response to our comments. Detailed cover letters greatly facilitate our review. Please furnish your letter on EDGAR under the form type label CORRESP.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing include all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. 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.

In connection with responding to our comments, please provide, in your letter, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

Robert L. Kirkman, M.D.
Oncothyreon Inc.
March 30, 2010
Page 3

Please contact Scot Foley at (202) 551-3383, Suzanne Hayes, Branch Chief, at (202) 551-3675 or me at (202) 551-3715 with any questions.

Sincerely,

Jeffrey P. Riedler
Assistant Director

cc: Michael Nordtvedt, Esq.
Patrick Schultheis, Esq.
Wilson Sonsini Goodrich & Rosati, Professional Corporation
701 Fifth Avenue, Suite 5100
Seattle, Washington 98104