

Via Facsimile and U.S. Mail
Mail Stop 4720

December 22, 2009

Mr. Robert L. Kirkman, M.D.
Chief Executive Officer and President
Oncothyreon, Inc.
2601 Fourth Avenue, Suite 500
Seattle, WA 98121

**Re: Oncothyreon, Inc.
Form 10-K for the Fiscal Year Ended December 31, 2008
Definitive Proxy Statement on Schedule 14A
File No. 001-33882**

Dear Mr. Kirkman:

We have reviewed your filings and have the following comments. Where indicated, we think you should revise your documents in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we ask you to provide us with information to better understand your disclosure. After reviewing the information provided, we may raise additional comments.

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 comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-K for the fiscal year ended December 31, 2008

General

1. Please provide us with a supplemental, unredacted copy of your Amended and Restated License Agreement between Biomira Management and Merck KGaA dated December 18, 2008. You should request Rule 83 treatment for the agreement as we have granted a request for confidential treatment for portions of the agreement.

Item 1. Business, page 1

Our Strategic Collaboration with Merck KGaA, page 8

2. Please expand your discussion of the existing license agreement you have with Merck KGaA to disclose the aggregate potential milestone payments and the total amount of payments made to date under the agreement and the agreements that the December 18, 2008 agreement replaced. Additionally, as we have granted a request for confidential treatment of the royalty rate, please disclose a reasonable range, e.g. “single digits,” “teens,” or “twenties.”

License Agreements, page 9

3. Please expand your discussion of these three license agreements to include the milestone payment schedule or, alternatively, the aggregate milestone payment you may be required to make. Please also disclose the rate of royalty payments you may be required to make or a reasonable range, e.g. “single digits,” “teens,” or “twenties.”

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures, page 54

4. Please include management’s conclusion of effective or not effective for their evaluation of its disclosure controls and procedures. Include management’s conclusion with the discussion about the evaluation of disclosure controls and procedures. We refer you to Items 307 and 308(a)(3) of Regulation S-K. We note management’s conclusion of its disclosure controls and procedures is inappropriately included under the section “Management’s Annual Report on Internal Control Over Financial Reporting.”

Management’s Annual Report on Internal Control Over Financial Reporting, page 54

5. Please provide management’s explicit conclusion of effective or not effective regarding the effectiveness of its internal control over financial reporting in accordance with Item 308 of Regulation S-K.

Notes to the Consolidated Financial Statements, page 28

Note 13. Collaborative Agreements, page F-26

6. Please revise your disclosure of the collaboration and supply agreements with Merck KGaA to include a description of all your rights and obligations, the

performance periods, all deliverables, and the contractual cash flows as stipulated within the May 2001 agreements and the amended and restated agreements in August 2007. Please provide your basis for using the revenue recognition method disclosed and how you determined the payments should be recognized ratably over the remaining patent life of the Stimuvax product. Tell us what consideration was given to using alternative periods of time to ratably recognize revenue, such as but not limited to the contract term. Please match the revenue recognition method used for the milestone payments with that which is disclosed in your revenue recognition policy. Lastly, it appears the registrant is obligated to participate in a Steering Committee as defined in the agreements. Please tell us and disclose how you have incorporated what appears to be an obligation of the company into your EITF 00-21 analysis.

Definitive Proxy Statement on Schedule 14A

Compensation Discussion and Analysis, page 17

7. We note your disclosure with respect to “Variable Cash Compensation-Incentive Bonuses” and “Equity-based Incentives.” As these grants appear to be based in considerable part on the achievement of certain undisclosed performance objectives, both by your company as a whole and by the individual named executive officer, please provide us with draft disclosure for next year’s proxy statement which provides the following:

- The actual performance objectives, both for your company and for each named executive officer; and
- A discussion of how the level of achievement will affect the actual compensation to be paid.

To the extent that the objectives are quantified, the discussion in your proxy statement should also be quantified. Please also confirm that you will discuss the achievement of the each objective.

* * * *

As appropriate, please amend your Form 10-K for the year ended December 31, 2008 and respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish on EDGAR under the form type label CORRESP a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendments and responses to our comments.

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 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 comment on your filing.

Please contact Christine Allen, Staff Accountant, at (202) 551-3652 or Lisa Vanjoske, Assistant Chief Accountant, at (202) 551-3614 if you have any questions regarding the processing of your response as well as any questions regarding comments on the financial statements and related matters. You may contact Scot Foley, Staff Attorney, at (202) 551-3383 or Suzanne Hayes, Branch Chief, at (202) 551-3675 with questions on any of the other comments. In this regard, do not hesitate to contact me, at (202) 551-3679.

Sincerely,

Jim B. Rosenberg
Senior Assistant Chief Accountant