

*Via Facsimile and U.S. Mail*  
Mail Stop 4720

April 29, 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 April 9, 2010 and we have the following comment. In this comment, 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. We note your response to our prior comment 1. Your discussion of the percentage of sub-license payments owed relating to your acquisition of ProlX refers to “a maximum of sub-teen double digits until research costs have been recouped to a maximum of sub-fifty percent double digits thereafter.” With respect to the

payments made after research costs have been recovered, please provide a more specific range such as “twenties,” “thirties,” “forties,” etc. If these royalties are tiered, please explain in detail how they are structured, e.g. if payments are made in one tier until all research costs have been recouped and then are increased based solely on revenues received on the sublicense.

\* \* \* \*

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.

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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.  
Bryan King, Esq.  
Wilson Sonsini Goodrich & Rosati, Professional Corporation  
701 Fifth Avenue, Suite 5100  
Seattle, Washington 98104